

**LAWYERS' SELF-SELECTION TO WORK IN THE PUBLIC OR PRIVATE SECTOR:
IS GOVERNMENT PERFORMANCE AFFECTED?**

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Abstract. Government must attract a talented workforce to develop policies to promote social welfare. We study the allocation of lawyers because of their critical role in the formulation and implementation of nearly all government policies. We document systematic differences in the allocation of legal talent between the public and private sectors and argue that this talent disparity exists because of a large government earnings penalty for lawyers. Finally, we present evidence based on Supreme Court cases that the talent disparity affects government performance. We conclude that deregulating the legal profession could improve the allocation of attorney talent between the sectors.

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Introduction

Innumerable studies have investigated the ways that institutional, political, and organizational factors affect policy outcomes. But very little attention has been paid to the role of the government personnel who must actually implement public policies. If the government fails to attract a high-quality workforce, its policies may be less likely to promote social welfare.

The potential link between workforce quality and effective governance is made particularly clear in the case of government lawyers. Public-sector attorneys play critical roles in the formulation and implementation of nearly all of government's policies. Moreover, when legal disputes arise between government and non-government entities, public-sector lawyers are forced to compete directly with their private-sector counterparts. Because many of those conflicts emanate from the implementation of public policies, the allocation of attorney talent between the government and the private sector may have implications for whether the resolution of those policy disputes favors public or private interests. Lawyers' choices to work in the private or public sector may also have macroeconomic implications. Murphy, Shleifer, and Vishny (1991), for example, found that countries with a higher proportion of college majors concentrating in law grew slower because more rent-seeking occurred. If private sector lawyers are especially effective at rent-seeking, and public sector lawyers do little to impede them, then lawyers' sector choices could greatly affect the magnitude of rents that private sector lawyers and their interests receive.

In this paper, we use the After the JD survey administered by the American Bar Foundation to empirically explore lawyers' decisions to work for private law firms or for the federal or state government. Our analyses indicate that lawyers with the highest intellectual

abilities tend to choose employment in private law firms over jobs in the public sector. We also demonstrate that the government is unable to retain its most talented attorneys over time.

This self-selection is likely driven by the large earnings penalties that we estimate lawyers incur from working for the government. Beginning with Boskin (1974), research has shown that compensation—including wages and benefits—is an important factor in occupational and sector choices. Using a control function approach to account for the unobserved differences between lawyers who choose to work in government and those who do not, we estimate that public-sector lawyers are paid at least 50% less on average than lawyers who work for private law firms. Moreover, we find in an auxiliary analysis of graduates from the University of Michigan Law School that the government earnings penalty is even larger for higher quality lawyers, suggesting that the most qualified legal advocates have the greatest financial incentives to work in the private sector.

Having established the existence and likely causal mechanism of the quality gap between private- and public-sector lawyers, we investigate the possibility that lawyers' self-selection has put the government at a disadvantage in legal disputes with the private sector. We develop a plausible indicator of lawyer quality and estimate the influence of high-quality government and private attorneys over the outcomes of cases decided by the Supreme Court. We find that, holding other influences constant, the same set of top Supreme Court advocate lawyers contribute more to winning a case when they are working for the private sector than when they are working for the public sector. We interpret this finding as reflecting differences in the quality of assistance that top advocates receive from senior and junior attorneys, as well as differences in work-environment constraints. We then argue that those results provide a lower bound on the adverse effects of lawyer self-selection on government performance because the

overwhelming majority of legal disputes involving government lawyers do not progress to the Supreme Court, and because some of the best lawyers in government support top Supreme Court advocates; thus, the problem of lawyers' self-selection is likely to have a greater adverse effect on government's performance in less prestigious cases where the quality difference between private and public lawyers is likely to be more pronounced.

Despite their implications for social welfare, our findings do not necessarily motivate a government policy intervention. Even if there is: 1) a substantial wage differential between the public and private legal sectors, 2) a skill differential that corresponds to the wage differential, and 3) the skill differential is material to the outcomes of legal disputes that pit public versus private interests, the observed allocation of legal talent may represent an efficient outcome.

Extant research, however, suggests that the allocation of legal talent is not efficient. The legal profession's occupational licensing requirements amount to entry barriers that, by artificially restricting the supply of lawyers, generate large rents to attorneys (Winston, Crandall, and Maheshri (2011)).¹ Because government compensation of lawyers, limited as it is by rigid pay schedules, is not highly responsive to competitive conditions in the market for lawyers, the government struggles to compete effectively with the private sector, which has no such restrictions on the salaries it can offer legal talent.

We conclude the paper with an overview of how policymakers could address the adverse effects of the government earnings penalty and improve the allocation of attorney talent between the public and private sectors by deregulating the legal profession to appropriately narrow the earnings differential for lawyers in the two sectors. Lawyers would not be required to graduate from an accredited U.S. law school and to pass a state bar examination and they would not be

¹ In a recent comprehensive study, Kleiner and Krueger (2013) find that occupational licensing increases wages nearly 20% on average.

prevented from offering legal services to the public as an employee of a corporation. This would result in a greater supply of lawyers, generate a broad decline in lawyers' wages, and allow the government to compete better with the private sector for lawyers who could improve the quality of their legal representation.

The AJD Data and the Characteristics of Government and Private Sector Lawyers

Our analysis is based on nationally representative data from the After the JD (AJD) survey of lawyers who were admitted to the bar in the year 2000. The AJD is administered by the American Bar Foundation and collected in two waves: 2002, which represents the first full year of a lawyer's employment, and 2007, which represents the sixth year of a lawyer's employment.² The AJD notes that the significance of conducting the second wave in 2007 is that the seventh year since passing the bar marks a crucial period in the careers of young lawyers. Those working in private law firms must decide whether to pursue promotion to partnership within their firm or elsewhere; whether to seek a different job in the private sector, such as in business, solo practice, or in a small firm; whether to shift legal sectors and move into government; or even whether to leave the legal profession entirely. Those in government positions face similarly important decisions about their long-term career paths.³

The AJD survey contains detailed information on lawyers' annual earnings and employment, demographics, education, personal goals, and parental characteristics. Sampling

² Unemployment rates are historically low among lawyers. In 2002, less than 4 percent of lawyers surveyed by the AJD reported being unemployed; in the 2007 wave, this number hovered at about 5 percent. Unemployment among new law school graduates increased following the Great Recession but it has stabilized during the past few years.

³ The changes noted above are captured in the AJD survey responses. For detailed documentation of the AJD survey, see: <http://www.law.du.edu/documents/directory/publications/sterling/AJD2.pdf>

weights are included in both waves of the survey so that each sample is representative of the national population of lawyers who were admitted to the bar in 2000 and who therefore have roughly the same amount of legal work experience.

We confine our analyses to lawyers who work in either the government (federal or state) or in private law firms. Federal and state governments and private law firms hire licensed lawyers who have passed a state bar examination to perform similar legal work that places a premium on winning cases that are litigated and on effectively completing negotiations. Generally, both sectors look for strong academic credentials and hire from a broad range of law schools, although the leading large law firms tend to hire primarily from elite law schools. Given that some lawyers switch from working in the government to working in a private law firm and vice-versa over the course of their careers, it is reasonable to consider the sectors as alternative places of employment.

Because we are interested in the sector choices of lawyers who shape the resolution of public policy disputes, we did not include “in-house counsel” or other lawyers who work for business firms in our analysis. Private firms whose primary focus is not law but that nonetheless employ lawyers offer a heterogeneous work environment and a wide range of responsibilities for lawyers that is not always comparable to employment in government or a private law firm. In addition, lawyers who work for those firms generally do not compete directly with government lawyers in litigation or in regulatory proceedings, although they may assist private-law-firm lawyers who are hired by their company. Finally, less than 10% of all the lawyers in the first wave of the AJD sample worked for business firms, which is consistent with the expectation that a small share of lawyers go in-house before their sixth year of practice.⁴

⁴ Roughly 18% of the lawyers in the second wave worked for a business firm.

