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The Industrial Organization of the Japanese Bar:

Levels and Determinants of Attorney Income

**By Minoru Nakazato,
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Using micro-level data on attorney incomes in 2004, we reconstruct the industrial organization of the Japanese legal services industry. These data suggest a somewhat bifurcated bar, with two sources of unusually high income: talent in Tokyo, and scarcity elsewhere. The most talented would-be lawyers (those with the highest opportunity costs) pass the bar-exam equivalent on one of their first tries or abandon the effort. If they pass, they tend to opt for careers in Tokyo that involve complex litigation and business transactions. This work places a premium on their talent, and from it they earn appropriately high incomes. The less talented face lower opportunity costs, and willingly spend many years studying for the exam. If they eventually pass, they disproportionately forego the many amenities available to professional families in Tokyo and opt instead for careers in the under-lawyered provinces. There, they earn scarcity and monopoly rents not available in the far more competitive Tokyo market.

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For over five decades now, modern Japan has made do with few attorneys. As of 2004, it had about 21,000. With roughly 40 percent the U.S. population, and 40 percent the GDP, it had but 2 percent as many lawyers.

The dearth has not been for want of applicants for the job. Instead, it has followed from deliberate policy. For over half a century, the government has required all would-be lawyers to study at its Legal Research & Training Institute (LRTI). Only by attending the LRTI could one become a lawyer, but only by passing a fiercesomely hard entrance exam could one attend it. From 1968 to 1992, the government kept the pass rate on this exam below 3 percent. Even as recently as 2004, only 2.97 percent passed.

With so few lawyers and so many applicants vying for so few slots, basic logic suggests industry incumbents should earn substantial rents. Curiously, however, they seem not to earn stratospheric incomes. Instead, they earn incomes that track those of well-paid white-collar workers more generally. Why they apparently earn so little thus presents one puzzle. Why so many still try so hard to join the bar presents a second. And why some lawyers earn more than the mass of their rivals presents a third.

To explore these questions, we use data from attorney's personal tax records. Through 2004, the Japanese government disclosed the tax liabilities of everyone who paid more than 10 million yen (about \$100 thousand) in taxes. About 400 lawyers met this criterion. We take the tax liabilities of these lawyers, collect information about their personal and professional backgrounds, and add analogous information on a random sample of another 1,100 lawyers. Using the resulting dataset, we study the determinants of professional success within the Japanese bar.

These tax records describe a somewhat bifurcated market. As the locus for the most complex business transactions and litigation, Tokyo generates the highest returns to legal talent. Disproportionately, the brightest lawyers locate there and join the large firms that specialize in problems that exploit their unusual abilities. Facing high opportunity costs to a legal career, they expect, demand, and earn appropriately high pay.

The vast majority of attorneys are men and women of a different sort. Lacking the intellectual ability that better-paying corporate employers demand, they incur fewer opportunity costs to try to join the bar, despite their lower odds of passage. Even after repeatedly failing the LRTI exam, they keep trying. Eventually, a few of them pass.

If these less talented people finally do join the bar, disproportionately they forego the many amenities available to professional families in Tokyo, and locate in the provinces instead. With half of all Japanese lawyers, Tokyo presents a highly competitive market. By choosing to practice instead in a small provincial city, these less able lawyers can earn monopoly and scarcity rents not available in Tokyo. Hence the contrast: the brighter lawyers tend to choose Tokyo for the premium on ability; the slower tend to choose the provinces for the monopoly returns.

I. The Japanese Legal Services Industry

A. The Puzzle:

Something is wrong with the following picture. Subject to a draconian entry barriers, the Japanese bar seems miniscule, yet its members earn only modestly high incomes. If they number so few, why do they not earn stratospheric returns? If they do

not make more than other high-level white-collar workers, why do they try so hard to become lawyers?

Lawyers are indeed few in Japan. As of 2004, they numbered 21,174. Given the general population, that gave Japan one lawyer for every 6,305 people. By contrast, the U.S. had one lawyer for every 286. The U.K. had one per 547, Germany had one per 651, and even France had one for every 1,488 people.¹

Lawyers are few because most would-be lawyers flunk what is the equivalent of the bar-exam in Japan. Law is an undergraduate major in Japan (and now the subject of post-graduate "law schools" as well), but those who would practice law must attend what has been the single law school--- LRTI---as well. The Ministry of Justice (MOJ) together with the Supreme Court and bar leaders controls entry to the Institute, and for most of the post-war period flunked most of the people who took the entrance examination.²

Lawyers also seem talented. After all, every one of them passed an exam that 97-99 percent of test-takers failed. The MOJ hires law professors to write and score the exams, and these professors grade the exams blind.³ At the very least, the process ought to guarantee extraordinarily high cognitive skills.

Thus, in Japan lawyers are talented and scarce, and should be earning rents to both their talent and the artificial scarcity of lawyers. Moreover, the scarcity of lawyers would seem to make the possibility of collusion easier, especially outside of Tokyo, adding monopoly rents to the talent and scarcity rents.

But elite Japanese lawyers seem not to earn anything close to the draws of America's "AmLaw 100" partners. From time to time, the Japanese bar association surveys its members about their income. In 1990 they reported a median income of 11 million yen and a mean of 15 million. Come 2000, they still reported a 15 million average---about \$146 thousand (on the distribution of income for all occupations in Japan, see Sec. B., below).⁴

Attorneys in Japan earn incomes that just barely exceed good white-collar incomes. Corporate branch managers in the 1990s (with a mean age of 50) earned about 12 million yen, while a lawyer (by the 1990 survey) in his 40s made 14 million yen and one in his 50s made 20 million. That's a bit higher. Compared to physicians, however,

¹ Nihon bengoshi rengo kai, Bengoshi hakusho [Lawyer White Paper] 77, 81 (Tokyo: Nihon bengoshi rengo kai, 2005).

² For an insightful analysis, see Tom Ginsburg & Glen Hoetker, *The Unreluctant Litigant: An Empirical Analysis of Japan's Turn to Litigation*, 35 *J. Legal Stud.* 31, 37-38 (2006). Japan recently increased the number of people it passed -- but that simply led to an increase in the number of people taking the exam. For historical pass rates, see J. Mark Ramseyer & Minoru Nakazato, *Japanese Law: An Economic Approach* 7 tab. 1.1 (Chicago: University of Chicago Press, 1999); <http://www.moj.go.jp/PRESS/051007-1/17syutu-gou2.html>

³ For an excellent description of the exam, see Curtis J. Milhaupt & Mark D. West, *Economic Organizations and Corporate Governance in Japan: The Impact of Formal and Informal Rules* 211 (Oxford: Oxford University Press, 2004).

⁴ Milhaupt & West, *supra* note, at 219; see also Arthur J. Alexander & Hong W. Tan, *Barriers to U.S. Service Trade in Japan* 18 (Santa Monica: Rand Corp. 1984) (R-3175) (using the high-income taxpayer database in the early 1980s).

the attorneys badly underperformed. A doctor running a private clinic earned a mean 32 million, and even a salaried physician (mean age of 37) made 13 million.⁵

Compared to American lawyers, these represent respectable incomes -- but not stratospheric. According to John Heinz and Edward Laumann's classic study of Chicago lawyers, the median attorney in the U.S.A. made about double the national median for all occupations, and the top 12 percent made double that attorney median.⁶ On the one hand, in Japan, 15 million yen does more than double the national median. On the other hand, it falls far below the AmLaw 100.

Where U.S. bar examiners pass the majority of those who apply, the Japanese examiners pass hardly anyone. With such a brutal entry barrier, why do incumbents earn such modest amounts?

