

Draft of Jan. 18, 2008

Minoru Nakazato
Univ. Tokyo Law Faculty
Bunkyo-ku, Tokyo
nakazato@j.u-tokyo.ac.jp

J. Mark Ramseyer
Harvard Law School
Cambridge, MA 02138
ramseyer@law.harvard.edu

Eric B. Rasmusen
Kelley School of Business
Bloomington, IN 47405
erasmuse@indiana.edu

The Industrial Organization of the Japanese Bar:

Levels and Determinants of Attorney Income

**By Minoru Nakazato,
J. Mark Ramseyer and
Eric B. Rasmusen***

Using micro-level data on attorney incomes, we reconstruct the industrial organization of the Japanese legal services industry. These data suggest a bifurcated bar, with two sources of unusually high income: an idiosyncratic return to talent in Tokyo, and a compensating differential for the lack of amenities in the provinces. The most able 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 opt either for relatively low-income careers in Tokyo, or for a practice in the provinces that pays a compensating differential for the lower levels of amenities.

* Professor of Law (Taxation and Law and Economics), University of Tokyo; Mitsubishi Professor of Japanese Legal Studies, Harvard Law School; Dan R. and Catherine M. Dalton Professor, Kelley School of Business, Indiana University. We received generous financial assistance from the East Asian Legal Studies Program and the John M. Olin Center for Law, Economics and Business at the Harvard Law School. We received helpful advice and suggestions from Bruce Aronson, Tom Ginsburg, Glen Hoetker, Curtis Milhaupt, Mark West, and David Wilkens and participants in presentations at Columbia University, [Creighton University](#), Harvard University, Indiana University, the University of Illinois, [New York](#)

University, the University of Tokyo, Wesleyan University, and the American Law & Economics Association, and the Japanese Law and Economics Association.

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 has but 2 percent as many lawyers.

The dearth has not been for want of applicants for the job. Rather, it has followed from deliberate policy. For over half a century, the government required all would-be lawyers to study at its Legal Research and 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 the LRTI. 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, and the incomes they do earn vary considerably. Why they apparently earn what they do 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 the attorneys' 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 bifurcated market. As the locus for the most complex business transactions and litigation (since most of the large corporations are headquartered there), Tokyo generates the highest returns to legal talent. Disproportionately, the brightest lawyers locate there and join 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 they do, they then face a choice: they can (a) locate in Tokyo and earn modest incomes, or (b) forego the amenities available to professional families in Tokyo, and locate in the provinces where their incomes will include a compensating differential reflecting those lower amenity levels.

I. The Japanese Legal Services Industry

A. The Puzzle:

Something is wrong with the following picture: Subject to draconian entry barriers, the Japanese bar is 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-so many people try so hard to become lawyers?

Lawyers are indeed few in Japan. In 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 (Nihon bengoshi, 2005: 77, 81).

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"), but those who would practice law must attend what was long the single law school --- the 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.¹

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.² 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 1999, they still reported a mean 17 million -- about \$146 thousand (on the distribution of income for all occupations in Japan, see Sec. B., below).³

These incomes are high, but not stratospherically high. Mid-level white-collar workers do earn less: corporate branch managers in the 1990s (with a mean age of 50) earned about 12 million yen, while a lawyer (by the 1999 survey) in his 40s made 20 million yen and one in his 50s made 22 million. Yet physicians earn much more: indeed, a doctor running a private clinic earned a mean 32 million (Nihon 2000; Bengoshi 1991; Ramseyer and Nakazato 1999, p. 14).

Compared to American lawyers, these incomes perhaps exceed those in mid-tier, but fall short of those of the elite. According to John Heinz and Edward Laumann's (1994, pp. 8-11) 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. On the one hand, 17 million yen does more than double the

¹ For an insightful analysis, see Ginsburg and Hoetker (2006). Japan recently increased the number of people it passed -- but that in turn led to an increase in the number of people taking the exam. For historical pass rates, see Ramseyer and Nakazato (1999, p. 7 tab. 1); <http://www.moj.go.jp/PRESS/051007-1/17syutu-gou2.html>

² For an excellent description of the exam, see Milhaupt and West (2004).

³ See Nihon (2000, 316); Milhaupt and West (2004, p. 219); Alexander and Tan (1984) (which uses the HIT database from the early 1980s).

Japanese national median. On the other hand, it falls far below the incomes earned by the AmLaw 100 partners.

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 only modestly high amounts?

B. The 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, corporate executives earn significantly less than in the U.S. (Nakazato Ramseyer and Rasmusen 2006). 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 legal incomes too.

Second, Japanese lawyers face a large number of unlicensed competitors (Ramseyer 1986; Kato 1987; Young and Hamilton 1988). 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 (Shiho seido 2001). 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 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.⁴

Other competitors operate from various licensed sub-sectors -- some of whom complement the work of attorneys, but some of whom compete with them. “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.⁵

Largely because of this competition, most Japanese attorneys specialize in the one activity over which courts enforce the unauthorized practice ban: litigation.⁶ 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 (Nihon 2005, p. 93). 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 (id.).

Traditionally, few lawyers other than those at the Tokyo international firms have done much besides litigate.⁷ The largest of these international firms (e.g., Nishimura Tokiwa& Asahi) now exceed 2300 lawyers, and offer the full panoply of corporate

⁴ For an analysis and description of these departments, see Kitagawa and Nottage (forthcoming2007).

⁵ Numbers from the official web sites of the professional associations of each of the groups, summer 2006.

⁶ Bengoshi ho [Attorneys Act], Law No. 205, of 1949, Sec. 72; see Ramseyer (1986).