We identify differences between the characteristics of government and private-sector lawyers by summarizing the first wave of the AJD sample. As shown in table 1, the majority of the 1332 lawyers in the sample work for private law firms, which is consistent with national population estimates of the share of lawyers in different sectors (Winston, Crandall, and Maheshri (2011)). As expected, lawyers who are employed at private law firms earn higher annual salaries and work more hours per week than do lawyers who work for the government. Private and public sector lawyers also appear to differ systematically across a variety of demographic and background characteristics. Minority and female lawyers, for example, comprise a greater fraction of the government attorney labor force. Although roughly ten percent of both types of lawyers have a parent who is a lawyer, private law firm attorneys are more likely to have a parent who is not a U.S. citizen. The sample accounts for a lawyer's personal goals and values by using a 5-point scale to determine the importance of a lawyer's desire to help society and desire for financial security and accumulating wealth in their decision to attend law school. Those goals and values vary by sector choice, with government lawyers reporting a greater desire to help society and private law firm attorneys indicating a greater desire to obtain financial security and wealth.

Perhaps most striking, however, are the differences in intellectual ability, as measured by law school rankings and GPA. In particular, table 1 indicates that private law firm attorneys are nearly two-thirds more likely than their government counterparts to have graduated from law school with a GPA greater than 3.5, while the share of lawyers earning degrees from a top 10 law

school is three times higher in the private sector than in government. Educational debt, however, for lawyers in each sector is virtually identical.⁵

Table 2 shows that the work and education-related differences between lawyers who work for private law firms and lawyers employed by the government are more pronounced for attorneys in the upper ten percent of each sector's earnings distribution. In this subsample, private sector lawyers' annual earnings are roughly \$100,000 more than government lawyers' annual earnings, while those lawyers work nearly 10 hours more per week than government lawyers do. Representation of graduates from top-20 law schools is nearly two times greater in the private sector than in government. In addition to graduating from better law schools, private sector lawyers were more likely to achieve a GPA above 3.5. In contrast, the self-reported personal goals and values of the most financially successful private sector and government lawyers do not differ much from those of private sector and government attorneys in the entire sample, suggesting that lawyers' goals and values are not strongly correlated with their earnings. We return to this finding later.

Attorney Sector Preferences

The descriptive statistics allude to systematic differences in the composition and intellectual ability of public and private sector attorneys. We now develop a formal model of sector preferences in order to explore empirically the extent to which lawyers' characteristics affected their choice of whether to work in government or the private sector. This analysis will

⁵ Between 2005 and 2010, Congress passed several laws addressing the issue of student debt forgiveness, but those programs are too recent to affect AJD respondents. Between 1994 and 2008, roughly one-quarter to 40 percent of law schools had loan-forgiveness plans for graduates who worked in the public sector or who took other, low-paying jobs (Schrag and Pruetz (2011)), but it is not clear how those plans contributed to equalizing the educational debt that was actually reported by AJD respondents who worked for government and private law firms.

also be used when we estimate the earnings penalty from working in government to control for unobserved characteristics of lawyers that may affect earnings.

We are not aware of any previous research that has estimated lawyers' choices to work for the government or a private law firm. Goddeeris (1998) estimated the choice to work for a public interest or a private law firm and found that preferences for public-interest work were based on non-pecuniary aspects of the job that were related to personal goals, political activism, and beliefs. Blank (1985) estimated a model of the choice to work in the public or private sector for many occupations and found that the choice was influenced by demographic and educational variables.

We specify the probability of a law school graduate selecting to work in the government as a function of demographic variables, including age, race, and gender; educational variables, including the ranking of the law school granting the lawyer's degree, law school GPA, and educational debt; and parental characteristics, including whether the lawyer's parent is a citizen and whether the parent is a lawyer. We include regional dummies to capture unmeasured characteristics of alternative workplace locations throughout the country. It may also be appropriate to include demand variables in the model, such as the availability of government jobs; however, because those vary with the state of the economy over time at the national and state level, we can capture their effects with time dummies. We are unable to include those (time) dummies using the AJD data set, but we are able to include them for sensitivity purposes when we analyze a data set consisting of University of Michigan Law School graduates that covers a sufficiently long time period.

Finally, following Goddeeris (1998), we account for a lawyer's personal goals toward helping society and accumulating wealth. We recognize that because the personal goals are

measured when a lawyer is already working for the government or for a private law firm that they may be endogenous to sector choice. We assessed this potential source of endogeneity by comparing changes in the personal goals of lawyers in the AJD sample who switched sectors with changes in the personal goals of lawyers in the sample who did not switch sectors. If those goals are endogenous to the selection of private- or public-sector work, we would expect them to change as lawyers moved into or out of government. As we show in the appendix table 1, however, changes in sector choice did not have a statistically significant effect at conventional levels on preferences for helping society and accumulating wealth, providing some support for our assumption that those preferences are exogenous.

The parameter estimates of the probit model presented in table 3 indicate that lawyers with different observed characteristics have distinct sector preferences. Lawyers who are not white are more likely to work for the government, but the other demographic variables (age and gender) have small and statistically imprecise effects. Lawyers with greater intellectual ability, as indicated especially by graduating from a top ten law school and also by graduating from a law school ranked 11-20 and by earning a law-school GPA greater than 3.5, are less likely to work for the government, while lawyers who graduated from a law school outside of the top 20 and who graduated with a GPA below 3.0 are more likely to work for the government. Given the conventional view that the high cost of law school is causing many law graduates to seek a job in the private sector, it is interesting that whether lawyers had accumulated large educational debt (greater than \$50,000) upon graduation did not bear a statistically significant relationship to their sector choice. Lawyers who indicated a desire to help society are more likely to work for the government and lawyers who indicated a desire for financial security and wealth are less likely

to work for the government.⁶ Finally, lawyers who have a parent who is not a U.S. citizen are less likely to work for the government, possibly because: 1.) they may not meet national security requirements; 2.) they feel less of an obligation to work for the U.S. government; 3.) they may come from less affluent economic backgrounds and are more attracted to the high paying jobs in the private sector. But a lawyer's sector choice is not influenced by having a parent who is a lawyer.⁷

To construct Wave 2 of the survey, the American Bar Foundation re-contacted the lawyers surveyed in Wave 1. The second wave enabled us to assess whether the government retains the best lawyers it initially attracts. While there was some attrition from Wave 1, and some new individuals surveyed in Wave 2, the Wave 2 sample is primarily comprised of lawyers who were also part of Wave 1. As in the case of Wave 1, we applied appropriate sample weights

⁶ We provide additional support that the variables measuring lawyers' desires to help society and for financial security are largely picking up their preferences, as opposed to unobservables that might impact sector choice. In particular, respondents in the first wave of the AJD were asked a series of questions regarding the factors that were important in determining the sector in which they began their professional career. Importantly, "medium to long-term earnings potential" and the "opportunity to do socially responsible work" were included in this list of sector-choice factors. If lawyers' self-reported desires to help society and for financial security actually reflect underlying personal goals and values, then we would expect those two measures to act as mediating variables for our original personal goals variables. We tested this hypothesis by re-estimating an augmented sector-choice model that included lawyers' responses to the sector-choice-factor questions about "medium to long-term earnings potential" and "the opportunity to socially responsible work." Suggestively, we found that those self-reported sector-choice factors had large and statistically significant effects on the probability of working for the government and the expected signs, but that their inclusion caused the coefficients on our original personal goals variables to become small and statistically insignificant. Those findings support the idea that the personal goals variables in our sample are primarily capturing lawyers' preferences and goals.

⁷ Burk and Winston (2014) find that an individual's choice to become a lawyer is positively affected by having a parent who is a lawyer, but their study did not assess whether having a parent who is a lawyer affected sector choice.

to Wave 2 to ensure it was representative of the population of lawyers who were admitted to the bar in 2000 and were therefore seven years into their legal career.

A notable feature of Wave 2 is that roughly 26 percent of the lawyers who worked in federal or state government in Wave 1 and remained in the sample switched to working in a private law firm, usually as an associate attorney. The exit rates for federal and state government lawyers do not appear to vary much but it is notable that, in general, the government lawyers who switched to the private sector had greater intellectual ability than the lawyers who stayed in government based on the relative shares of law school GPAs that exceeded 3.5 and of degrees from a top 10 law school.⁸ We confirmed this point econometrically by using both waves of the AJD to estimate a probit model of the factors that influence lawyers to stay in government, including demographic characteristics and measures of intellectual ability based on academic performance. The sample consisted of lawyers who worked in government in Wave 1 and who we also observed in Wave 2; lawyers who left the survey after Wave 1 and lawyers who are new to the survey in Wave 2 were not included in the sample. We argue in the appendix that if we use the Wave 2 sample weights to estimate this model, then the parameter estimates are not biased by excluding those lawyers from the sample.