B. Legal Services Industry:

By the late 1980s at least part of the answer to this first puzzle was relatively clear. First, although contemporary Japan and the U.S. have roughly the same median incomes, that income is far more compressed in Japan.⁷ This compression involves not just aggregate income, but executive compensation patterns as well.⁸ To the extent that most college graduates who opt for legal careers could have selected business careers instead, the compression in Japanese executive compensation should dampen high-level legal incomes too.

Second, Japanese lawyers face a large number of unlicensed competitors.⁹ The largest group staffs the legal departments of Japanese corporations. Some 45,000 students major in law as undergraduates at the 93 university law departments.¹⁰ Upon graduation, most take jobs at private firms. There, many of them draft contracts, manage regulatory filings, and negotiate disputes. At insurance companies, they handle claims

⁵ Bengoshi gyomu no keizaiteki kiban ni kansuru jittai hokoku [Empirical Report on the Economic Foundation of Lawyers' Work], 42 *Jiyu to seigi* 1 (1991). Discussed in Ramseyer & Nakazato with comparative numbers, *supra* note, at 14.

⁶ John P. Heinz & Edward O. Laumann, *Chicago Lawyers: The Social Structure of the Bar*, rev. ed. 8-11 (Evanston: Russell Sage, 1994), 8-11.

⁷ Thomas Piketty & Emmanuel Saez, *The Evolution of Top Incomes: A Historical and International Perspective*, 96 *Am. Econ. Rev.* 200 (Papers & Proceedings, 2006). See also Sec. II.A.1., *infra*.

⁸ Minoru Nakazato, J. Mark Ramseyer & Eric B. Rasmusen, *Executive Compensation in Japan: Estimating Levels and Determinants from Tax Records* (Harvard Law School John M. Olin Center for Law, Economics & Business Working Paper No. xx, 2006).

⁹ J. Mark Ramseyer, *Lawyers, Foreign Lawyers, and Lawyer-Substitutes: The Market for Regulation in Japan*, 27 *Harv. Int'l L.J.* 499 (1986); Masanobu Kato, *The Role of Law and Lawyers in Japan and the United States*, 1987 *B.Y.U. L. Rev.* 627; Michael K. Young & Constance Hamilton, *The Legal Profession of Japan*, in Mitsuo Matsushita, ed., *Japanese Business Law Guide* Para. 7-260 though 7-900 (Sydney: CCH Australia, Ltd. 1988); Richard S. Miller, *Apples v. Persimmons: The Legal Profession in Japan and the United States*, 39 *J. Legal Educ.* 27 (1989).

¹⁰ *Shihou seido kaikaku shingikai, Shihou seido kaikaku shingikai Ikensho: 21 seiki no Nihon wo sasaeru shiho seido* [Position of the Committee on Legal System Reform: A Legal System to Support the 21st Century Japan] (June 12, 2001).

over traffic and other accidents. For much of the work that U.S. firms assign to lawyers, Japanese firms hire university-trained but unlicensed legal specialists.¹¹

Other competitors operate from various licensed sub-sectors. “Judicial scrivenors” (shiho shoshi; as of 2006, 18,000) draft contracts, and handle the paper work for regulatory matters and real estate transactions. “Administrative scrivenors” (gyosei shoshi; 39,000) handle government paperwork. “Tax agents” (zeirishi; 69,000) file individual and corporate returns, sell tax planning advice, and negotiate audits. “Patent agents” (benrishi; 6,200) handle filings and disputes over intellectual property. And “notary publics” (koshonin; 540), who have their own monopolized niche, draft wills and corporate charters.¹²

Largely because of this competition, most Japanese attorneys specialize in the one activity over which courts enforce the unauthorized practice ban: litigation.¹³ Traditionally, they operated out of small offices, and most worked in cities with court houses. As of 2005, nearly 40 percent still practiced alone, and about an equal number practiced in firms of two to five lawyers.¹⁴ Only in Tokyo and Osaka did anyone work in a firm with more than 20 lawyers. Exclude metropolitan Kobe, Kyoto, Nagoya, and Fukuoka, and no one worked in a firm with more than 10.¹⁵

Traditionally, few lawyers other than those at the Tokyo international firms did much besides litigate. The largest of these international firms (e.g., Nishimura Tokiwa) now exceed 200 lawyers, and offer the full panoply of corporate services. A small group of Americans who obtained special licenses during the post-war occupation once dominated this international market. No more. Those men are gone now (though four remained on the rolls in 2004),¹⁶ and only a few of the current firms (principally Anderson Mori Tomotsune) trace their lineage directly to them. Instead, most Western lawyers in Tokyo work for the large U.S. (e.g., Morrison & Forester) and U.K. law firms (e.g., Clifford Chance). Several of these now include many Japanese lawyers as well.¹⁷

II. Empirical Resources

A. The Data:

1. Tax data coverage. -- If a Japanese lawyer makes only a modestly high income, why do so many people try desperately to become one? Among Japanese attorneys, what determines who makes the better money? To begin to explore these two questions, we estimate incomes in the year 2004 from the amount of taxes attorneys

¹¹ For an analysis and description of these departments, see Toshimitsu Kitagawa & Luke Nottage, *Globalization of Japanese Corporations and the Development of Corporate Legal Departments: Problems and Prospects*, *Raising the Bar: The Emerging Legal Profession in East Asia* (William P. Alford, ed., Cambridge: Harvard University Press, Forthcoming).

¹² Numbers from web sites.

¹³ *Bengoshi ho* [Attorneys Act], Law No. 205, of 1949, Sec. 72; see Ramseyer, *supra* note.

¹⁴ *Nihon bengoshi*, *supra* note, at 93.

¹⁵ *Nihon bengoshi*, *supra* note, at 93.

¹⁶ *Nihon bengoshi*, *supra* note, at 70.

¹⁷ For a directory to this corporate legal services market, see Nikkei Business Publications, ed., *Bijinesu bengoshi taizen 2006* [An Encyclopedia of Business Lawyers, 2006] (Tokyo: Nikkei BP, 2005).

paid. We obtained this information because of a now-discontinued Japanese government policy. Through the 2004 taxable year, the tax office published the names, addresses, and tax liabilities of those taxpayers who reported the highest incomes. The amount of liability that triggered this public disclosure varied over the years, but in 2004 it stood at 10 million yen (at the end-of-2004 exchange rate of 102.68 yen/\$, about \$97,000).

Starting with the 2005 taxable year, this taxpayer data is no longer available. Under the newly passed Personal Information Protection Act, the government may not release a variety of private information.¹⁸ Because tax liabilities fall within the scope of the ban, the government will not release the taxpayer lists. Our 2004 data thus represent the last available set of this information.

For all lawyers on this high-income taxpayer (HIT) list, we enter the actual taxes they paid in 2004. For all lawyers not on the list, we know only that they paid less than 10 million yen. Because our data are thus “censored below” at 10 million, we use tobit regressions.

In 2004, some 73,000 Japanese paid 10 million yen or more in taxes. As discussed earlier, compared to the U.S. this is few. Japan has about half the population of the U.S., and roughly the same median household income. Yet in 2003, U.S. taxpayers filed 536,000 returns with adjusted gross incomes of over \$500,000, an income which conservatively would pay 10 million yen in taxes. U.S. taxpayers filed nearly 181,000 returns with over \$1,000,000 (www.irs.gov).