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; Nihon bengoshi 2005, p. 70), 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 and Forester) and U.K. law firms (e.g., Clifford Chance). Several of these now include many Japanese lawyers as well.⁸

II. Empirics

A. The Estimation Strategy

Plausibly, lawyer incomes in Japan depend on individual characteristics (e.g., talent and experience), the number of lawyers in a particular prefecture, the amount of non-lawyer competition, the need for legal services, and the amenities of living in the prefecture. To see which of these are most important, one might use a regression equation of the following form, in effect a demand equation for lawyer i in prefecture j :

$$(1) \quad \text{Income}_{ij} = a_0 + a_1 * \text{talent}_i + a_2 * \text{quantity}_j + a_3 * \text{competition}_j + a_4 * \text{demand-shifters}_j + \text{disturbance}_i$$

As we will explain, our income data consist of the exact tax bills for lawyers paying over a certain threshold plus, for poorer lawyers, the knowledge that those lawyers had tax bills below the threshold. We will therefore use tobit regressions, which will allow us to include all of this information in our regression estimate.

For reasons discussed below, however, Tokyo is a special market -- not just a large prefecture, but a prefecture with an unusual market for legal services (stemming from the overwhelming location of corporate headquarters for large firms in the city) that we would not expect to follow the same demand specification as the others. Merely correcting for the heteroskedasticity resulting from one observation with so much higher values for quantity, competition, and the demand shifters is not correction enough, because we would not expect the true coefficients to be the same for Tokyo.

We will therefore use two different sets of regressions. First, we will drop the prefectural variables and just include the individual-lawyer variables to compare Tokyo with other locations. If we use **Tokyo** to denote a dummy variable for the lawyer's job location being in Tokyo and interact that with the individual characteristics, equation (1) becomes

$$(2) \quad \text{Income}_{ij} = b_0 + b_1 * \text{talent}_i + c_0 * \text{Tokyo}_i + c_1 * \text{Tokyo}_i * \text{talent}_i + \text{disturbance}_{ij}$$

We would expect job location to be endogenous, because a lawyer who for some unmodelled reason has a high income (that is, whose value of the individual disturbance is large and positive) may be more likely to choose to locate in Tokyo. The instrument

⁷ And virtually none dropped out of the bar. Only about 100 lawyers per year drop their registration. See Nihon bengoshi (2005: 74).

⁸ For a directory to this corporate legal services market, see Nikkei Business (2005).

we will use is a lawyer's hometown. If a lawyer's hometown is a determinant of his location choice, it is correlated with his location but not, we assume, with his income, holding his ability constant.⁹

Equation (2) is as much as we can do for Tokyo, since its prefecture-level variables have a unique effect. We can, however, exploit variation among the other prefectures to estimate equation (1) for them. Yet Equation (1) has a problem that equation (2) does not: it includes the quantity of lawyers and quasi-lawyer competitors in a prefecture and those are endogenous variables, depending on the incomes the lawyers and competitors can expect to earn in that prefecture. As is typical in demand equation estimation, we need instruments for quantities. The amenities of living in the prefecture are something that would affect the supply of lawyers and their competitors but not the demand, and so make suitable instruments.

B. Data:

1. Tax data coverage. -- For our estimations, we turn to the incomes of individual, named, attorneys in the year 2004. We obtain this information from tax data. 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.¹⁰ 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 in Japan conservatively would pay 10 million yen in taxes. U.S. taxpayers filed nearly 181,000 returns with incomes over \$1,000,000 (www.irs.gov).

We obtained our tax data from the Japanese affiliate of the D&B credit rating service, Tokyo shoko risaachi (TSR 2004). Naturally, TSR uses the data for credit

⁹ There are two reasons why our instrument could be correlated with the disturbance term in the demand equation. First, a lawyer born in the prefecture might be more productive there, say because of family connections in the local business community. If that is true, the hometown variable ought to be a separate regressor, not an instrument. Second, a lawyer might accept a lower income in his hometown than an outsider would, and if there were enough hometown returnees, such a lawyer might be the marginal supplier and affect the income level. For those concerned by our choice of instrument, we will offer both instrumented and uninstrumented specifications in Table 4.

¹⁰ Kojin joho no hogo ni kansuru horitsu [Act Relating to the Protection of Personal Information], Law No. 57 of 2003.

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; Horitsu 2005).

Since hand-collecting background data incurs an extra cost for each observation, and observations for which we have tax data are the most crucial, we use stratified sampling--- we include all of the lawyers for which we have tax data, and a random sample of others. The JFBA directory records the backgrounds of all 21,000 attorneys in private practice. We first found the background of 1,120 lawyers selected randomly from this list (except that because of lingering differences reflecting the differing regulatory regime under the U.S. occupation before 1972, we exclude Okinawa). Of these 1,120 attorneys, just 23 are on the High-Income-Taxpayer list. Because the TSR database includes 381 other high-income-taxpayer lawyers, we enter the tax and background data for all of 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. Japanese taxpayers pay a tax of 37 percent on ordinary income beyond 18 million yen.¹¹ For a crude approximation of income from tax liability, readers thus can simply 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.]

In 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 does not work at one of the prominent international firms, he worked at such a firm before starting his own.¹² The fact that he never appeared on the High-Income-Taxpayer list before suggests he received a windfall in 2004, or ~~realized~~-recognized his capital gains then. Note that his income includes non-law returns: he has written at least six novels (several of which do well on the Amazon sales rank)¹³ and holds senior offices with several corporations.

[Insert Table 2 about here.]

From Ushijima's 227 million, tax liabilities fall quickly. Fifth-ranked Nobuo Takai paid less than half as much tax, 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

¹¹ 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.

¹² See <http://www.ushijima-law.gr.jp/lawyers/partners/su.html> (March 2007).

¹³ <http://www.amazon.co.jp/> searching Ushijima Shin (in Japanese) (March 2007).

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 significant. 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. Because the large offices are overwhelmingly in Tokyo, this underreporting will depress Tokyo incomes relative to those in the provinces.

Third, as the example of Ushijima illustrates, 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.

Fourth, it is possible that law firms compensate their partners through untaxed perquisites (e.g., housing, automobiles). As common as these practices are among senior corporate executives, however, they appear to be rare among law firm partners.

Last, even before 2005 some wealthy Japanese resented the publication of their tax bills (though at least anecdotally some small-town lawyers are said to have been proud of making the list). To skirt disclosure, they could do one of two 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, they 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 crude 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 (obtained from Toyo 2005). 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.