The estimates shown in table 4 indicate that lawyers who are older and not white are more likely than other lawyers to stay in government but lawyers whose law school GPA exceeded 3.5 and who graduated from a top 10 law school are less inclined than other lawyers to stay in government. Lawyers with GPAs less than 3.0 are also less inclined to stay in government, which may raise the average GPAs of government lawyers. In any case,

⁸ It is unlikely that the government lawyers with the greatest intellectual abilities who switched to private law firms were generally law clerks because few of those competitive clerkships actually exist.

government appears to be unable to retain its most intellectually able lawyers. deHaan et al. (2012) provide corroborating evidence from their detailed study of lawyers who leave the Securities and Exchange Commission. Specifically, they found that roughly one-third of their sample of SEC lawyers left during 1990-2007 to join private law firms and that those lawyers were more likely to have graduated from top law schools and to have the best enforcement records at the agency.

Finally, we estimated the sector selection equation for Wave 2 using the same specification that we used for Wave 1. Accounting for attrition and new participants in the survey yields a sample of 904 observations. The parameter estimates presented in table 5 can be distilled into the same basic findings that we obtained for the Wave 1 sample: lawyers with high intellectual ability, based on academic performance, are less likely to work for the government; lawyers who have a strong desire to help society are more likely to work for the government; and lawyers who have a strong desire to accumulate wealth are less likely to work for the government.

The Earnings Penalty for Lawyers Working in Government

Why do there appear to be systematic differences in the allocation of legal talent between the private and public sector? As noted in the introduction, compensation has been shown to be an important influence on sector choice; thus, the differences in compensation for lawyers working for private law firms and the government shown in tables 1 and 2 strongly suggest why

the public sector attracts less intellectually talented lawyers and does not retain the most talented lawyers it does attract.⁹

Differences in compensation can be largely attributed to occupational licensing of the legal profession in combination with government pay schedules. We summarize their effects on government and private sector lawyers' in figure 1. As shown in panel A, without occupational licensing, wages for government lawyers, w_0 , would be determined by the demand for, D_0 , and the supply of, S_0 , government lawyers. However, occupational licensing restricts the supply of lawyers in general, including the supply of government lawyers, and causes the supply of lawyers to shift inward and become somewhat more inelastic, as indicated by S_I . This causes government lawyers' wages to rise to w_I . As shown in panel B, without occupational licensing, wages, w_0 , for private sector lawyers would be determined by the demand for, D_0 , and supply of, S_0 , private sector lawyers. The shift in supply to S_I indicates that occupational licensing increases private lawyers' wages more than it increases government lawyers' wages for two reasons. First, even without occupational licensing, there are a limited number of government lawyer positions, determined by a schedule of pay classifications and government budgets, which means that fewer government jobs could be curtailed by occupational licensing (i.e., the potential inward shift in supply is smaller for government lawyers than for private sector lawyers). Second, government lawyers' wages are constrained by government pay schedules and caps, which cause its demand curve to be "less steep" than the demand curve facing the private sector (and the intercept to be lower) because the more inelastic portion of its demand has been eliminated. Specifically, the President's annual salary of \$400,000 puts a cap on government

⁹ Falk (2012) provides evidence that government workers with professional or doctorate degrees suffer a significant earnings penalty from not working in the private sector.

lawyers' earnings, but this figure overstates the cap because, for example, the highest current annual salary for a lawyer who works for the President, the White House Counsel, is \$172,000.

An additional effect on private sector lawyers' wages, discussed in Winston, Crandall, and Maheshri (2011), is that public policies, some of which are strongly influenced by the legal profession, induce individuals and firms to hire more private sector lawyers, which shifts demand to D_1 and causes wages to rise even more to w_2 . Generally, an interest group can more easily gain from the political process when it "speaks the same language" as the public officials whose policies it is trying to influence. Accordingly, it is not surprising that members of the legal profession have benefited when lawyers have lobbied members of Congress, a notable fraction of whom have held a law degree.

The earnings gap between lawyers in the private sector and the government could also be due to other factors, including the observed and unobserved differences between lawyers who choose to work for the government and lawyers who do not. We therefore estimate the government earnings penalty by taking a control function approach and estimating an earnings equation that includes an endogenous dummy variable to capture a lawyer's choice to work in the public sector. Generally, earnings equations specify individuals' earnings as a function of their supply characteristics, such as education-related variables, and demand factors, such as industry characteristics. The demand for government lawyers is driven to a large extent by time-related variables, such as macroeconomic and policy considerations, while the demand for private sector lawyers is affected by those variables as well as by various industry and societal trends.

Formally, the earnings equation is:

$$Y = \mathbf{X}'\boldsymbol{\beta} + \gamma G + \varepsilon \quad (1)$$

$$E(\mathbf{X}'\varepsilon \mid G) = 0$$

$$E(G'\varepsilon) \neq 0,$$

where Y is the log of annual earnings, \mathbf{X} represents other, exogenous explanatory variables, G is a dummy variable indicating whether a lawyer works in government, ε represents unobserved variables that affect a lawyer's earnings, and $\boldsymbol{\beta}$ and γ denote parameters.

We address the endogeneity bias that arises because G is correlated with ε by using the threshold-crossing, sector choice model that we estimated previously to show there were systematic differences in the allocation of talent between the sectors:

$$G = \mathbf{I}(\mathbf{Z}\boldsymbol{\alpha} + v > 0) \quad (2)$$

$$E(v \mid \mathbf{X}, \mathbf{Z}) = E(\varepsilon \mid \mathbf{X}, \mathbf{Z}) = 0$$

$$E(\varepsilon \mid v) = \rho v$$

$$v \sim N(0,1),$$

where \mathbf{Z} and v are, respectively, observed and unobserved variables that influence a lawyer's choice to work in government, $\boldsymbol{\alpha}$ is a vector of parameters, ε and v are jointly distributed with mean 0 and covariance ρ , and the marginal distribution of v is standard normal. We assume that \mathbf{Z} is exogenous with respect to both the sector choice model and the earnings equation and thus independent of both v and ε .

Given those assumptions, we can derive the control function (Heckman (1976)):

$$E[\varepsilon \mid G] = \rho[G\lambda(\mathbf{Z}'\boldsymbol{\alpha}) - (1 - G)\lambda(-\mathbf{Z}'\boldsymbol{\alpha})], \quad (3)$$

where $\lambda(\cdot)$ represents the inverse Mills ratio, given by the ratio of the normal probability density function to the normal cumulative distribution function. Accordingly, this model implies that the conditional mean of Y is

$$\begin{aligned}
 E[Y|X, G] &= \mathbf{X}'\boldsymbol{\beta} + \gamma G + E[\varepsilon|G] \\
 &= \mathbf{X}'\boldsymbol{\beta} + \gamma G + \rho[G\lambda(\mathbf{Z}'\boldsymbol{\alpha}) - (1 - G)\lambda(-\mathbf{Z}'\boldsymbol{\alpha})]
 \end{aligned}
 \tag{4}$$

where the control function captures the unobserved differences between workers who choose to work in government and those who do not.

We obtain consistent parameter estimates of the earnings equation by using the parameters α that we obtained from our binary probit model of sector choice to construct an estimate of the control function, and then specifying the control function in the augmented earnings equation that can be estimated by OLS with robust standard errors. As an alternative approach, we estimate the model by the Generalized Method of Moments (GMM), as outlined in the appendix.