We obtained our tax data from the Japanese affiliate of D&B, Tokyo shoko risaachi (TSR).¹⁹ Naturally, TSR uses the data for credit investigations. In some cases, it has added the professional affiliation of the taxpayers. Where it did, we generally followed that identification. We obtain our information on attorney backgrounds from the 2005 directory of the Japan Federation of Bar Associations (JFBA).²⁰

To maximize the number of observations with tax data, we use stratified sampling--- sampling different groups of lawyers with different probability. The JFBA directory records the backgrounds on all 21,000 active attorneys. From this list, we first entered the information on 1,120 randomly selected lawyers. Of these attorneys, 23 were on the HIT list. Because the TSR database includes 381 other high-income-taxpayer lawyers, we enter the tax and background data for those attorneys as well. This procedure leaves us with a dataset of 1,501 lawyers, of whom 404 paid taxes of over 10 million yen. Because of lingering differences reflecting the differing regulatory regime under the U.S. occupation before 1972, we exclude Okinawa.

Japanese taxpayers pay a tax of 37 percent on ordinary income beyond 18 million yen.²¹ For a crude approximation of income from tax liability, readers thus can simply

¹⁸ Kojin joho no hogo ni kansuru horitsu [Act Relating to the Protection of Personal Information], Law No. 57 of 2003.

¹⁹ Tokyo shoko risaachi, ed., Zenkoku kogaku nozeisha meibo [National Registry of High-Income Taxpayers] (Tokyo: Tokyo shoko risaachi, 2004) (CD-ROM version).

²⁰ Horitsu shimbunsha, ed., Zenkoku bengoshi taikan [National Survey of Lawyers] (Tokyo: Horitsu shimbun sha, 2005).

²¹ Shotoku zei ho [Income Tax Act], Law No. 33 of 1965, Sec. 89, as amended by Shotokuzeito futan keigen sochi ho [Act for Measures to Reduce the Burden of the Income and Other Taxes], Law No. 8 of 1999.

divide the liability by .37. To illustrate a more nuanced approach, in Table 1 we use standard deductions and the full rate schedule to calculate the actual income that would generate the taxes given. By this approach, to owe 10 million yen in taxes, an attorney would need to make 39.9 million yen (\$390 thousand).

[Insert Table 1 about here.]

On Table 2 we detail the tax liabilities of several high-income lawyers. Highest-ranking Shin Ushijima paid 227 million yen in taxes, suggesting income of perhaps \$6 million. Among Japanese taxpayers in all occupations, he ranked 185th. Although Ushijima advertises himself as an international lawyer, he does not work at one of the prominent international firms. The fact that he never appeared on the High-Income-Taxpayer list before suggests he received a windfall in 2004, or realized his capital gains then.

[Insert Table 2 about here.]

From that 227 million, tax liabilities fall quickly. Fifth-ranked Nobuo Takai paid less than half as much, and even he (born in 1937, and nearing the end of his career) had made the High-Income-Taxpayer list only four other times. For some more modestly (if still highly) paid lawyers, however, the high incomes come often. The 20th ranked lawyer earned about \$1.7 million, and the 50th and 100th ranked (both partners at a major international firm) earned \$1.1 million to \$750 thousand. Perhaps 58 years old, number 20 had appeared on the High-Income-Taxpayer list 17 times before. By age 44, number 50 had been on it seven times already.

2. Limitations. -- As a source of information, tax records inherently present several limitations. Most obviously, taxpayers have an incentive to underreport. With a top marginal bracket of 37 percent, the incentive is strong. Although the Japanese tax and prosecutors' offices punish cheaters severely, our data will still include some lawyers who hide income.

Second, the amount of underreporting will increase as firm size falls. If a lawyer in solo practice takes his fee in cash, he need never enter it on his books. If he practices with 50 partners, he will need to keep an accurate set of books in order to split revenue and expenses. If he hopes to cheat the government, he will then have to keep two parallel sets of books -- a process that obviously increases the risk that auditors will catch him.²²

Third, to the extent attorneys have income from other sources, their taxable income will overstate their returns from legal practice. Because the attorneys with the highest such returns will accumulate the greatest wealth, over time they will also tend to earn the most investment income. As a result, the fraction of taxable income from legal practice should fall both with age and with taxable income.

Last, the tax office no longer discloses this information, but even before 2005 some wealthy Japanese resented its publication (though at least anecdotally some are said to have been proud of making the list). To skirt disclosure, they could do one of two

²² On one the consequences for this, see [this note + 8], *infra*.

things. First, they could pay a penalty and submit their return late. The tax office included on its list only those high-income taxpayers who filed within 2 weeks of the March 15 return deadline. By filing after April 1, they could avoid publication.

Second, wealthy attorneys could file an initial return that included only income below the amount that triggered disclosure, and then submit an amended return with the remaining income. Because the tax office compiled its list from the initial returns, they could avoid publication this way too. We do not know how many taxpayers used either strategy.

As a check on the reliability of our data, we compared a lawyer's 2004 tax liability with the average land price of the neighborhood in which he lived.²³ To maintain comparability, we limited our sample to attorneys in the greater Tokyo area. The correlation coefficient between a lawyer's 2004 tax liability (with 10 million entered for those not on the High-Income-Taxpayer list) and the land values in his residential neighborhood is 0.19 -- statistically significant at greater than the 0.1 percent level: lawyers reporting higher incomes do live in more expensive areas.

Parenthetically, note the following: in Japan, couples may not file joint returns; taxpayers with rising incomes may not use "income averaging" across years; gains from the sale or exchange of real estate are taxed at 15 percent if held over 5 years and at 30 percent if held for 5 years or less; and pension payments are taxed at lower rates than salaries. For complex reasons detailed elsewhere, our data exclude most taxes on dividends from exchange-listed firms, but do include some (though not all) taxes on capital gains from securities transactions.²⁴

3. Other sources. -- To our tax data, we add a variety of other information. We take the information on the attorneys themselves from the bar association directory.²⁵ For most prefecture-level data on economic welfare we use standard Japanese statistics.²⁶ We obtain our prefectural information on lawyers and law firms from the bar association. "International" firms we define as those that advertise in Martindale-Hubbell, the standard American law directory.²⁷

²³ Obtained from the Toyo keizai shimposha, ed., Toshi deeta banku [Metropolitan Data Bank] (Tokyo: Toyo keizai shimpo sha, 2005).

²⁴ See the discussion in Nakzato, Ramseyer, & Rasmusen, supra note xxx. Both dividends and securities capital gains were subject to a national tax of 7 percent.

²⁵ Horitsu shimbun sha, ed., Zenkoku bengoshi taikan [National Lawyer Directory] (Tokyo: Horitsu shimbun sha, 10th ed., 2005).

²⁶ We should say what these are.xxx

²⁷ Ken Toba, Nihon jin no heikin chi [Japanese Averages] (Tokyo: Seikatsu joho sentaa, 2005); Nihon bengoshi rengo kai, Bengoshi hakusho [Attorney White Paper] (Tokyo: Nihon bengoshi rengo kai, 2005); Martindale-Hubbell Law Directory (New York: Martindale-Hubbell Law Directory, 2005).

C. Variables:

We define the following variables, and include selected summary statistics in Table 3:

[Insert Table 3 about here.]

1. Tax variables. –

Ln Tax Liability: The log of a lawyer's 2004 (or 2003) tax liability (in 1000 yen), conditional on appearing on the High-Income-Taxpayer list; the log of the lower cutoff of 10,000 (which equals 10 million yen) otherwise.

Appearances: The number of times a lawyer has appeared on the High-Income-Taxpayer list (conditional on appearing in 2004).

HIT: 1 if lawyer appeared on the 2004 High-Income-Taxpayer list; 0 otherwise.