In addition, when we learned that one large firm paid its "equity partners" more favorably than the others, we obtained the equity roster. We then compared their incomes with those of the other partners. The equity partners did indeed report higher incomes.

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.¹⁴

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 (Horitsu 2005). For most prefecture-level data on economic welfare we use standard Japanese statistics as collected in Toba (2005). 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 (2005), the standard American law directory.

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.

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. Elsewhere, we show that a judge's success within the judiciary is heavily correlated with the number of times he failed the exam (Ramseyer & Rasmusen, 2003).

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.

¹⁴ See the discussion in Nakazato, Ramseyer and Rasmusen (2006). Both dividends and securities capital gains were subject to a national tax of 7 percent.

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. Variables for the Prefecture in which a Lawyer Practices. –

Attorneys: Total number of attorneys, 2004.

Income PC: Per capita income, 2001.

Bankr'y PC: Number of judicial declarations of bankruptcy per 1,000 population, 2003.

Crimes PC: Criminal Code crimes per 1,000 population, 2003.

Corp Inc PC: Corporate income declared to tax office (billions of yen), per 1,000 population, 2002.

Museums: Total museums in prefecture (including zoos, aquariums, etc.), 2002.

Concerts: Percent of population (10 years old or older) who attend music concerts (for reasons not explained, our source excludes classical concerts), 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. The Determinants of 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.¹⁵ Where 74 percent of the randomly sampled lawyers failed it 4

¹⁵ 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 Miyazawa (1995, p. 77); Ramseyer and Nakazato (1999, p. 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

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).¹⁶

Regression results using the entire dataset, both Tokyo and non-Tokyo and the individual-characteristics approach of equation (2) confirm the 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 reflecting his personal characteristics: **Flunks**, **U Tokyo**, **Experience** (along with its squared term), and **Male**. According to the results, lawyers with University of Tokyo degrees and low **Flunks** do earn more than others. From column (2), someone with a Tokyo degree earns 85% more, and someone with the median of 6 flunks earns 15% less than someone with 5 flunks. Men earn 50% more than women. And given that many lawyers remain members of the bar even after they effectively retire, the effect of **Experience** is non-linear. According to the specification in Column (1), the effect peaks at 23.5 years -- implying peak earnings in his early 50s for the average lawyer. The coefficient sizes from regression (2) imply that a lawyer with 10 years of experience will earn 4.8% more than one with 9 years of experience.¹⁷

[Insert Table 4 about here.]

In Table 5, we explore the effect of university backgrounds in more detail. In our sample of lawyers generally, Tokyo and Chuo Universities stand out as producers of future lawyers, with their 178 and 216 graduates, followed by Waseda (105) and Kyoto (76), but with 195 lawyers not reporting a university. 72% of Tokyo University graduates practice in Tokyo, which is typical for a university located in Tokyo (the range is from 57% to 78%). Graduates of the perennially top-ranked University of Tokyo and University Kyoto have notably fewer **Flunks** than average, as noted earlier, and Tokyo (but not Kyoto) graduates are roughly twice as likely to appear on the High-Income-Taxpayer list.¹⁸ The last column of Table 5 shows the coefficients from a tobit regression of logged tax liabilities on the standard Table 4 variables plus a dummy variable for each university with more than 7 lawyers in the dataset. Tokyo, Hokkaido, and Kobe have the largest positive coefficients, and Meiji and Doshisha have the largest negatives ones, but

pass rate during the late 1970s and early 1980s. See Ramseyer and Nakazato (1999, p. 7).

¹⁶ Admission to the University of Tokyo is solely by a blindly graded exam. Where many other universities test accumulated knowledge, the University of Tokyo takes pains to focus less on knowledge and more on intelligence. That its tests successfully do so is a widely accepted conclusion within Japan.

¹⁷ — The coefficient impacts in this paragraph are calculated as follows, since the dependent variable

is logged. $85\% = \exp(.617) - 1$. $7.8\% = [\exp(-6*.080) - \exp(-5*.080)] / \exp(-5*.080)$. $50\% = \exp(.409) - 1$.

$4.8\% = ([\exp(10*.086 - 10*10*.002)] - [\exp(9*.086 - 9*9*.002)]) / [\exp(9*.086 - 9*9*.002)]$.

¹⁸ Elsewhere, we find that judges who graduated from these universities are professionally more successful than the others. See Ramseyer & Rasmusen (2003).

no university coefficient shows a statistically significant difference from the omitted variable, **No University**.

[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. Japan may have only 21,000 lawyers, but half of them (10,300) work in Tokyo. Although Japan has 6,030 people per lawyer, Tokyo has only 1,206 (Nihon 2005, pp. 77, 81). That puts the city of Tokyo behind the nation of Germany's 651 citizens per lawyer, but ahead of France with its 1,488.

The resulting competition creates an income penalty for lawyers who choose to practice in Tokyo. Return to Table 3's 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 Column (3) of Table 4 we add three geographical variables (Tokyo is the omitted variable, the base for the comparison). As with the summary statistics, lawyers in the provinces earn higher incomes than those in Tokyo, and those in most metropolitan centers earn about as much as lawyers in Tokyo. Puzzlingly, those in the second-largest city of Osaka earn significantly less. With most of the amenities available in Tokyo, Osaka is an attractive place for a professional family, with a somewhat different regional flavor from Tokyo. Because most large firms locate their corporate headquarters in Tokyo, however, Osaka lacks the high-value-added legal work that rewards unusual legal talent. If attorneys chose freely between the two metropolitan areas, incomes would equilibrate. That they do not suggests that the strong regional loyalties that characterized Japan 50 years ago may not have disappeared--- or, that the instrumental variables specification of Column (5) is better. Because lawyers will choose where to practice with an eye on their expected incomes, location is endogenous, as explained earlier. Location affects income, but expected income affects location too. Accordingly, in Column (5) we offer instrumental variables tobit regressions, instrumenting the geographical variables with a lawyer's hometown. Arguably, a lawyer's hometown affects his locational choice without being affected by his incomes at that location.¹⁹ 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.²⁰ In specification

¹⁹ But see the qualifications given in note 9, above.