Empirical Specification

The earnings equation excludes lawyers' personal goals, educational debt, and parental characteristics, thereby identifying the sector choice model that we use to construct the control function. The desire for financial wealth and security could capture ambition and the willingness to work hard; but as noted below, our specification of earnings holds constant the number of hours worked per week and law school GPA, which are likely to capture those effects. We also assume that lawyers establish those personal goals prior to selecting a job and that they are unrelated to their productivity, which is consistent with the summary statistics that indicated that lawyers' goals are not strongly correlated with their earnings. We obtained additional empirical support for this assumption by analyzing a set of variables in the first wave of the AJD survey that asked respondents whether they participated in certain activities during law school and by showing that those activities were correlated with their personal goals.¹⁰ By doing so, we

¹⁰ The variables were not available in the second wave of the AJD survey.

suggest that lawyers in our sample established those goals before they began working in government or the private sector; thus, they were not influenced by their earnings during employment.¹¹

We also did not include a lawyer's parental characteristics because a parent's citizenship bears no direct relationship to an individual's earnings. It may be argued that having a lawyer parent could help an individual find better job opportunities and earn a higher salary through his or her parent's connections. But those connections are likely to be less important for advancement in the legal profession because the profession places a premium on analytical and expository skills; has a meritocratic culture based on work effort and performance; and its practitioners often make initial hiring decisions based on the recommendation(s) of the supervisor(s) of an individual's summer internship. Moreover, any genetic component of having a lawyer parent is largely captured by the individual's educational variables. Finally, we excluded educational debt from the earnings equation because, although young lawyers who are saddled with large amounts of debt may work harder to pay off their loans, we likely capture that effect by controlling for hours worked in the earnings equation.

¹¹ Specifically, the AJD asked respondents whether they participated during law school in law review, moot court, school government, political advocacy, college alumni association, American Bar Association student division, public interest law group, pro bono work with clients, and a gender, racial, or ethnic-based organization. We ran a regression of the effects of those activities on the desire to help society and we found that the activities that are most directly related to helping society (public interest law group, pro bono work, political advocacy) were statistically significant and had the expected positive sign, while participation in a gender, racial, or ethnic-based organization, which has a strong social justice theme, also had a statistically significant effect. In contrast, when we ran a regression of the effects of those activities on the desire for financial security/wealth, we found that both public interest law group and pro bono work with clients were statistically significant and negatively associated with the financial security goals. Given that none of the activities deal directly with enhancing financial security, it is not surprising that we did not find that any of them had a positive statistically significant association with that goal.

The influences we included in the earnings equation are a dummy variable indicating whether a lawyer works in government; employment characteristics, including whether employment is full time and weekly hours of work; and the demographic variables and measures of intellectual ability based on academic performance that were described previously and included in the sector choice model.

Our dependent variable for earnings is a lawyer's logged annual salary, including bonuses.¹² The earnings variable does not include fringe benefits, but the bias should be small because Falk (2012) found in the case of workers with a professional degree or doctorate that the average cost of benefits was comparable for workers in the government and the private sector. As a qualification, our model may underestimate the earnings penalty from working in government because we do not account for private sector lawyers' fringe benefits related to law firm perks, such as free meals, free tickets to sporting and other entertainment events, and the like. We also do not have an explicit measure for job security, which Biggs and Richwine (2011) quantify as a source of the compensation premium from working in government because security is provided from the outset. They estimate its value for a broad cross-section of workers to be 17 percent of compensation. Private lawyers, however, have the opportunity to eventually make partner at a law firm which could provide comparable job security. Later we explore this issue empirically by using data from the University of Michigan Law School to assess earnings differences between government and private sector lawyers over time as the job security

¹² Annual salaries for government lawyers are based on a schedule of pay classifications. For example, most entry level jobs for federal attorneys are classified by the GS 11 pay grade, which is currently about \$62,000 per year.

advantages of public-sector employment fade in the long run. We conclude that our findings should be largely unaffected by not including a measure of job or income security.¹³

Estimation Results

We present OLS estimates of the earnings equation in table 6. The specification in the first column of estimates does not include the correction for selectivity bias. The dummy variable indicating whether a lawyer works in government is central to our analysis and it indicates that government lawyers' earnings are roughly 40 percent lower than what they could earn at a private law firm. We are not aware of previous estimates of an earnings penalty for lawyers, although our estimate is broadly consistent with Falk's (2012) finding that federal workers with a professional degree or doctorate suffer a non-trivial earnings penalty.

The remaining variables have plausible signs and are precisely estimated. Lawyers' earnings are positively related to working full time and more hours per week. The latter variable may be endogenous for private sector lawyers, but, in alternative specifications, we found that its inclusion barely affected the estimate of the works in government dummy.¹⁴ A lawyer's age is positively related to earnings, although at a declining rate, as is being a member of a minority race/ethnicity, which may reflect public and private sector efforts to promote diversity in the

¹³ Partners' and senior partners' earnings are undoubtedly subject to larger annual fluctuations than are senior government lawyers' earnings. But their mean earnings are also much higher.

¹⁴ There may be concern that whether a lawyer is employed full time is endogenous; but this variable has been found in other contexts (for example, Winston, Crandall, and Maheshri (2011)) to be strongly determined by scheduling flexibility rather than earnings, especially for women. In any case, our estimate of the works in government dummy was not affected much by the inclusion of this variable. It could also be argued that lawyers in the private sector work much harder and have less downtime than do government lawyers. We explored this possible effect on the earnings penalty by multiplying government lawyers' hours per week by two-thirds and re-estimating the earnings equation. We found that the government earnings penalty declined modestly from 40 to 35 percent.

workplace.¹⁵ However, female lawyers' earnings continue to lag behind male lawyers' earnings. Greater intellectual ability, as indicated by a higher law school GPA and graduating from a higher ranked school, has a positive effect on earnings. In particular, individuals with a GPA greater than a 3.5 and who graduate from a top ten law school enjoy the largest relative increase in earnings, while individuals with a GPA below a 3.0 and who graduate from a law school not ranked in the top 100 suffer a relative decline in earnings.

When we include the inverse Mills ratio in the specification to control for selectivity (see the second column), its effect is statistically significant, the earnings penalty from working for the government becomes larger and approaches roughly 60 percent, and the coefficients of the remaining variables are virtually unaffected.¹⁶ What unobserved influences may be responsible for this increase in the government earnings penalty? Because only lawyers can share ownership of a private law firm, law firms do not generally hire highly-paid professionals from non-law backgrounds. In contrast, government lawyers must work with a broad range of people at their workplace because formulating and implementing public policy requires them to interact regularly with civil service employees, elected and appointed government officials, and even

¹⁵ Generally, summary statistics of the entire AJD sample indicate that differences in race earnings gaps are primarily due to minorities choosing to work in sectors, such as public interest law, that pay lower-than-average wages. Within a sector, racial/ethnic pay gaps have been found to be largely nonexistent. It is also important to note that the positive effect on earnings of being a racial/ethnic minority may not apply to lawyers who have been in practice for longer than say ten years because the *American Lawyer* reports that minorities constitute a tiny share of partners at the top 100 largest firms.

¹⁶ If we had not adequately controlled for the possibility that people who self-select to work in government seek, among other benefits, greater job security and less stressful work, then the penalty from working in government should have decreased, not increased, when we included the Mills ratio. It is possible that the earnings penalty may vary by the level of government where a lawyer is employed. Although the AJD does distinguish between state and federal government employment, we were unable to precisely estimate separate earnings penalties for lawyers in those government sectors because we did not have a large enough sample.

members of the public. We therefore conjecture that our selectivity correction increases the earnings penalty because lawyers who choose to work in government have strong interpersonal skills and non-cognitive attributes that are not being fully compensated.¹⁷

The simple two-step estimation procedure employed above makes potentially restrictive distributional assumptions (i.e., normality) on the form of the selectivity correction. We therefore re-estimated the earnings equation by generalized method of moments (GMM) (see the appendix), using as before lawyers' personal goals, parental characteristics, and educational debt as instruments for the endogenous choice of whether to work for government or a private law firm. We found that the magnitude of the dummy for working in government increased to -0.709 (with a standard error of 0.111) and that we could not reject the validity of the instruments according to Hansen's Test of Overidentifying Restrictions (p-value=0.489).