2. Lawyer variables. –

Flunks: The estimated number of times a lawyer failed the LRTI entrance exam. In general, an attorney first would have taken the exam at age 21. Accordingly, we calculate **Flunks** using the attorney's birth year and the year he passed the exam where available; where unavailable, we use university and LRTI graduation years.

University dummies: The university from which a lawyer obtained his undergraduate degree. Note that **U.Tokyo** (university) is a different variable than **Tokyo** (location of practice).

Other Tokyo U: 1 if an attorney graduated from a Tokyo-area university other than the University of Tokyo, 0 otherwise.

Experience: Years from LRTI graduation to 2004.

Sex: 1 if a lawyer is male; 0 if female.

International: 1 if a lawyer works at a firm advertised in Martindale-Hubbell; 0 otherwise.

Prefectural dummies: the prefecture in which an attorney is registered to practice

Prefecture of birth: To instrument attorney location in our instrumental variable regressions (Tables 4, 8), we also identify the prefecture in which the lawyer was born; where unavailable, we use the lawyer's registry address (honseki).

Metropolitan: 1 if a lawyer is registered to work in one of the prefectures with big cities: Kanagawa, Chiba, Saitama, Hyogo, Aichi, Hiroshima, Fukuoka, Hokkaido, or Miyagi; 0 otherwise.

Tokyo: 1 if a lawyer is registered to work in Tokyo prefecture.

Provincial: 1 if a lawyer is registered to work in any prefecture other than Tokyo, Osaka, or one of the **Metropolitan** prefectures; 0 otherwise.

3. Prefectural variables. –

Attorneys: Total number of attorneys, 2004.

- New Attorneys:** Total number of new attorneys, 1995-2004.
Income PC: Per capita income, 2001.
Bankr'y PC: Number of judicial declarations of bankruptcy per 1000 population, 2003.
Hospitals PC: Hospitals per 100,000 population, 2003.
Traf Death PC: Traffic deaths per 100,000 population, 2003
Crimes PC: Criminal Code crimes per 1000 population, 2003.
Pro Bono PC: Number of free consultations with a lawyer, per 1000 population, 2003.
Corp Inc PC: Corporate income declared to tax office (x 1 billion), per 1000 population, 2002.
New Business %: New business formation rate, in percentage, 2001.
Museums: Total museums in prefecture (including zoos, aquariums, etc.), 2002.
Concerts: Percent of population (10 years old or older) who attend music concerts (excluding classical), 2001.
School Internet: Percent of public schools with high-speed internet access, 2003.
College Grads: Percent of population who graduated from a university, 2000.

III. Talent and Income

A. The Talent Premium:

The bright lawyers earn more than the dull. This seemingly obvious point emerges clearly even in the summary statistics. Where our randomly sampled lawyers failed the LRTI entrance exam a mean 6.57 times (**Flunks**), the high-income lawyers failed it only 4.97 times.²⁸ Where 74 percent of the randomly sampled lawyers failed it 4 or more times, only 55 percent of the high-income lawyers did (Table 3 Panels A, B). Where only 16 percent of our randomly sampled lawyers attended the perennially first-ranked University of Tokyo, 31 percent of the high-income lawyers went there (Tab. 3 Pan. A).

Regression results confirm this premium on talent. In Table 4 Columns (1) and (2) (Col. (2) includes prefectural dummies), we regress (through tobit) an attorney's logged tax liability on four variables: **Flunks**, **U Tokyo**, **Experience**, and **Sex**. According to the results, lawyers with University of Tokyo degrees and low **Flunks** do earn more than others. Note also that men earn more than women, but more experienced lawyers do not earn more than their younger competitors.

[Insert Table 4 about here.]

²⁸ According to another study, the median successful applicant in 1994 was passing the exam 4 years after his initial attempt. 18.4 percent were passing it 9 or more years after their initial attempt. See Setsuo Miyazawa, Shiho shiken ni okeru tomen no kadai [Urgent Issues Regarding the LRTI Entrance Exam], 481 Hogaku seminaa 76, 77 (1995); see Ramseyer & Nakazato, *supra* note, at 9. The median **Flunks** among our randomly sampled lawyers is 6. The difference between that figure and Miyazawa's 1994 figure probably reflects in part the difference between the 3.3 percent pass rate in 1994 and the sub-2 percent pass rate during the late 1970s and early 1980s. See Ramseyer & Nakazato, *supra* note, at 7.

In Table 5, we explore the effect of university backgrounds in more detail. Again, we regress (through tobit) logged tax liabilities on the standard Table 4 variables and a dummy variable for each university with more than 7 lawyers in the dataset. The omitted variable is Doshisha University -- the school with the fewest lawyers on the High-Income-Taxpayer list. The coefficient on the University of Tokyo again emerges as strongly significant. Traditionally second-ranked University of Kyoto does not fare as well, but still outpaces Doshisha, and elite Hokkaido and Kobe universities both earn their graduates high incomes.

[Insert Table 5 about here.]

B. The Tokyo Penalty:

In choosing to work in Tokyo, the average lawyer pays a price. Tokyo offers the widest array of urban amenities in Japan, and for that reason remains a perennial favorite among professionals. Because so many lawyers locate there, however, they apparently dissipate the rents.²⁹ Japan may have only 21,000 lawyers, but half (10,300) work in Tokyo. Although Japan has 6,030 people per lawyer, Tokyo has only 1,206. That puts the city of Tokyo behind the nation of Germany's 651 citizens per lawyer, but ahead of France with its 1,488.³⁰

The resulting competition creates a penalty for lawyers with average abilities who choose to practice in Tokyo. Return to the Table 3 summary statistics. Tokyo lawyers are more talented than the provincial lawyers: 25 percent of them attended the University of Tokyo compared to 12 percent in the provinces, and they flunked the LRTI exam 6.3 times compared to 7.5 for the provincial lawyers. Yet Tokyo lawyers are poorer: only 1.8 percent (181) of the 10,263 Tokyo lawyers appeared on the High-Income-Taxpayer list compared to 3.4 percent (119) of the 3,460 outside of Tokyo, Osaka, and the **Metropolitan** prefectures (of the randomly sampled lawyers, 1 and 5 percent respectively; see Table 3).

To explore the Tokyo penalty in more detail, in Column (3) of Table 4 we add three geographical variables (Tokyo is the omitted variable). As with the summary statistics, lawyers in the provinces earn higher incomes than those in Tokyo. Those in the second-largest city of Osaka earn less than those in Tokyo, but lawyers in the other metropolitan centers earn about as much.

Because lawyers will choose where to practice with an eye on their expected incomes, location is endogenous. Location affects income, but income affects location too. Accordingly, in Column (5) we use instrumental variables tobit to instrument the geographical variables using a lawyer's hometown. Hometown is a suitable instrument because it affects a lawyer's location choice while not being affected by lawyers'

²⁹ The higher incomes need not represent monopoly rents; they could simply reflect the higher prices necessary to induce more attorneys to take jobs in areas with fewer of the amenities prized by professionals.

³⁰ Nihon bengoshi, *supra* note, at 77, 81.

incomes at that location. The Tokyo penalty now emerges more clearly still: Osaka lawyers no longer significantly underperform those in Tokyo, and both other metropolitan and provincial lawyers earn more than Tokyo lawyers.³¹

C. The Differential Premium on Talent:

1. The talent premium in Tokyo. -- Talented lawyers choose Tokyo despite the general penalty because the complex practice places a premium on their abilities. In Columns (4) and (6) of Table 4, we interact **Flunks** and **U Tokyo** with Tokyo as the place of practice. Both interacted variables now emerge as strongly significant, which means that a low **Flunk** score matters more for high incomes in Tokyo than elsewhere, as does a University of Tokyo degree. Attorneys who attend an elite university and pass the bar-exam equivalent on their first or second try not only earn more regardless of where they practice, but also can earn an additional return on their talent in Tokyo that they would not find elsewhere.