²⁰ 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

(5) we see that almost all the non-location coefficients are very close to their values and significances in Columns (1) and (2) (which omitted location), with the exception of **Male**, which is now smaller and insignificant. This suggests that the apparent effect of being **Male** (the 50% premium stated earlier) may really be due to men being more likely to locate outside of Tokyo. Column (5) implies that lawyers who choose to practice in a non-Osaka metropolitan area instead of Tokyo earn 34% more (at the marginal 10% significance level), and those who choose a non-metropolitan area earn 47% more (at the 1% significance level).²¹

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. Most of the largest Japanese corporations maintain their headquarters in Tokyo, and most corporations assign their most complex and demanding legal work out of headquarters. As a result, the most talented lawyers should earn the highest return on their abilities in Tokyo -- and so they do. In Columns (4) and (6) of Table 4, we use the full specification of equation (1), interacting **Flunks** and **U.Tokyo** (the lawyer's college) with **Tokyo** (his job location). 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.²²

Column (6) suggests that once we separate the Tokyo legal market from the rest of Japan, talent no longer matters except in Tokyo (**Flunks** and **U.Tokyo** have insignificant coefficients), though experience counts the same everywhere and has the same coefficients as in the other specifications. As with column (5), the **Male** effect disappears, and seems to have been due to conflation with location choice. The importance of talent for Tokyo lawyers, however, is far greater than we found in other specifications for Japan generally. We said earlier that Column (2) implies that for Japan generally someone with a Tokyo degree earns 85% more, and someone with the median of 6 flunks earns 7.8% less than someone with 5 flunks. Column (6) finds insignificant effects (with the wrong sign) for non-Tokyo Japan, but the number changes to a 332% income premium for someone with a University of Tokyo degree, and a 19% income loss for someone with 6 flunks instead of 5.²³ The University of Tokyo premium is huge--- quite likely due to the ``international firms'' we will discuss next.

on the books. On the other hand, however, partners at the large Tokyo firms (particularly those with "closed book" accounts (i.e., accounts not open to junior partners) may use one of the means of avoiding appearing on the HIT list, while attorneys in small cities may welcome their appearance on the HIT list as a badge of success.

²¹ 34% = $\exp(.295)-1$. 47% = $\exp(.386)-1$.

²² Although the Male*Tokyo interaction term generates a large coefficient in regression (5), its magnitude is not reliable (its significance disappears in regression (6) once we use instruments for location). There are only two women on the HIT list outside of Tokyo, so their idiosyncrasies would drive any result.

²³ 332% = $\exp(1.465)-1$. 19.0% = $[\exp(-6*.212) - \exp(-5*.212)]/\exp(-5*.212)$.

2. The international firms. -- Many of the talented lawyers earn their high return by affiliating themselves with one of the large "international firms" (i.e., firms that offer cross-border services, not necessarily foreign-dominated firms) in Tokyo. The lawyers 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 report in the table), the coefficient would be positive and significant at more than the 1 percent level.

Over the past several decades, the international firms have grown consistently (and exponentially), and as they did the tendency for talented lawyers to join them increased too. 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 many of the other lawyers avoid it. For these other lawyers, the choice is between hardship pay in the provinces or a job that lacks both high income and glamour but that nonetheless lets them live in Tokyo. To explore this phenomenon, let us 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 so many Tokyo graduates pass the LRTI exam 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 (Ramseyer and Nakazato, p. 8). 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 average Tokyo graduate lawyer passes in four years because so many of his classmates who failed on their early tries jettisoned the

effort and took well-paying corporate jobs. Those classmates do not appear in the average.

It is worth noting that a student can take the test four times and 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. After that, getting a job offer from a corporate employer becomes more difficult. Accordingly, those with job prospects at the best corporations will 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. Perhaps they are not unlike 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 non-Tokyo graduates 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 a corporation such as NEC. Elite students attack the exam 3 or 4 times and then stop trying and settle for the also-desirable 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, prospects worth the sacrifice of several years of incomeless study for the exam on top of the years spent at LRTI once they do pass.

2. The locational choice. -- Table 6 shows the location 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** \leq 3). According to Column (1), elite lawyers earn substantially higher incomes in Tokyo (often at one of the international firms) than elsewhere. According to Column (2), nobody else gets a clear advantage from being in Tokyo, and the sign of the coefficient is even negative.

[Insert Table 6 about here.]

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 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. Presumably, the less talented lawyers who choose nevertheless to practice in Tokyo do so because they value the amenities Tokyo provides. They could earn higher high income in the moderate-sized city of Kumamoto, but opt instead for the lower incomes in Tokyo. Apparently, they value the amenities attached to Tokyo residence more highly than the accompanying income penalty.

E. Robustness Checks:

Table 7 explores whether our basic findings are robust to alternative specifications. Toward that end, in Panel A of Table 7 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 (23) and (45), the regressions indicate that lawyers in the provinces and lesser cities report higher incomes than attorneys in Tokyo. And in Column ~~(4s (3) and (5))~~, they the coefficients 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).~~

F. The Determinants of Provincial Income:

Among the half of all lawyers who choose not to work in Tokyo, who earns the highest incomes? For these lawyers, we can exploit variation in prefecture-level variables, as in equation (1) above. In Table 8 we regress an attorney's logged tax liability on his personal variables and a series of characteristics about the prefecture, taking as our data all lawyers not practising in Tokyo. Consistently, those who failed the LRTI exam fewer times earn more than those who failed it more often. The University of Tokyo degree, however, earns a lawyer no advantage, consistent with our earlier regression. As in prior regressions, income peaks after about two decades of work, and men make more than women.

[Insert Table 8 about here.]

Because prices depend on quantities, we include in Table 8 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 Osaka.