We complete our analysis of the earnings penalty for government lawyers by using the parameters from the sector choice model estimated for Wave 2 of the AJD (see table 4) to construct the control function and estimating the earnings equation for Wave 2 respondents using the same specification that we used for Wave 1. Parameter estimates are presented in table 7. The main finding is that lawyers who work for the government suffer an earnings penalty that is again greater when we correct for selectivity, and its magnitude, slightly more than 60 percent, is

¹⁷ Compared with private sector lawyers, government lawyers in our AJD sample reported greater responsibilities for keeping their clients updated on relevant legal matters. Those responsibilities could also be interpreted as requiring a certain level of noncognitive/interpersonal skills. Our interpretation of the selectivity correction stands at odds with recent work conducted by Lindqvist and Vestman (2011). In particular, they find that cognitive ability is better than noncognitive ability at predicting the earnings of skilled workers, but that non-cognitive ability helps to predict poor labor market outcomes, such as unemployment and low annual earnings. However, their analysis did not focus on government workers who may require a somewhat different skill set than do workers in the private sector. More research is clearly needed to better understand the market for and characteristics of government workers.

comparable to the penalty we estimated for lawyers in Wave 1. Apparently, the earnings penalty was not affected even though the government did not retain its intellectually strongest lawyers. We hypothesize that this is because the government also did not retain some of its intellectually weaker lawyers. Our findings may indicate that those lawyers who switched during the AJD survey waves got signals that they could achieve a better match in their search for higher wages in the private sector of the legal profession (Parent (2000)).¹⁸ When we re-estimated the model by GMM, we found that the estimated earnings penalty was also about 60 percent (-0.603, with a standard error of 0.0882), and that we could not reject the validity of our instruments by Hansen's Test of Overidentifying Restrictions (p-value=0.979).

In sum, we have provided strong evidence that the government offers salaries to lawyers that are much lower than those offered by private law firms, *ceteris paribus*, which we posit explains to a large extent our finding that more able lawyers are attracted to the private sector. We also posit that the government attracts lawyers who have unobserved/unmeasured (by us) non-cognitive skills that appear to be well-suited for working in the public sector, which may explain why some lawyers—at least initially in their career—prefer to work for the government despite its lower salaries. Such behavior is consistent with a matching story whereby certain extroverted workers gain more than other workers from jobs that involve frequent interactions with a broad range of co-workers and they are therefore willing to sacrifice considerable income for those working conditions (see, for example, Krueger and Schkade (2008)).¹⁹

¹⁸ It is, of course, possible that established lawyers who work for private law firms may increase their earnings in the long run by accepting a high-level government position and then returning to the private sector to resume their practice. However, the AJD data do not cover the latter part of a lawyer's career so we could not confirm that possibility.

¹⁹ Are government lawyers therefore more satisfied with their jobs than are private lawyers? According to evidence from the AJD survey, the answer is no. The AJD survey included questions related to job satisfaction that were measured on a 7-point scale, with 1= "highly

Does the Government Earnings Penalty Vary by the Quality of an Attorney's Law School?

We have found strong evidence that lawyers, on average, suffer a large earnings penalty from working in the government and we have suggested that this may affect the government's ability to attract and retain its most intellectually able lawyers. In this section, we investigate whether the earnings penalty varies positively with the quality of an attorney's law school, as indicated by its ranking, which would indicate an additional source of government's disadvantage in attracting lawyers who can compete effectively with lawyers who work at private law firms.

To that end, we re-estimated our model of lawyers' sector choice and earnings for subsamples of the Wave 1 sample that included 299 lawyers who attended the top 20 law schools in the country and 632 lawyers who attended law schools ranked 21-100. Based on the two-step control function estimation procedure that controls for selectivity, we found that the earnings penalty from working as a lawyer in government is positively related to school quality: the penalty for lawyers who graduated from a top 20 ranked law school is -0.975 (with a standard error of 0.233) and the penalty for lawyers who graduated from a law school ranked 21-100 is -0.547 (with a standard error of 0.107).

Because we do not have a large sample of lawyers who graduated from the nation's top 20 law schools, our estimate of an extremely large earnings penalty for government lawyers who graduated from those schools should be viewed with caution. However, we are able to provide corroborating evidence by analyzing a detailed data set of lawyers who graduated from the

dissatisfied" and 7= "highly satisfied". We created a "satisfaction index" by computing the average response across all job satisfaction variables (except for questions relating to work travel and pro-bono work, which may not be pertinent to all lawyers in the private and public sector) for each lawyer in our sample. We found that the difference in the index for private and public sector lawyers who were in both survey waves and who did not switch sectors between waves 1 and 2 became statistically insignificant by wave 2.

University of Michigan Law School, which *U.S. News and World Report* consistently ranks among the top 20 law schools in the country.

Similar to the AJD Survey, the University of Michigan Law School has maintained a data set on its graduates that includes information on their annual earnings and employment, demographic characteristics, and education. Although the survey does not collect data on career goals, respondents were asked whether they were more or less concerned than other lawyers their age about “making a lot of money” and about “the impact of [their] work on society.” Similar to the personal goals variables used in the analyses of the AJD data, these two measures serve as proxies for lawyers’ underlying preferences that affect sector choice, and they are assumed to be exogenous to earnings. The Michigan survey, which started in 1967, is administered to alumni fifteen years after graduation and was later expanded in 1972 to include alumni five years after graduation.²⁰

To facilitate comparisons between the AJD and Michigan datasets, we limited our analyses to the 2517 lawyers who (1) were five years out of law school, and (2) took a job in the government or with a private law firm; we summarize the means of the key variables in table 2 of the appendix. Consistent with the AJD Survey, lawyers who are employed at private law firms earn higher annual salaries and work more hours per week than do lawyers who work for the government. A greater share of minority and female lawyers works for the government. Lawyers at private law firms have law school GPAs that are higher than government lawyers’ GPAs, while their debt from attending law school is similar to government lawyers’ debt. Finally, compared with lawyers at private firms, government lawyers state they have greater

²⁰ As noted, the AJD sample included weights to be consistent with a random sample. The Michigan sample did not include sampling weights, but as shown below, the responses in the two samples are broadly consistent, suggesting that the Michigan sample does not suffer from any particular sampling bias.

concern about the social impact of their work relative to other lawyers their age, but less concern about making money.

The Michigan survey enabled us to specify sector selection and earnings equations that were very similar to our previous specifications and to estimate the parameters using the two-step estimation procedure to account for selectivity bias. In addition, we were able to jointly estimate several cohorts of Michigan alumni five years after they graduated and to specify yearly time dummies to account for any changes over time (e.g., the availability of government positions) that may affect lawyers' sector choice and earnings. We present all the parameter estimates in table 3 of the appendix and report here that the estimated earnings penalty for Michigan law school graduates who worked in government was roughly 78 percent, which is bounded by the earnings penalty for lawyers in the AJD Survey who graduated from a law school ranked 21-100 and by the possibly inflated earnings penalty for lawyers who graduated from a top 20 ranked law school.²¹

Potential Implications for Government Performance

Macey (1998) argues that lawyers generate benefits by taking a focused and unemotional approach to governance, but that they also generate costs by impeding efficient decisions and by creating inefficient delays. Sunstein (2013) adds that lawyers in government are valuable for

²¹ Because the Michigan survey data has been collected for a number of decades, we used it to assess the issue raised previously that the public sector may offer an additional benefit in greater job security for lawyers. Our approach was to estimate earnings penalties for the same sample of lawyers who were 5 and 15 years out of law school with the idea that any differences in public and private-sector job security should be small for lawyers in their 15th year because private-sector lawyers would have more than sufficient time to become a partner or obtain greater security at their place of work. We found for government lawyers 15 years out of law school that their earnings have continued to be strongly penalized, even though the relative job security benefits of government employment have likely decreased substantially.

resolving questions of law and for providing guidance on process. However, empirical work on the effects of government policies where lawyers are extensively involved in the policy process, such as antitrust enforcement and regulation, frequently finds that social welfare is rarely improved and is occasionally reduced (Winston (2006)). Organized interest groups, the bureaucratic inflexibility and short-sightedness of regulatory agencies, and other institutional factors are generally cited as factors that hinder government performance.

We suggest an additional factor, namely: that the government earnings penalty for lawyers leads to higher quality lawyers working for the private sector over time, which, in turn, puts the government at a disadvantage when it competes with private firms in legal proceedings that are part of the policy process. Could lawyers' self-selection therefore be a cause of government failure? Some anecdotal evidence is suggestive. Although the vast majority of merger cases are settled, until the U.S. Justice Department successfully challenged H&R Block's proposed merger with TaxAct in 2012, it had not won a merger challenge in eight years.²² Federal agencies (and their lawyers) that are responsible for regulating banks have been widely criticized for failing to resist private lawyers' lobbying efforts on behalf of their financial clients to soften regulatory rules and enforcement. And until the recent spate of successful prosecutions of insider trading, the federal government was not especially successful in high-profile cases involving white-collar defendants.