2. The international firms. -- Many of the talented lawyers earn this return by affiliating themselves with one of the large international firms in Tokyo. Those who choose these firms (and who are hired by them) are indeed able. Where University of Tokyo graduates constitute 16 percent of our random sample and 25 percent of our Tokyo random sample, they are 57 percent of the randomly sampled international firms. Where the randomly sampled lawyers flunked the LRTI exam 6.57 times, the randomly sampled international lawyers flunked it only 4.31 times.

At the international firms, these talented lawyers earn high incomes. The international lawyers constitute 5 percent of the random sample, but 22 percent of the High-Income-Taxpayer list. They are 11 percent of the Tokyo random sample, but 49 percent of the Tokyo High-Income-Taxpayer list. The decision to work at such a firm is obviously endogenous to expected income, but were we to include **International** in our Column (1) Table 4 regression (a regression we ran but do not include in the table), the coefficient would be positive and significant at more than the 0.1 percent level.

Over the past several decades, the international firms grew steadily (and exponentially), and as they did the tendency for talented lawyers to join them increased as well. Among all randomly sampled University of Tokyo graduates who passed the LRTI exam on one of their first 4 tries, 23 percent work at one of the Tokyo international firms. Among those with 20 years or less experience, 54 percent work there. But among those who joined the bar in the last decade, 63 percent do. Of the most talented young lawyers, in short, nearly two-thirds join an international firm.

D. The Dynamics of Locational Choice:

1. Elite and non-elite lawyers. -- Because of the differential returns to talent in Tokyo and the provinces, the brightest young lawyers opt for careers in the capital, while

³¹ The differential patterns to tax evasion suggest that this Tokyo penalty may be even larger than we observe. The rich Tokyo lawyers work at large firms, where systematic tax evasion is hard. The rich provincial lawyers mostly work in one-lawyer firms where cash receipts need never be entered on the books.

many of the slower lawyers avoid it. To explore this phenomenon, we first partition lawyers by the opportunity costs they face. Consider Figure 1, a plot of the percentage of lawyers from different schools against the number of times they failed the LRTI exam. University of Tokyo students receive the best job offers, and disproportionately they pass the exam on one of their first four tries.

[Insert Figure 1 about here.]

The reason that most Tokyo graduates pass in four times or less is not that the average Tokyo graduate who hopes for a legal career passes quickly. Even Tokyo graduates pass at only an 8.2 percent rate.³² If they kept on trying, we would expect half of them to pass only after about 8 years of trying (8.2 of 100 the first year, $.082(100-8.2)$ the second year, $.082(100-.082(100-8.2))$ the third year, and so forth). Rather, the typical Tokyo graduate lawyer passes in four years because his classmates who fail four times jettison the effort and take well-paying corporate jobs. It is worth noting that a student can take the test four times still retain access to the university placement machinery if he takes it once (or perhaps twice) during his first four years in college, a second time by delaying graduation a year, and a third or fourth time by enrolling in a master's program.

Beyond those four years, students increasingly find it hard to obtain job offers from corporate employers. Accordingly, those with job prospects at the best firms tend to drop out of the LRTI exam pool after four years. Disproportionately, those who do poorly on the job market anyway continue to take the exam. They obviously face lower odds of ever passing, but while continuing their studies they make do as best they can by living at home or taking assorted odd jobs. They are not unlike those American students who fail to get a good job after college and tell people they are “planning to go to law school”.

Hence the reason so many people try so hard to become lawyers despite the income: for many of them, the modestly high income is not modest. Instead, it exceeds what they could earn elsewhere. The bulk of the people taking the exam are not the University of Tokyo elite who choose between the bar and a position at NEC. Elite students attack the exam 3 or 4 times and if unsuccessful take the NEC job. Instead, most of the people taking the exam are men and women without access to such high-paying jobs. For them, a job as an attorney offers very good prospects indeed.

2. The locational choice. -- Table 6 presents the locational choice that lawyers with differing abilities face. We define an “elite” lawyer as a University of Tokyo graduate who passes the LRTI exam on one of his first four tries (**Flunks** ≤ 3). According to Column (1), elite lawyers earn significantly higher incomes in Tokyo (often at one of the international firms) than elsewhere. According to Column (2), everyone else earns more if they stay out of the city.

[Insert Table 6 about here.]

³² Ramseyer & Nakazato, *supra* note, at 8.

In Table 6 Column (3), we regress (through probit) the locational choice each lawyer makes (**Tokyo** = 1) on his background. Those with low **Flunk** scores and with University of Tokyo degrees opt for Tokyo careers. Although graduates of other Tokyo schools also tend to stay in Tokyo, the lower marginal effect suggests they less often stay than those from the University of Tokyo. Among University of Tokyo graduates, 72 percent choose to work in the city. Among those from other Tokyo universities, only 62 percent do. And among those from all other universities, only 42 percent do.

The resulting lesson is straightforward. The most talented lawyers earn more in Tokyo than the provinces, and tend to opt for Tokyo jobs. The less talented earn more in the provinces, and tend to opt for provincial jobs.

Note, however, that we need not feel sorry for the less talented lawyers who stay in Tokyo and earn less. They do, after all, get to live in Tokyo. If they had the opportunity to earn a high income in Kumamoto and decided to have a low income in Tokyo, then we can conclude they think living in Tokyo is worth the lower income. Thus, part of the scarcity rent for lawyers in Japan may show up as the job amenity of a good location instead of as high income.

E. The Determinants of Provincial Income:

Among the half of all lawyers who choose not to work in Tokyo, who succeeds? To explore the question, in Table 7 we regress an attorney's logged tax liability on his personal variables and a series of characteristics about the prefecture. We take as our dataset all lawyers not in Tokyo. Consistently, those who failed the LRTI exam fewer times do earn more than those who failed it more often. The University of Tokyo degree, however, earns a lawyer no advantage. As in prior regressions, more experienced lawyers do not earn more than younger lawyers, and men make more than women.

[Insert Table 7 about here.]

Because prices depend on competition, we include in Table 7 the number of attorneys per prefecture. To be sure, most provincial attorneys do simply work where they were born. Among our randomly sampled lawyers outside of Tokyo, Osaka, and the **Metropolitan** areas, 79 percent work where they were born. Yet only 64 percent of those **Metropolitan** lawyers were born where they work, and only 37 percent of the Osaka lawyers and only 38 percent of the Tokyo lawyers were born there. A LRTI graduate from rural Miyazaki will not open a practice in rural Niigata, apparently, but he may well decide to stay in Tokyo. [xxx this should be attorneys per capita or some such measure]

When deciding whether to stay in the city or to return home, a rural-born young lawyer will choose in part on the basis of the income he can expect to earn in the two areas. To eliminate this endogeneity in Table 7, we instrument the number of attorneys in each prefecture with proxies for the level of amenities available there: **Museums**, **Concerts**, **School Internet**, and **College Grads**. As one would expect, so instrumented an increase in the number of attorneys generally lowers attorney incomes (Cols. (1), (3);

though not in all specifications). The number of new attorneys (Col. (2)) seems to have much the same effect.³³

Turn to the other prefecture-specific variables. We try a variety of these. The standard method is to put them all in one regression, to find out which of several collinear variables is really explaining the dependent variable, income. We do that in column (7), and the method works if enough observations are available, but in small samples it is not so dependable, so we also run several regressions that focus on a single prefecture-specific variable, a procedure useful especially for determining what is *not* causal. First, higher general per capita incomes lead to higher attorney incomes (Col. (3)). People in richer prefectures apparently buy legal services poorer people do without. Second, bankruptcies are positively associated with attorney incomes (Col. (3)). When a firm fails it and its creditors take a variety of strategies that may rely on an attorney's services (the correlation between bankruptcies per capita and litigation per capita is .94). Per capita income held constant, attorneys in prefectures with more bankruptcies earn higher incomes.