In Table 8, we offer a demand equation for lawyers. Because the price of legal services also depends on the quantity supplied, we include the number of lawyers per capita for each prefecture (**AttorneysPC**). Because quantity is also in the supply equation, we instrument it by the amenities available in the prefecture -- a variable in the supply equation but not demand. As proxies for the level of amenities available there: **Museums**, **Concerts**, **School Internet**, and **College Grads**. We use these, too, to instrument for the number of **Judicial ScrivenersPC**. These instruments seem at least to be correlated with **AttorneysPC** and **Judicial Scriveners PC**; the correlation coefficients are .50 and .49. For comparison, we include a straight tobit specification as well.

Regression (1) is instrumental variables tobit, with all the variables included, **AttorneysPC** and **Judicial Scriveners PC** instrumented, the Newey two-step method used for estimation, and robust standard errors computed by bootstrapping (the Stata command *ivtobit, twostep vce(bootstrap)*). We will focus on this regression. The other specifications and regression methods are included to see how robust it is.

As one would expect, an increase in the number of attorneys lowers attorney incomes in a prefecture.²⁴ The number of judicial scriveners increases it, if anything (it is insignificant in Regression 1 but not 2 or 6) however, implying that attorneys and scriveners are more complements than substitutes. As before, **Flunks** reduces income. Oddly enough, a U. of Tokyo degree hurts rather than helps, though the result is not altogether robust. It may be that it is the less talented U. of Tokyo graduates who end up in the provinces; like a Yale graduate working in a post office, the degree may indicate a problem rather than a talent. **Experience** comes in as one would expect, helping income at first but hurting it at too great an age. And being **Male** helps substantially.²⁵

Turn now to the other prefecture-specific variables. First, higher per capita incomes in the general population lead to higher attorney income. People in richer prefectures buy legal services poorer people do without. Second, bankruptcies are positively associated with attorney incomes. 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, serious crimes are not associated with high attorney incomes in Japan. Criminal defense work rarely makes lawyers rich in the U.S., nor does it seem to in Japan.

Fourth, higher corporate income in a prefecture appears to hurt lawyer incomes rather than helping it, and the result is robust. We cannot explain this, but note that the coefficient is only -.003, a very small effect when the mean level of corporate income is 47.

Regression (2) omits the bankruptcy, crime, and corporate income variables as being more speculative than the others. The only real change is that **Judicial ScrivenersPC** doubles its coefficient size and becomes highly significant. Regression

²⁴ On prefecture-level changes in the number of attorneys, see Ginsburg and Hoetker (2006, pp. 38-39).

²⁵ As noted earlier, there are only two women on the HIT list outside of Tokyo, however, so this might be a spurious effect.

(3) takes the opposite tack and omits **Judicial ScrivenersPC**, as a result of which corporate income per capita loses its significance. Regressions (4), (5), and (6) return to specification (1) but change the estimation method. Regression (4) uses ordinary standard errors rather than robust ones. The coefficients are identical without that heteroskedasticity correction, and the standard errors are little changed except that **Male** becomes significant without the bootstrapped standard errors. Regression (5) drops all the lawyers not on the High Income Taxpayer list and uses linear instrumental variables rather than tobit. The result is that almost every variable except **Flunks** loses its statistical significance, and coefficients sizes generally fall. Regression (6) uses tobit, but does not instrument for **AttorneysPC** and **Judicial Scriveners PC**. The results are similar to regression (1).

IV. Conclusion

The Japanese legal services industry is 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.

Less-talented would-be lawyers face lower opportunity costs to a legal career. Willingly, they spend many years studying to pass the bar-exam equivalent. A few pass; most do not. Those who do face a choice. They can choose to practice in Tokyo. There, they will enjoy the many amenities Tokyo provides professional families, but (lacking unusual talent) will have no access to high-paying work and will earn only modest incomes. Alternatively, they can leave Tokyo entirely. They will make do without the many amenities it provides, but in exchange will earn a significant compensating differential.

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 ze 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 ze ho, Secs. 74, 83, 86.

* Basic personal deduction	380,000 yen
* Sousal 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		
<u>- 1,000,000</u>		
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

<u>Rank</u> (att)* <u>(all)**</u>	Name	Firm	Pref.	YOB	Bar pass	University	Taxes	Number of Appearances
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. "Number of Appearances." 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 shimbunsha, 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. Attorney Characteristics: Summary Statistics

A. Introduction:

	Random Sample					High-Income-Taxpayer				
	n	min	median	mean	max	n	min	median	mean	max
HIT*	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 Characteristics1. *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.

* High-Income-Taxpayer.

For data 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	-0.070 (6.98)***	-0.080 (7.44)***	-0.075 (7.26)***	-0.024 (1.95)*	-0.078 (8.64)***	0.025 (0.76)
UTokyo	0.607 (7.05)***	0.617 (6.76)***	0.589 (6.49)***	-0.063 (0.38)	0.662 (5.69)***	-0.537 (1.07)
Experience	0.094 (7.54)***	0.086 (6.84)***	0.088 (6.95)***	0.078 (3.79)***	0.082 (7.63)***	0.084 (2.09)**
Experience ²	-0.002 (7.74)***	-0.002 (6.97)***	-0.002 (7.15)***	-0.001 (3.97)***	-0.002 (7.65)***	-0.002 (2.74)***
Male	0.464 (2.71)***	0.409 (2.39)**	0.430 (2.48)**	1.196 (2.60)***	0.362 (1.63)	0.422 (0.15)
Tokyo				1.036 (1.73)*		0.626 (0.15)
Osaka			-0.619 (3.69)***		-0.383 (1.09)	
Metropolitan			0.057 (0.57)		0.295 (1.93)*	
Provinces			0.215 (2.16)**		0.386 (3.13)***	
Tokyo*Flunks				-0.107 (5.03)***		-0.212 (2.94)***
Tokyo*U.Tokyo				0.829 (4.20)***		1.465 (2.10)**
Tokyo*Experience				0.022 (0.89)		-0.01 (0.18)
Tokyo*Experience ²				0.000 (0.96)		0.000 (0.40)
Tokyo*Male				-0.912 (1.83)*		0.103 (0.03)
Constant	7.502 (32.17)***	8.001 (27.87)***	7.609 (32.39)***	6.754 (12.24)***	7.64 (32.83)***	7.292 (2.34)**
Observations	1261	1261	1261	1261	1235	1235
Prefectural dummies	No	Yes	No	No	No	No