²² When the antitrust authorities successfully blocked a proposed merger from 1984-96, Crandall and Winston (2003) found that it had no statistically significant effect on reducing industry price-cost margins. The FTC has an in-house administrative process in which it has rarely lost a case in the past two decades. However, Jenna Greene, "FTC's Winning Streak Provokes Questions About Process," *National Law Journal*, January 6, 2014 quotes FTC Commissioner Joshua Wright as saying that the FTC's own decisions are reversed by federal courts of appeal at a much greater rate than those of generalist district court judges with little or no antitrust expertise.

In this section, we conduct a more systematic analysis of how lawyers' self-selection along with their work environment may affect government performance in U.S. Supreme Court (SCOTUS) litigation. We focus on SCOTUS cases because SCOTUS advocates are generally highly qualified across the board, thereby giving us a lower bound on the effects of self-selection on government performance, and because SCOTUS cases have major implications for public policy. Formally, we propose the following simple model of SCOTUS outcomes:

$$Pr(W) = f(C, I, L), \quad (5)$$

where $Pr(W)$ is the probability that a case ruling favors the government; C encapsulates the legal issues and ambiguities that underlie the case in question; I represents the preferences and ideologies of the justices hearing the legal dispute; and L captures differences in the quality of government and private legal representation. Although the relevance of case characteristics and court ideology has been well documented by legal scholars and political scientists (George and Epstein (1992), Law and Zaring (2010)), the relative quality of legal representation has received much less academic attention and few datasets contain direct measures of lawyer performance (Lazarus (2008)).

Accordingly, we include fine-grained controls for case characteristics and court ideology and then control for one dimension of lawyer quality in our specification. In particular, we specify dummy variables that indicate whether a top Supreme Court advocate lawyer, identified as presenting more than a certain number of arguments before the Court, is the lead attorney, either for the government or the private sector, on the case. Although this approach involves lawyers who are generally of much greater quality and experience than the lawyers in our preceding analyses, it enables us to explore how a given lawyer's effectiveness may be affected by the public versus the private sector's work environment, which includes the quality of senior

and junior lawyers who provide assistance in a case. In addition, Supreme Court cases are one area where one might expect the government to have an advantage because those cases are generally handled by the best government lawyers, while non-elite private sector lawyers who initially had a case may be reluctant to give up a rare opportunity to argue before the Supreme Court.²³ Such situations improve the likelihood of successful litigation by the government and contribute to a lower bound on the adverse effects of lawyer self-selection.

Sample and Data

We estimated the model as a binary probit using a sample of cases drawn from the well-known U.S. Supreme Court Database. Originally created by Harold Spaeth and a team of political scientists and lawyers in the 1980s, this unique dataset (hereafter referred to as the “Spaeth Database”) provides detailed information on the legal characteristics and outcomes of each Supreme Court case decided between 1946 and 2012 (Spaeth et al. (2013)).

Our sample consists of all modern (1980-2012) split-decision Supreme Court cases that pit the federal government against private entities.²⁴ We excluded unanimously decided cases because we expected lawyer performance to matter little in disputes that are judged to be legally unambiguous, and evidence exists that unanimous decisions serve as markers for cases with strong legal precedent (Epstein, Landes, and Posner (2012)). Our definition of the “federal government” relied upon Spaeth’s classification of different types of petitioners and respondents, and included a broad array of federal agencies, departments, bureaus, and commissions.²⁵ We

²³ Government does have contracts with private law firms for legal services, but not to provide representation in cases against a private sector entity before the Supreme Court.

²⁴ We define split-decision cases to be any case in which at least one justice votes for the petitioner and at least one justice votes for the respondent.

²⁵ More specifically, we used Spaeth’s *petitioner* and *respondent* variables to identify federal government and private parties. A party was labeled as the federal government if either the

considered any party that is not affiliated with the federal government or a U.S. State to be a “private entity.”²⁶ Finally, we limited our sample to cases in which the Supreme Court heard an oral argument because the links between lawyer performance and case outcomes are likely to be strongest in those types of disputes (Black et al. (2011), Johnson, Wahlbeck, and Spriggs (2006)).²⁷

To control for the legal characteristics of a case, we included in all of our analyses twelve “issue area” dummies. Those indicators, which are derived from pre-constructed variables in the Spaeth Database, group disputes into mutually-exclusive categories based on the Supreme Court’s own statements regarding the main substantive legal questions and matters of a case.²⁸ We also included an indicator for whether the federal government is the petitioner in a case. The side that brings the case to the Supreme Court is identified as the petitioner and, while it considers the facts of the case and the rulings of a lower court, the petitioner is also more likely to bring a case that it believes it can win.²⁹ Thus, the issue area dummies account for the

petitioner or *respondent* variable assumed one of the following values: 1, 27, 301, 302, 304, 305, 307-372, 374, 376-417.

²⁶ Here, we used Spaeth’s *petitionerState* and *respondentState* variables to identify state parties so as not to remove those. Some of the entities that are excluded from the “private” category include city, town, township, village, or borough governments, commissions, committees, and agencies. For more details on Spaeth’s categorization of SCOTUS petitioners and respondents, see Spaeth et al. (2013).

²⁷ For simplicity, we also excluded the few cases that are decided by an equally divided vote.

²⁸ This variable has been used extensively by political scientists and legal scholars (see, for instance, Lauderdale and Clark (2012)). The twelve substantive issue areas observed in our dataset are: criminal procedure, civil rights, First Amendment, due process, privacy, attorneys, unions, economic activity, judicial power, federalism, federal taxation, and miscellaneous.

²⁹ Because the Supreme Court agrees to hear only a very small percentage, roughly 5%, of the cases that are petitioned before it, based on the approval of a minority of Justices (i.e., 4), it is difficult to argue that the petitioner variable is systematically affected by how the case will turn out.

possibility that certain legal arenas are more likely to favor pro-government outcomes than others, and the petitioner dummy partially accounts for the fact that, within a legal issue area (e.g., criminal law), certain cases may be harder for the government to win than others. Finally, we controlled for the ideological biases of Court justices by adding a full set of “natural court” dummies that indicated periods of time during which there were no changes to the Supreme Court bench. We were therefore able to account for both the ideological composition of the Court and any changes in overall Court attitudes towards government that might arise from justice turnover.³⁰

We also collected auxiliary data on lawyers who appeared before the Supreme Court to construct a top Supreme Court advocate indicator. This variable identified whether the principal advocates in a case—whom we define to be the lawyers presenting the oral arguments—have (1) argued at least 20 cases before the Supreme Court by 2010, and (2) argued at least one case on behalf of the federal government and at least one case on behalf of a private entity in our sample of split-decision disputes.³¹ (Our findings were not affected when we used alternative cut-off points for the number of cases a top advocate argued before the Supreme Court.) By focusing on

³⁰ Natural court indicators are widely used in studies of Supreme Court outcomes; see, for example, Lim (2000). We also tried to capture ideological conflict between the Court and the President because such conflict may hurt the performance of the Solicitor General’s Office, which presumably shares the views of the President. We specified a dummy variable indicating whether the President is a Democrat because the majority of justices have been appointed by a President from the Republican Party since the 1980s. However, this dummy variable was statistically insignificant and did not affect our findings.

³¹ We constructed our top Supreme Court advocate dummy variable using two datasets. First, we identified Supreme Court lawyers who argued at least 20 times before the Supreme Court using data published by Bhatia (2012). Specifically, Bhatia ranked recent SCOTUS lawyers according to the number of cases they have argued between 2000 and 2010, as well as provided lifetime numbers of Supreme Court appearances for each of those lawyers. We then used data published by the Oyez Project—a multi-media archive of all Supreme Courts cases heard since 1946—to identify which petitioners and which respondents in our sample of split-decision cases were represented by one of the top Supreme Court advocates.

lawyers who have represented both government and private clients in our sample of cases, we are able to observe how the same advocates perform in public- and private-sector settings.³² Any systematic differences in top advocates' performance would suggest that (1) there are critical differences in the quality of government and private-sector lawyers who provide support to top advocates, and/or (2) there are institutional differences in the private and government sector work environment that either hamper or enhance the performance of high quality lawyers. The second explanation is related to the first because the government may have to attract lawyers of higher quality to offset the competitive disadvantages of any unfavorable aspects of its work environment. Finally, we acknowledge that we do not have data on the characteristics of lawyers who provide support for top advocates in each sector, but we carefully consider alternative explanations for differences in top advocates' performance and we conclude that the two preceding explanations are the most plausible.