Third, hospitals and perhaps serious traffic accidents are also associated positively with attorney incomes (Col. (4)). Given the dearth of malpractice claims,³⁴ the coefficient on hospitals would not directly reflect disputes over the medical care itself. Instead, perhaps it captures the claims arising out of the injuries that brought the patients to the hospital in the first place (though the correlation between traffic deaths per capita and hospitals per capita is modestly negative). Fourth, serious crimes are not associated with high attorney incomes in Japan (Col. (5)). Criminal defense work rarely makes lawyers rich in the U.S., and it seems not to do so in Japan.

Fifth, higher levels of pro bono services are associated with lower attorney incomes (Col. (5)). Hypothetically, the amount of the pro bono work could reflect either (i) general prefectural income levels (attorneys offer free services most readily to poor people) or (ii) the amount of unbilled time attorneys have (attorneys provide pro bono work when short of billable projects; this would make the variable endogenous, of course). In fact, it reflects (ii): if we regress **Pro Bono PC** on **Income PC** and **Ln Tax Liabilities**, we obtain coefficients and t-statistics of .0008 (2.87) and -1.193 (3.46).³⁵ Attorneys do not offer pro bono services when they live in poorer communities. They offer them when they need to advertise their services and generate demand.

Last, higher general levels of business activity are not associated with higher attorney incomes (Col. (6)). Although business activity entails transactional work, apparently moderate-sized regional firms tend not to hire lawyers for such work. Instead, only the exchange-listed Tokyo firms do, and they hire their lawyers on the Tokyo market.

In Column (7), we include all these prefecture-specific variables. Only the **Bankruptcy PC** and **Pro Bono PC** are strongly significant.

³³ On prefecture-level changes in the number of attorneys, see Ginsburg & Hoetker, *supra* note, at 38-39.

³⁴ See, e.g., Robert B. Leflar & Futoshi Iwata, *Medical Error as Reportable Event, as Tort, as Crime: A Transpacific Comparison* (Jan. 22, 2006; unpublished).

³⁵ We use OLS with robust standard errors. We include all attorneys outside Tokyo; n = 802.

F. Robustness Checks:

We close by exploring whether our principal findings are robust to alternative specifications. Toward that end, in Panel A of Table 8 we experiment with other regression techniques. The three alternatives of OLS, probit, and Poisson regression all come to much the same result as tobit. In all four regressions the coefficients on **Flunks** are significantly negative, and those on **U Tokyo** significantly positive. Whether we use the tobit regressions discussed earlier (Column (1)), whether we limit ourselves to taxpayers on the High-Income-Taxpayer list (Column (2)), whether we use as our dependent variable a High-Income-Taxpayer-list dummy (Column (3)), or whether we use as that dependent variable the number of times a lawyer appeared on the High-Income-Taxpayer list (Column (4)) -- regardless of the specification we use, we obtain consistent results.

In Panel B, we repeat our principal regressions on logged 2003 tax liability. Because we have 2003 tax data only on those lawyers who also appeared on the 2004 list, the exercise is obviously imperfect. Again, however, we obtain results consistent with the ones in our main regressions. In our basic Column (1) regression, the marginal effects on **Flunks** and **U Tokyo** are significant in the predicted directions. In Columns (2) and (4), the regressions indicate that lawyers in the provinces and lesser cities report higher incomes than attorneys in Tokyo. And in Columns (3) and (5), they indicate that the University of Tokyo graduates and low-**Flunk** attorneys earn the largest premium in Tokyo (though the Flunk-Tokyo interaction is not significant in the instrumental variables regression).

IV. Conclusion

The Japanese legal services industry presents a bifurcated market. As the locus for complex transactions and litigation, Tokyo attracts the most talented lawyers. Disproportionately, they choose to practice there, and earn incomes commensurate with their ability. Because Tokyo attracts so many lawyers, however, those who work there earn lower scarcity rents than they would earn in the provinces.

With far fewer lawyers, the provinces do offer monopoly rents. Disproportionately, many of the less talented lawyers opt for careers there. Facing lower opportunity costs to a legal career, they willingly spend many years studying to pass the bar-exam equivalent. Once they pass, they return to their home prefecture, and earn what are -- for them -- handsome returns.

Table 1: Calculating Income from Tax Liability

The amount of income that would generate a tax liability of 10 million yen is about 39.9 million yen. To reach this conclusion, we make the following calculations:

A. The Principles:

1. Assume the taxpayer has only salary income. If so, he will have the standard salary income deduction of 5 percent plus 1,700,000 yen. See Shotoku zei ho [Income Tax Act], Law No. 33 of 1965, Sec. 28.

2. Assume further that this taxpayer has no children, no life insurance, no charitable donations, no medical expenses, etc.. If so, he will have only the three basic personal deductions: his own deduction, his spouse' deduction, and a social security deduction. Assume the last equals 1 million yen (in fact, it varies by salary level). See Shotoku zei ho, Secs. 74, 83, 86.

* Basic personal deduction	380,000 yen
* Sousel deduction	380,000
* Social security deduction	1,000,000

3. A taxpayer with an income in this range will face the full maximum marginal rate: 37 percent. The actual amount of the tax is given as 37 percent of his income, less a deduction of 2.49 million yen.

4. This taxpayer will also have the currently standard lump-sum tax credit of 250,000 yen. Shotokuzei to futan keigen sochi ho [Act to Reduce the Burden of the Income Tax], Law. 8 of 1999, Sec. 6.

B. Tax calculation:

Gross income:		39,900,000
Salary income:		
$39,900,000 \times .95 - 1,700,000 =$		36,205,000
Taxable income:		
36,205,000		
380,000		
380,000		
- 1,000,000		
<hr/>		
34,445,000		34,445,000
Income Tax:		
$34,445,000 \times .37 - 2,490,000 =$		10,254,650
Less lump-sum tax credit:		
$10,254,650 - 250,000 =$		10,004,650

Table 2: Selected High-Income Lawyers

Rank (att)* (all)**		Name	Firm	Pref.	YOB	Bar pass	University	2004 Taxes	No. Appear.
1	185	Shin Ushijima	Ushijima sogo	Tokyo	1949	1974	U Tokyo	227,161	1
5	770	Nobuo Takai	Takai law	Tokyo	1937	1960	U Tokyo	106,749	5
10	1,315	Mutuo Tahara	Habataki	Osaka	1943	1966	Kyoto U	80,344	12
20	2,061	Yuichi Suzuki	Tokyo keizai	Tokyo	1946	1972	Keio U	64,171	18
50	4,566	Shin Kikuchi	Mori Hamada	Tokyo	1960	1981	U Tokyo	43,013	7
100	10,449	T. Shinagawa	Mori Hamada	Tokyo	1958	1982	U Tokyo	28,653	1
200	30,273	Sentaro Arai	Arai law	Tokyo	1938	1961	Meiji U	16,966	9

Notes: * Rank among attorneys. ** Rank among all taxpayers. Taxes are in x1000 yen. "No. Appear." gives the number of times the lawyer has appeared on the High-Income-Taxpayer list.