Notes: The dependent variable is **Ln Tax Liability**. For data sources, see Table 2. Columns (1) through (4) are tobit coefficients. Unlike in most tobit settings, here the “marginal effects” are the coefficients themselves, because the lower bound of 10 million yen is not the true tax level for lawyers with a low “tax tendency”, but rather means that their tax level was at or below 10 million. z statistic are in parentheses. Stars and boldfacing indicate significance at the 1% (***), 5% (**), and 10% (*) levels. 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,

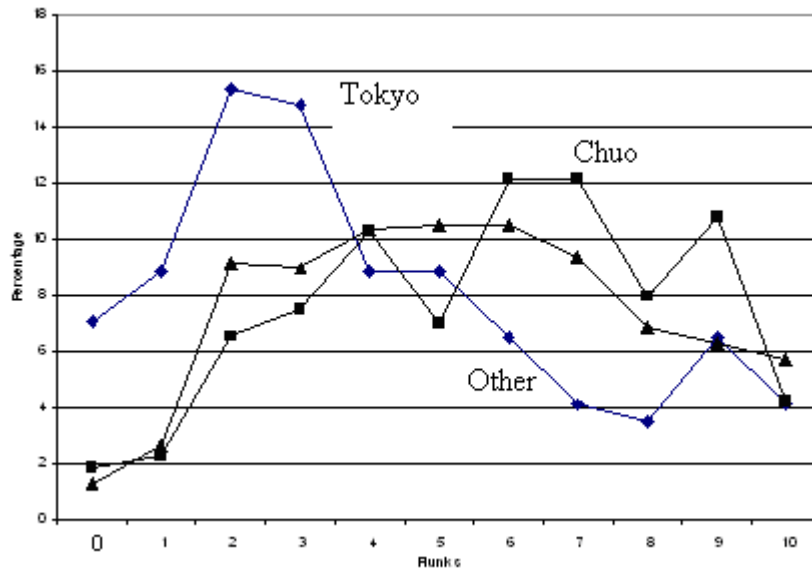
and in Column (6) we do the same for Tokyo. In Columns (2), (3) and (5), the omitted prefecture is Tokyo. Prefectural results are calculated in Regression (2) but not reported.

Table 5: The Effect of University Background

	Random Sample			Sample mean Flunks	HIT lawyers	Income Regression Coefficient
	Sample lawyers --total	Sample lawyers --Tokyo	Sample lawyers --HIT			
<i>Public, Tokyo</i>						
U Tokyo	178	129	7	5.25	127	.545
Hitotsubashi	27	16	1	6.15	10	-.114
<i>Public, Other</i>						
U Kyoto	76	10	2	5.24	23	-.107
Tohoku U	25	25	11	0	6.67	9 -.173
Kansai U	25	0	1	8.75	4	-.143
Osaka U	17	1	0	5.59	5	-.083
Osaka City	12	0	0	8.17	2	-.118
Hokkaido U	11	2	1	7.09	9	.347
Nagoya U	11	3	1	7.54	5	.041
Kyushu U	10	2	0	6.67	4	.144
Kobe U	7	0	1	7.71	7	.473
<i>Private, Tokyo</i>						
Chuo U	216	130	4	7.00	72	-.113
Waseda U	105	60	1	7.14	39	.103
Keio U		51	40	0	6.04	18 -.021
Meiji U	39	24	0	6.29	7	-.486
Nihon U	21	16	0	9.10	8	.039
<i>Private, Other</i>						
Doshisha U	14	4	0	6.07	1	-.779
Ritsumeikan	7	0	0	6.43	3	.055
<i>Other Univ</i>	74	35	2	7.69	22	-.080
<i>No Univ</i>	195	41	2	7.78	29	

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 the High-Income-Taxpayer list were 120 lawyers 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 column gives the results of a tobit regression of **Ln Tax Liability** on dummy variables for each of the universities and a constant, **Flunks**, **Experience**, and **Experience²**, with **No University** as the omitted dummy. None of the university coefficients are significant at even the 10% level.

Figure 1: Giving Up on the Exam



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.] For data sources, see Table 2.

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

	(1) Elite (U.Tokyo and Flunks < 4)	(2) Non-Elite	(3) All Lawyers
Dependent Variable:	Ln(Tax)	Ln(Tax)	Tokyo location
Technique:	Tobit	Tobit	Probit
Flunks	-0.117 (1.32)	-0.049 (4.71)***	-0.027 (2.83)***
Experience	0.085 (3.26)***	0.087 (6.17)***	
Experience ²	-0.002 (3.90)***	-0.002 (6.04)***	
Male	0.61 (1.79)*	0.456 (2.36)**	
Tokyo practice	0.924 (3.27)***	-0.093 (1.16)	
University of Tokyo			1.501 (13.47)***
Other Tokyo University			0.942 (10.57)***
Constant	7.671 (13.95)***	7.498 (27.19)***	-0.612 (6.43)***
Observations	167	1094	1261

Notes: The table gives the regression coefficients. Unlike in most tobit settings, here the “marginal effects” are the coefficients themselves, because the lower bound of 10 million yen is not the true tax level for lawyers with a low “tax tendency”, but rather means that their tax level was at or below 10 million. The corresponding z-statistic is below in parentheses. Stars and boldfacing indicate significance at the 1% (***), 5% (**), and 10% (*) levels. **Elite** is as defined in the text. In regression (3), the omitted dummy is “Non-Tokyo University”. For data sources, see Table 2.