Table 8 presents a descriptive overview of the 527 split-decision cases that constitute our sample. Criminal procedure cases account for more than one-third of the Court's cases and cases involving civil rights and economic activities combine to account for another 25 percent of the cases; thus, those three issue areas account for more than 60 percent of the Court's cases. The nine remaining issue areas each account for less than 10 percent of the total cases. Win margins for most cases cluster around one, three, five, and seven votes. The outcomes of nearly a third of those cases hinge on the vote of a single justice. Interestingly, the federal government wins more than 60 percent of the 527 cases in our sample, although it is the petitioner in about half of those

³² We explored specifying individual fixed effects for each top advocate and dividing the sample into different time periods, but we could not obtain statistically precise estimates for those specifications.

cases. At the same time, it is represented by a top advocate attorney in about 10 percent of the cases while a top advocate works for the private sector in only 4 percent of the cases.

Findings

Table 9 presents estimates of the Supreme Court case outcome probit model. As expected, the federal government is more likely to win if it is the petitioner in a split-decision case. The top advocate dummies have striking effects. Specifically, we find that the chances of a government win are substantially reduced when their private rivals are represented by a top Supreme Court advocate. In fact, our findings indicate that, on average, private respondents who hire a top advocate can completely offset any advantages that the federal government gains by virtue of being a petitioner in a case. In contrast, when those same lawyers bring their skills to represent the federal government, their effects on the probability of a government win are quantitatively negligible and statistically insignificant. Thus, although the public sector wins more than half the time, top Supreme Court advocates are more effective as private attorneys than as government litigators and we contend that the finding is robust to various counter arguments and alternative specifications.³³

What explains the relatively lower effectiveness of the top Supreme Court lawyers when they work for the government? Certainly, top advocates have very similar incentives to win regardless of which sector they represent because they want to enhance their reputation as

³³ The additional variables in the specification control for the effect of the Court's ideological bias, the difficulty of cases based on issue areas, and which party brought the case. It could be argued that top advocates working for the government systematically encounter more difficult cases or, unlike when they are in the private sector, can easily choose their cases based on the likelihood of success. However, it is important to recall that the Supreme Court agrees to hear only about 5% of the cases that are petitioned before it; thus, it is difficult to envision a scenario in which the Court's selection of petitions enables top advocates in the private sector to "cherry pick" the easiest cases to win. In support of this assertion, when we measured "harder" cases as those with a smaller win margin, we found that case difficulty was only weakly correlated with whether the case was argued by a top attorney in either sector.

successful advocates in cases that are highly visible and have large stakes. And although lawyers often gain Supreme Court exposure as government litigators (Bhatia (2012)), it is unlikely that the differential effects that we found can be explained by experience. Table 10, which reports the years that top attorneys represent the federal government in our sample of cases, does not show a clear pattern of government work preceding private-firm litigation.³⁴

Our surmise is that top advocates face constraints in the public sector, including limitations to the support that they receive from their senior and junior legal colleagues, which contribute to their performing worse in government than they do in the private sector. The Solicitor General's Office is chartered by law to conduct virtually all litigation in the Supreme Court on behalf of the United States and federal agencies; accordingly, the top advocates who work in that office have various jurisdictions. Compared with when they work in the private sector and can focus on a single Supreme Court case, the top advocates in government may face competing demands on their time and attention and therefore find it more difficult to regulate their workload. The government staff lawyers, known as Assistants to the Solicitor General, also have competing demands on their time, which may limit performance.

The list of potential government limitations is likely, however, to extend beyond simple time constraints. Previously, we argued that even in the upper tail of the earnings/quality distribution (table 2) the private sector attracts lawyers with higher intellectual quality. We have also argued that the government tends to lose its most intellectually capable lawyers to the

³⁴ Moreover, many of those top advocates spent a number of years working in the private sector before assuming prominent litigant roles in the federal government. Donald B. Verrilli, for instance, was a partner at Jenny & Block before serving the government as Associate Deputy Attorney General and later Solicitor General. Maureen E. Mahoney spent more than a decade litigating in the private sector at Latham & Watkins before working as Deputy Solicitor General (1991-1993). And Theodore B. Olson has, with the exception of his two government stints as Assistant Attorney General (1981-1984) and Solicitor General (2001-2004), worked at the private law firm of Gibson, Dunn & Crutcher since 1965.

private sector.³⁵ The Solicitor General's Office does attract staff lawyers with strong law school records, clerkships with noted judges, and often some experience at an elite law firm (Schwartz (1988)), but it is not clear that their human capital is equivalent to the human capital of lawyers at elite law firms who provide support for top advocates in the private sector. In addition, staff lawyers may be stretched thin because they have to work in a variety of areas in their subspecialty and they may not have had the opportunity to develop deep knowledge of the issues in a particular Supreme Court case. Top advocates in government can and may have to rely on lawyers from other government agencies, but those lawyers may not be as capable as lawyers in their office. As pointed out by Schwartz (1988), a factor that militates against specialization is the relatively rapid turnover of staff lawyers within the Solicitor General's Office. Although a handful of lawyers are committed to a career in the Office, the majority stay roughly three years before moving on. Such turnover may also undermine cohesion and overall performance.

We stress that the overwhelming majority of issues involving government lawyers do not involve the Supreme Court. Nonetheless, in the SCOTUS cases analyzed here, where arguably some of the best lawyers in government are supporting top advocates, we have raised some concerns about those lawyers and also how their abilities may be compromised by their work environment. While we cannot distinguish between the relative quality per se of government and private sector lawyers and how their relative quality is affected by their work environments, we have found that the effectiveness of top SCOTUS advocates is lower when they represent the

³⁵ Lawyers who begin their careers in government and switch to the private sector sacrifice some earnings. We verified this point with the AJD data by estimating an earnings equation for Wave 2 that included a dummy variable that indicated that lawyers who started in government in wave 1 and switched to a private law firm in wave 2 suffered a decline in earnings compared with lawyers who were employed by a private law firm in both waves. As noted, some experienced lawyers in the private sector could increase their earnings in the long run by accepting a high-level government position and then returning to the private sector to resume their practice.

government than when they work for a private law firm. The problem of lawyers' self-selection is undoubtedly even more relevant in less prestigious legal cases where the difference between private and public lawyers is likely to be more pronounced.

Conclusion

The government competes with the private sector in the labor market for all of its hires, and for many occupations has an advantage over the private sector by offering higher wages for comparable positions. We have found, however, that the government is at a disadvantage when hiring lawyers because it pays considerably lower salaries than the private sector pays and, on average, attracts and retains attorneys of lower intellectual quality. We also provided evidence that the self-selection of lawyers may contribute to government failure in policy matters where the government presumably represents the public interest in competition with the private sector. Given the myriad policy failures that are potentially attributable to self-selection, the consequences may be large.

In our view, government bears responsibility for a self-inflicted wound from self-selection by allowing the legal profession to erect entry barriers that generate large rents and give the private sector an advantage in attracting legal talent (Winston, Crandall, and Maheshri (2011)). Our findings motivate reducing the earnings differential for private and public sector lawyers by deregulating entry into the legal profession, thereby generating greater competition that would reduce lawyers' rents in the private sector (as shown in figure 1). In practice, would-be attorneys would be free, but no longer required, to obtain a law degree from an accredited

U.S. law school and to pass a state bar examination to practice law.³⁶ Moreover, legal services could be provided by any type of firm, not just law firms, and foreign law firms and lawyers, who have not met the current licensing requirements, would be free to provide legal services in the United States.³⁷ The various sources of new competition in legal services would generate competition among lawyers throughout the profession and would result in a broad decline in their earnings.