Sources: Horitsu shimbunsha, ed., Zenkoku bengoshi taikan [National Survey of Lawyers] (Tokyo: Horitsu shimbun sha, 2005); Tokyo shoko risaachi, ed., Zenkoku kogaku nozeisha meibo [National Registry of High-Income Taxpayers] (Tokyo: Tokyo shoko risaachi, 2004) (CD-ROM version).

Table 3: Summary Statistics for Attorney Characteristics

A. Introduction:

	Random Sample					High-Income-Taxpayer				
	n	min	median	mean	max	n	min	median	mean	max
High-Income-Taxpayer	1120			.02						
Tax Liability						404	10,010	16,872	24,756	227,161
Flunks	904	0	6	6.57	20	377	0	4	4.97	18
U Tokyo	1120	0		.16	1	404	0		.31	1
Tokyo location	1120	0		.47	1	404	0		.45	1
Osaka location	1120	0		.13	1	404	0		.03	1
Other Metropolitan	1120	0		.24	1	404	0		.23	1
Provinces	1120	0		.16	1	404	0		.29	1

B. Income Levels and Lawyer Characteristics:

	Random	High Income
Mean Flunks	6.57	4.97
% Flunks > 3	74.2	55.2
% International	5.7	22.3
% U Tokyo	15.9	31.4
% Chuo U	19.3	17.8
% Tokyo	46.7	44.8
n	404	1120

C. Geography and Lawyer Characteristics:

1. *Random Sample*

	Tokyo	Osaka	Other Metro	Provinc'l
% U Tokyo	24.7	5.4	7.1	12.3
% Chuo U	24.9	6.0	16.0	19.0
% High Income	1.0	<0.1	3.3	5.0
Mean Flunks	6.32	6.31	6.65	7.50
% Flunks > 3	70.5	69.8	77.7	85.6
n	523	149	184	179

2. *High Income Taxpayers*

% U Tokyo	59.7	0	5.4	11.8
% Chuo U	12.7	0	20.4	25.2
Mean Flunks	3.38	4.00	6.20	6.79
% Flunks > 3	37.6	54.5	72.8	71.0
n	181	11	93	107

Notes: Panels B and C give the relevant figure for the population of lawyers in each column. In Panel B, among the high-income lawyers, the mean Flunks score was 4.97. In Panel C, among the randomly sampled Tokyo lawyers, 24.7 percent came from the University of Tokyo.

Sources: See Table 2.

Table 4: Determinants of Attorney Income

	(1)	(2)	(3)	(4)	(5)	(6)
	Tobit	Tobit	Tobit	Tobit	IV Tobit	IV Tobit
Flunks	-.019 (5.67)	-.020 (6.05)	-.020 (6.00)	-.009 (1.81)	-.078 (7.12)	-.030 (0.89)
U Tokyo	.194 (5.30)	.204 (5.64)	.187 (5.33)	-.057 (0.93)	.601 (5.78)	-.197 (0.98)
Experience	.000 (0.09)	-.000 (0.31)	.000 (0.02)	.001 (0.45)	-.002 (0.54)	.001 (0.45)
Male	.125 (5.32)	.099 (4.07)	.105 (4.22)	.191 (4.03)	.487 (2.71)	.573 (3.22)
Osaka			-.122 (4.57)		-.457 (1.34)	
Metropolitan			.042 (1.36)		.399 (2.60)	
Provinces			.122 (3.45)		.543 (4.06)	
Tokyo * Flunks				-.047 (3.33)		-.093 (1.44)
Tokyo * U Tokyo				.514 (3.63)		.985 (2.79)
Tokyo				.110 (1.81)		.136 (0.22)
Prefectural dummies	No	Yes	No	No	No	No
n	1261	1261	1261	1261	1235	1235

Notes: The dependent variable is **Ln Tax Liability**. For data sources, see Table 2.

Columns (1) through (4) are tobit. For continuous variables, the number reported is the marginal effect of the independent variable, calculated at the median; for dummy variables, it is the marginal effect of a discrete change from 0 to 1. z statistic are in parentheses.

Columns (5) and (6) are instrumental variable tobit with Newey's two-step estimator. In Column (5) we instrument the regional variables with the hometown of the lawyer, and in Column (6) we do the same for Tokyo. These iv tobit regressions give the regression coefficients themselves (not the marginal effects).

In Columns (2), (3) and (5), the omitted prefecture is Tokyo. Prefectural results are calculated in Column (3) but not reported.

In all cases, a constant term is calculated but not reported.

Table 5: The Effect of University Background

	Random Sample				All HIT n	Regression Results		
	Total n	Tokyo n	HIT n	Mean Flunks		A Coeff.	B S.E.	C Marg. Eff.
<i>Public, Tokyo</i>								
U Tokyo	178	129	7	5.25	127	1.584**	(.553)	.322***
Hitotsub'i	27	16	1	6.15	10	1.024*	(.590)	.131**
<i>Public, Other</i>								
U Kyoto	76	10	2	5.24	23	.876	(.562)	.098**
Tohoku U	25	11	0	6.67	9	.917	(.595)	.107*
Kansai U	25	0	1	8.75	4	.727	(.623)	.071
Osaka U	17	1	0	5.59	5	.943	(.615)	.112
Osaka City	12	0	0	8.17	2	.811	(.677)	.085
Hokkaido U	11	2	1	7.09	9	1.471**	(.610)	.274**
Nagoya U	11	3	1	7.54	5	1.166*	(.638)	.169*
Kyushu U	10	2	0	6.67	4	1.160*	(.652)	.168
Kobe U	7	0	1	7.71	7	1.614**	(.633)	.335*
<i>Private, Tokyo</i>								
Chuo U	216	130	4	7.00	72	.990*	(.553)	.123***
Waseda U	105	60	1	7.14	39	1.195**	(.558)	.178***
Keio U	51	40	0	6.04	18	1.092*	(.570)	.149***
Meiji U	39	24	0	6.29	7	.608	(.593)	.053
Nihon U	21	16	0	9.10	8	1.144*	(.606)	.163**
<i>Private, Other</i>								
Doshisha U	14	4	0	6.07	1			
Ritsumeikan	7	0	0	6.43	3	1.085	(.681)	.147
<i>Other Univ</i>								
	74	35	2	7.69	22	.969*	(.566)	.118**
<i>No Univ</i>								
	195	41	2	7.78	29	1.130*	(.656)	.159

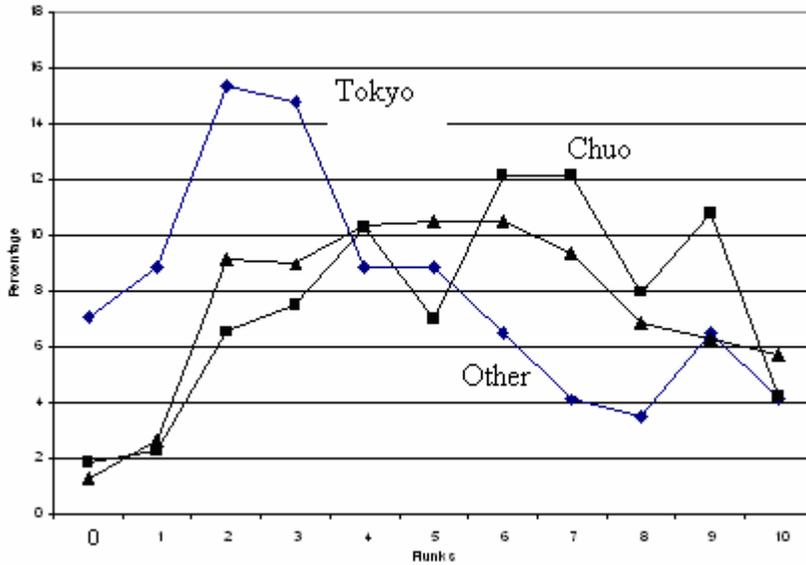
Notes: In other words, there were 178 University of Tokyo graduates in the random sample, and 129 of those 178 worked in Tokyo. Seven of the 178 were on the High-Income-Taxpayer list, and on that High-Income-Taxpayer there were 120 not in our random sample, making a total of 127 U Tokyo graduates. The 178 random-sample U Tokyo graduates had a mean **Flunks** score of 5.25.