**Table 7: Determinants of Attorney Income:
Robustness Checks**

A. Alternative Regression Forms

	(1) Tobit	(2) OLS	(3) Probit	(4) Poisson
Dep. Var.:	Ln Tax Liability	Ln Tax Liability	HIT	Num. Appearances
Flunks	-0.070 (6.98)***	-0.034 (4.21)***	-0.062 (5.86)***	0.014 (2.26)**
UTokyo	0.607 (7.05)***	0.320 (4.58)***	0.496 (5.25)***	0.284 (5.75)***
Experience	0.094 (7.54)***	0.000 (0.01)	0.101 (7.85)***	0.040 (4.30)***
Experience ²	-0.002 (7.74)***	0.000 (0.17)	-0.002 (8.00)***	0.000 (0.09)
Male	0.464 (2.71)***	-0.175 (1.07)	0.586 (3.18)***	0.476 (2.97)***
Constant	7.502 (32.17)***	10.177 (43.07)***	-1.936 (8.16)***	0.048 (0.22)
Observations	1,261	377	1,261	377

Notes: The regressions with 377 observations include only those attorneys who paid at least 10 million yen in 2004 taxes. The table gives the regression coefficients followed by the absolute value of the corresponding t- (or z-) statistic in parentheses. Unlike in most tobit settings, here the “marginal effects” are the coefficients themselves, because the lower bound of 10 million yen is not the true tax level for lawyers with a low “tax tendency”, but rather means that their tax level was at or below 10 million. Stars and boldfacing indicate significance at the 1% (***), 5% (**), and 10% (*) levels. The OLS regression’s R^2 is .16.

B. Using 2003 Tax Liability

	(1) Tobit	(2) Tobit	(3) Tobit	(4) IV Tobit	(5) IV Tobit
Flunks	-0.072 (5.95)***	-0.085 (6.55)***	-0.078 (6.26)***	-0.032 (2.13)**	-0.082 (5.97)***
U. Tokyo	0.569 (5.62)***	0.596 (5.53)***	0.587 (5.45)***	0.012 (0.06)	0.659 (3.19)***
Experience	0.100 (6.64)***	0.091 (6.03)***	0.093 (6.09)***	0.090 (3.66)***	0.089 (5.22)***
Experience ²	-0.002 (6.54)***	-0.002 (5.89)***	-0.002 (6.02)***	-0.001 (3.63)***	-0.002 (5.48)***
Male	0.737 (3.21)***	0.680 (2.95)***	0.693 (2.98)***	1.135 (2.20)**	0.63 (2.40)**
Osaka			-0.447 (2.37)**		-0.188 (0.09)
Metropolitan			0.172 (1.44)		0.393 (1.29)
Provinces			0.276 (2.35)**		0.428 (1.49)
Constant	6.788 (21.67)***	7.268 (19.78)***	6.874 (21.82)***	6.344 (9.85)***	6.883 (17.13)***
Tokyo				0.668 (0.93)	
Tokyo * Flunks				-0.107 (4.01)***	
Tokyo * U Tokyo				0.748 (3.20)***	
Tokyo * Experience				0.012 (-0.40)	
Tokyo * Experience ²				0.000 (0.52)	
Tokyo * Male				-0.503 (0.87)	
Observations	1,261	1,261	1,261	1,261	1,235

Notes: The dependent variable is **Ln Tax Liability** for 2003, not 2004. For data sources, see Table 2. Columns (1) through (4) are tobit coefficients. Unlike in most tobit settings, here the “marginal effects” are the coefficients themselves, because the lower bound of 10 million yen is not the true tax level for lawyers with a low “tax tendency”, but rather means that their tax level was at or below 10 million. z statistics are in parentheses. Stars and boldfacing indicate significance at the 1% (***), 5% (**), and 10% (*) levels. Columns (4) and (5) 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 (4) we do the same for Tokyo. In Columns (2), (3) and (5), the omitted prefecture is Tokyo. Prefectural results are calculated in Column (3) but not reported.

Table 8: Determinants of Attorney Incomes outside Tokyo

	(1)	(2)	(3)	(4)	(5)	(6)
	IV tobit	IV tobit	IV tobit	IV tobit No bootstrapping	IV	tobit
Attorneys PC	-8.895 (3.13)***	-8.913 (6.05)***	-6.129 (2.01)**	-8.895 (3.46)***	-2.828 (0.81)	-4.627 (4.50)***
Judicial Scriveners PC	3.684 (1.38)	7.354 (3.14)***		3.684 (1.55)	1.137 (0.54)	2.135 (1.84)*
Flunks	-0.027 (3.13)***	-0.023 (2.34)**	-0.027 (0.80)	-0.027 (2.89)***	-0.016 (2.01)**	-0.025 (2.51)**
U. Tokyo	-0.182 (1.80)*	-0.181 (1.61)	-0.163 (1.04)	-0.182 (1.49)	-0.122 (1.59)	-0.162 (1.44)
Experience	0.038 (2.64)***	0.037 (2.19)**	0.038 (2.02)**	0.038 (2.55)**	0.001 (0.09)	0.045 (3.20)***
Experience ²	-0.001 (2.69)***	-0.001 (2.23)**	-0.001 (1.50)	-0.001 (2.61)***	0.000 (0.01)	-0.001 (3.41)***
Male	0.786 (0.61)	0.638 (0.42)	0.780 (0.59)	0.786 (2.14)**	0.521 (1.72)*	0.890 (5.39)***
GDP PC	0.642 (3.41)***	0.744 (5.06)***	0.539 (3.38)***	0.642 (3.95)***	0.117 (0.60)	0.407 (3.85)***
Bankruptcy PC	0.589 (3.32)***		0.481 (2.61)***	0.589 (3.63)***	0.239 (1.29)	0.319 (3.54)***
Crime PC	0.011 (0.69)		0.002 (0.06)	0.011 (0.78)	0.025 (1.72)*	-0.011 (1.23)
Corporate Income PC	-0.003 (2.90)***		-0.002 (0.51)	-0.003 (2.64)***	-0.001 (1.68)*	-0.001 (1.93)*
Constant	4.762 (2.30)**	5.202 (3.29)***	5.699 (2.88)***	4.762 (4.70)***	8.043 (5.63)***	6.055 (9.87)***
Observations	621	621	621	621	197	621

Notes: The dependent variable is **Ln Tax Liability**. PC means “per capita”. We use only those lawyers located outside of Tokyo. These regressions give the regression coefficients with the absolute value of the z statistics below in parentheses. Unlike in most tobit settings, here the “marginal effects” are the coefficients themselves, because the lower bound of 10 million yen is not the true tax level for lawyers with a low “tax tendency”, but rather means that their tax level was at or below 10 million. Stars and boldfacing indicate significance at the 1% (***) , 5% (**), and 10% (*) levels. “Ivtobit” means instrumental variables tobit with Newey’s two-step estimator. In these estimations, we instrument **Attorneys** with variables for the amenities available in the prefecture: **Museums, Concerts, School Internet, and College Grads**. For data sources, see Table 2.