The last three columns give the results of a tobit regression of **Ln Tax Liability** on dummy variables for each of the universities, **Tokyo, Flunks, Experience**, and a constant term. As the omitted term, we take the university with the fewest graduates on the HIT list: Doshisha U. Col. A. gives the coefficient, Col. B gives the standard errors, and Col. C. gives the marginal effect of a discrete change from 0 to 1, which here is a semi-elasticity: the % change in an attorney's tax liability as result of that discrete change.

Stars indicate significance at the 1% (***), 5% (**), and 10% (*) levels. **Sources:** See Table 2. [xxx Actually, Chuo would be a better omitted dummy than Doshisha. I think Doshisha is significantly

different from all the others—hence the significant marginal effects---
but none of the others are different from each other.]

Figure 1: Dropping Out of the Lawyer Market



Notes: In the figure, we give the percentage of lawyers with a given Flunks score for the University of Tokyo, Chuo University, and all other universities. [The first horizontal point is 0 not 1.]
 Sources: See Table 2.

Table 6: A Lawyer's Choice of Where to Practice

	(1) Elite College	(2) Non-Elite College	(3) All Colleges
Dependent variable:	Ln Tax	Ln Tax	Tokyo location
	<u>Tobit</u>	<u>Tobit</u>	<u>Probit</u>
Experience	-.008 (1.85)	.003 (4.36)	
Tokyo Flunks	.412 (3.62)	-.037 (2.20)	-.008 (2.72)
U Tokyo			.547 (16.32)
Other Tokyo Univ			.350 (11.71)
n	167	1267	1261

Notes: For the continuous variables, the regressions give the marginal effect of the independent variable, calculated at the median; for dummy variables, they give the marginal effect of a discrete change from 0 to 1. The corresponding z-statistic follows in parentheses.

All regressions include a constant term. **Elite** is as defined in text. In regression (3), the omitted dummy is "Non-Tokyo University".

Sources: See Table 2.

Table 7: Determinants of Attorney Income outside Tokyo

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Flunks	-.025 (2.73)	-.025 (2.75)	-.026 (2.81)	-.022 (2.41)	-.023 (2.43)	-.024 (2.65)	-.025 (2.68)
U Tokyo	-.193 (1.61)	-.192 (1.59)	-.161 (1.33)	-.179 (1.51)	-.203 (1.66)	-.178 (1.50)	-.183 (1.52)
Experience	-.001 (0.22)	-.001 (0.23)	-.002 (0.45)	.001 (0.20)	.000 (0.00)	-.001 (0.16)	.000 (0.12)
Sex	.810 (2.32)	.806 (2.30)	.814 (2.26)	.900 (2.56)	.938 (2.65)	.838 (2.33)	.988 (2.70)
Attorneys	-.0002 (5.56)		-.0005 (5.44)	-.000 (0.84)	.0004 (2.07)	-.0003 (3.11)	.000 (1.40)
New Attys		-.001 (5.56)					
Income PC			.001 (3.24)				-.000 (0.22)
Bankr'y PC			.455 (3.90)				.298 (2.98)
Hospitals PC				.030 (2.11)			.005 (0.26)
Traf Death PC				.059 (1.47)			.025 (0.71)
Crimes PC					-.040 (2.94)		-.003 (0.28)
Pro Bono PC					-.154 (3.48)		-.150 (3.48)
Corp Inc PC						-.001 (1.20)	.001 (0.81)
New Business %						.015 (0.17)	-.265 (1.88)

Notes: n = 621. The dependent variable is **Ln Tax Liability**. We use only those lawyers located outside of Tokyo. For data sources, see Table 2. PC = per capita.

The regressions are instrumental variable tobit with Newey's two-step estimator. In these estimations, we instrument **Attorneys** (or **New Attys**) with variables proxying for the amenities available in the prefecture: **Museums, Concerts, School Internet, and College Grads**. These regressions give the regression coefficients themselves (not the marginal effects), followed by the absolute value of the t statistic on the line below. In all cases, a constant term is calculated but not reported.

**Table 8: Determinants of Attorney Income:
Robustness Checks**

A. Alternative Regression Forms:

	(1) Tobit	(2)* OLS	(3) Probit	(4) Poisson
Flunks	-.065 (6.40)	-.034 (4.22)	-.053 (5.23)	.014 (2.26)
U Tokyo	.511 (5.93)	.317 (4.70)	.376 (4.16)	.282 (6.04)
Experience	.000 (0.09)	-.002 (0.68)	.001 (0.36)	.039 (20.59)
Sex	.637 (3.68)	-.173 (1.06)	.730 (4.12)	.477 (2.98)
n	1261	377	1261	377
Dep. Var.:	Ln Tax Liability	Ln Tax Liability	HIT	Num. Appearances.

Notes: * Those attorneys who paid at least 10 million yen in 2004 taxes only. The table gives the regression coefficient (for Column (1), not the marginal effects as in other tables), followed by the absolute value of the corresponding t- (or z-) statistic in parentheses. All regressions include a constant term. The OLS regression's R² is xxx.

B. Using 2003 Tax Liability:

	(1) Tobit	(2) Tobit	(3) Tobit	(4) IV Tobit	(5) IV Tobit
Flunks	-.015 (4.90)	-.015 (5.14)	-.009 (2.22)	-.082 (6.21)	-.028 (0.71)
U Tokyo	.135 (4.17)	.134 (4.45)	-.023 (0.43)	.590 (4.87)	-.098 (0.42)
Experience	.001 (1.44)	.001 (1.12)	.002 (1.45)	.003 (0.71)	.006 (1.56)
Sex	.114 (6.44)	.091 (5.02)	.163 (3.97)	.735 (3.11)	.846 (3.53)
Osaka		-.063 (2.71)		-.252 (0.67)	
Metropolitan		.057 (2.01)		.495 (2.79)	
Provinces		.104 (3.27)		.574 (3.69)	
Tokyo * Flunks			-.033 (2.56)		-.112 (1.43)
Tokyo * U Tokyo			.348 (2.75)		.812 (1.93)
Tokyo			.048 (0.90)		.222 (0.30)
n	1261	1261	1261	1235	1235

Notes: The dependent variable is **Ln Tax Liability** for the 2003 tax year (x 1000) if an attorney was on the 2004 HIT list; logged 10,000 otherwise.

Columns (1) through (3) are tobit. For continuous variables, these tobit regressions give the marginal effect of the independent variable, calculated at the median; for dummy variables, they give the marginal effect of a discrete change from 0 to 1. After the marginal effect, the table gives the absolute value of the corresponding z statistic.

Columns (4) and (5) are instrumental variable tobit with Newey's two-step estimator. In the iv tobit estimations, we instrument the regional variables with the hometown of the lawyer. These iv tobit regressions give the regression coefficients themselves (not the marginal effects).

In all cases, a constant term is calculated but not reported.

Sources: See Table 2.