References

- Alexander, Arthur J., and Hong W. Tan. 1984. "Barriers to U.S. Service Trade in Japan" (Santa Monica: Rand Corp.) (R-3175).
- "Bengoshi gyomu no keizaiteki kiban ni kansuru jittai hokoku [Empirical Report on the Economic Foundation of Lawyers' Work]." *Jiyu to seigi* 42: 1 (1991).
- Garicano, Luis, and Thomas N. Hubbard. 2005b. "Managerial Leverage Is Limited by the Extent of the Market: Hierarchies, Specialization, and the Utilization of Lawyers' Human Capital." *Journal of Law and Economics*
http://faculty.chicagogsb.edu/luis.garicano/research/index_files/hierspec.pdf
- Garicano, Luis, and Thomas N. Hubbard. 2005a. "[Hierarchical Sorting and Learning Costs](#)" *Journal of Economic Behavior and Organization* 58(2): 349-369.
- Ginsburg, Tom, and Glen Hoetker. 2006. "The Unreluctant Litigant: An Empirical Analysis of Japan's Turn to Litigation." *Journal of Legal Studies* 35: 31.
- Heinz, John P., and Edward O. Laumann. 1994. *Chicago Lawyers: The Social Structure of the Bar*, rev. ed. Evanston: Russell Sage.
- Horitsu shimbun sha, ed. 2005. *Zenkoku bengoshi taikan [National Lawyer Directory]*. Tokyo: Horitsu shimbun sha, 10th ed.
- Kato, Masanobu. 1987. "The Role of Law and Lawyers in Japan and the United States." *B.Y.U. L. Rev.* 1987: 627.
- Kitagawa, Toshimitsu, and Luke Nottage. [Forthcoming 2007](#). "Globalization of Japanese Corporations and the Development of Corporate Legal Departments: Problems and Prospects." In *Raising the Bar: The Emerging Legal Profession in East Asia*. William P. Alford, ed., Cambridge: Harvard University Press.
- Leflar, Robert B., and Futoshi Iwata. 2006. "Medical Error as Reportable Event, as Tort, as Crime: A Transpacific Comparison." (Jan. 22, 2006; unpublished).
- Martindale-Hubbell Law Directory*. 2005. New York: Martindale-Hubbell Law Directory.
- Milhaupt, Curtis J., and Mark D. West. 2004. *Economic Organizations and Corporate Governance in Japan: The Impact of Formal and Informal Rules*. Oxford: Oxford University Press.
- Miller, Richard S. 1989. "Apples v. Persimmons: The Legal Profession in Japan and the United States." *Journal of Legal Education* 39: 27-38.
- Miyazawa, Setsuo. 1995. "Shiho shiken ni okeru tomen no kadai [Urgent Issues Regarding the LRTI Entrance Exam]." *Hogaku seminaa* 481: 76.
- Nakazato, Minoru, J. Mark Ramseyer, and Eric B. Rasmusen. 2006. "Executive Compensation in Japan: Estimating Levels and Determinants from Tax Records" (Harvard Law School John M. Olin Center for Law, Economics and Business Working Paper No. 567, 2006)
http://www.law.harvard.edu/programs/olin_center/papers/567_Ramseyer_et%20al.php

- Nihon bengoshi rengo kai. 2005. *Bengoshi hakusho [Attorney White Paper]*. Tokyo: Nihon bengoshi rengo kai.
- "Nihon no horitsu jimusho 2000 [Japanese Law Offices 2000]" 2002. *Jiyu to seigi* (Spec. ed. 2002) 316.
- Nikkei Business Publications, ed. 2005. *Bijinesu bengoshi taizen 2006 [An Encyclopedia of Business Lawyers, 2006]*. Tokyo: Nikkei BP.
- Piketty, Thomas, and Emmanuel Saez. 2006. "The Evolution of Top Incomes: A Historical and International Perspective." *American Economic Review* 96(2): 200-205 (Papers and Proceedings).
- Ramseyer, J. Mark, and Minoru Nakazato. 1999. *Japanese Law: An Economic Approach*. Chicago: University of Chicago Press.
- Ramseyer, J. Mark, and Eric B. Rasmusen. 2003. *Measuring Judicial Independence: The Political Economy of Judging in Japan*. Chicago: University of Chicago Press.
- Ramseyer, J. Mark. 1986. "Lawyers, Foreign Lawyers, and Lawyer-Substitutes: The Market for Regulation in Japan." *Harvard International Law Journal* 27: 499-539.
- Shiho seido kaikaku shingikai, Shiho seido kaikaku shingikai. 2001. "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).
- Toba, Ken. 2005. *Nihon jin no heikin chi [Japanese Averages]*. Tokyo: Seikatsu joho sentaa.
- Tokyo shoko risaachi, ed. 2004. *Zenkoku kogaku nozeisha meibo [National Registry of High-Income Taxpayers]*. Tokyo: Tokyo shoko risaachi. (CD-ROM version) (TSR).
- Toyo keizai shimposha, ed. 2005. *Toshi deeta banku [Metropolitan Data Bank]*. Tokyo: Toyo keizai shimpo sha.
- TSR. See Tokyo shoko risaachi.
- Young, Michael K., and Constance Hamilton. 1988. "The Legal Profession of Japan," in Mitsuo Matsushita, ed., *Japanese Business Law Guide*. Sydney: CCH Australia, Ltd.