Deregulation would address the distortion in private and public sector lawyers' relative wages that may be affecting the allocation of lawyers and government performance without creating additional inefficiencies in the market for lawyers. In contrast, it would be much less efficient for the government to simply raise lawyers' salaries to reduce the distortion in relative earnings because that would confer rents to government lawyers while generally preserving private lawyers' rents.³⁸

³⁶Maheshri and Winston (2014) assess the argument that occupational licensing protects consumers from being exploited because they lack sufficient ability to accurately evaluate a prospective lawyer's ability. First, they question whether there is any evidence that consumers lack the ability to evaluate a lawyer. Second, they point to evidence that the American Bar Association and state bar associations have provided weak discipline on lawyers' conduct. Finally, they suggest that more information about a lawyer's competence, especially from third-party providers, would emerge in a more competitive legal environment.

³⁷ Occupational licensing is just one example of how lawyer legislatures take positions that favor the legal profession at the possible expense of the public. As another example, Matter and Stutzer (2013) find that attorneys elected to the U.S. House of Representatives and to U.S. state legislators are less likely to vote in favor of tort reforms that restrict costly tort litigation, but are more likely to support bills that extend tort law. Polinsky and Shavell (2010) argue that product liability suits likely contribute very little to economic welfare and at best provide benefits that are incremental to the benefits provided by market responses and regulation.

³⁸ Given that the demand for high legal ability is lower for government jobs, government may have to make a concerted effort to differentiate pay to compete better with the private sector. That is, many government lawyers are likely to have little to do with the work involved with litigating cases against private lawyers, while those that do may have to be paid more to attract them.

To be sure, even in a deregulated environment, it is likely that the most distinguished lawyers would continue to earn large salaries and that the government would be unable to attract their services full-time. But by reducing the earnings penalty for lawyers working in government and creating an even more stressful entrepreneurial work environment in the private sector, deregulation may enable the public sector to compete more effectively in attracting other lawyers—especially junior lawyers who support senior attorneys’ work—that improves the quality of its legal representation and enables it to be a more effective advocate for the public interest.

Appendix

This appendix assesses the endogeneity of the personal goal variables—desire to help society and desire to accumulate wealth—that are included in our sector-choice model; outlines GMM estimation of the earnings equation accounting for lawyers’ endogenous choice of whether to work in the government; and explains why the probit model that estimates the influences on lawyers to stay in government is not subject to attrition bias.

Sector Choice and Personal Goals

If personal goals are endogenous to job selection, then we would expect changes in sector choice to be systematically correlated with changes in personal goals. We explored this hypothesis empirically using both waves of the AJD by constructing preference-change dummy variables—which indicate whether a lawyer’s desire to help society or have financial security/wealth increased between waves 1 and 2 of the AJD—and sector-switching dummies—which indicate whether a lawyer changed sectors between survey waves. As in the main analyses, we limited our sample to lawyers who worked for either the government or a private law firm in both administrations of the survey.

Appendix Table 1 presents probit-model estimates of the effects of sector switching on changes in lawyers’ personal goals and shows that those effects tend to be small and statistically insignificant, regardless of whether the advocate selected into or out of the government. Although the coefficients on the sector-switching dummies are slightly larger in the wealth-preference model, they too remain statistically indistinguishable from zero. Those findings are largely confirmed by more expansive models that control for basic demographic and family background characteristics. Interestingly, while sector switching does not appear to induce changes in personal preferences, lawyers’ desires to help people and to accumulate wealth both

appear to have declined between survey waves, as indicated by the large and negative coefficient on the constant term.

GMM Estimation

The earnings model in the text is given by:

$$Y = \mathbf{X}'\boldsymbol{\beta} + G\gamma + \varepsilon,$$

where all variables are defined as before, $\boldsymbol{\beta}$ and γ are the unobserved parameters to be estimated, and the following conditions are met:

$$E(\varepsilon) = 0, \text{Var}(\varepsilon) = \boldsymbol{\Sigma}$$

$$E(\mathbf{X}\varepsilon) = 0$$

$$E(\mathbf{G}\varepsilon) \neq 0$$

$$E(\mathbf{Z}\varepsilon) = 0.$$

Note \mathbf{X} is a k -element vector of exogenous explanatory variables, \mathbf{Z} is a vector of exogenous instruments that may include some subset of \mathbf{X} but include at least one variable not in \mathbf{X} , and G is an endogenous dummy variable capturing sector choice. The disturbance term ε , with mean 0 and variance $\boldsymbol{\Sigma}$, is potentially correlated with G but not with \mathbf{X} or \mathbf{Z} . All the variables are measured at the individual level; we have suppressed the indexes for simplicity.

$E[\mathbf{X}\varepsilon] = E[\mathbf{X}(Y - \mathbf{X}'\boldsymbol{\beta} - G\gamma)] = 0$ and $E[\mathbf{Z}\varepsilon] = E[\mathbf{Z}(Y - \mathbf{X}'\boldsymbol{\beta} - G\gamma)] = 0$ constitute $k + m$ distinct theoretical moment conditions. The sample counterparts of those conditions can be used to estimate the $k + 1$ parameters of the model ($\boldsymbol{\beta}$ and γ). If $m = 1$ there are as many moment conditions as parameters and the model is exactly identified. If $m > 1$, then there are more moment conditions than parameters, and the model is over-identified. In the over-identified case, estimation proceeds by choosing the parameters that minimize the criterion function

$$\mathbf{m}(\hat{\boldsymbol{\beta}}, \hat{\boldsymbol{\gamma}})' \mathbf{W} \mathbf{m}(\hat{\boldsymbol{\beta}}, \hat{\boldsymbol{\gamma}}),$$

where \mathbf{m} represents the vector of sample moments and \mathbf{W} is a positive definite weighting matrix. The optimal weighting matrix is the inverse of the covariance matrix of the moment conditions (Hansen (1982)), which we denote \mathbf{V}^{-1} .

Although \mathbf{V}^{-1} is unobserved, it can be estimated consistently by an iterative procedure where the moment conditions are initially weighted with an identity matrix to obtain consistent estimates of $\boldsymbol{\beta}$ and $\boldsymbol{\gamma}$. Those estimates are then used to estimate \mathbf{V}^{-1} , which is used as the weighting matrix in the next iteration to obtain more precise estimates of $\boldsymbol{\beta}$ and $\boldsymbol{\gamma}$. The process continues until the improved precision of the parameter estimates is sufficiently small such that convergence is achieved.

Probit Model of a Lawyer's Decision to Stay in Government

This model requires data from both waves of the AJD Survey, so we assess the potential bias caused by not including lawyers in the estimation who dropped out after participating in Wave 1. Such attrition is fundamentally a problem of sample selection. As is well-known, the probit model may be motivated as a latent variable threshold-crossing model:

$$S^* = \mathbf{X}\mathbf{B} + u$$

$S=1$ if $S^*>0$, where S^* is the latent variable such that if $S^*>0$ then the lawyer stays in government, \mathbf{X} denotes exogenous explanatory variables, and u is an unobserved component that affects the decision to stay in or exit from the government sector. In a probit model, u is assumed to conform to a standard normal distribution.

If individuals were dropped from the sample at random, then the distribution of u would be unchanged, and the probit estimation would maintain consistency. It is possible, however, that individuals who attrit from Wave 1 may vary systematically in u from those who do not

attrit. Suppose, for example, that those who attrit are more likely to stay in government; thus, the distribution of u would change, specifically, $E[u|in\ sample] < 0$, and probit estimation would no longer be consistent.

We therefore apply the Wave 2 sample weights to our estimation sample. The idea here is that instead of dropping the lawyers who attrit from the Wave 1 sample, we are dropping the newly added lawyers from the Wave 2 sample. The newly added lawyers were presumably exogenously selected for the survey thus their inclusion in, or removal from, the sample should have no effect on the distribution of u . In contrast, the lawyers who attrit from Wave 1 may, by their choice to attrit, be revealing information about their unobserved component u .

Although those processes of exclusion are conceptually different, in either case the remaining sample involves the same individuals. By applying the Wave 2 sample weights, the data from the newly added observations that are dropped can be assumed to be missing at random, thus probit estimation maintains consistency.

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Figure 1: Occupational Licensing in Public- and Private-Sector Lawyer Labor Markets

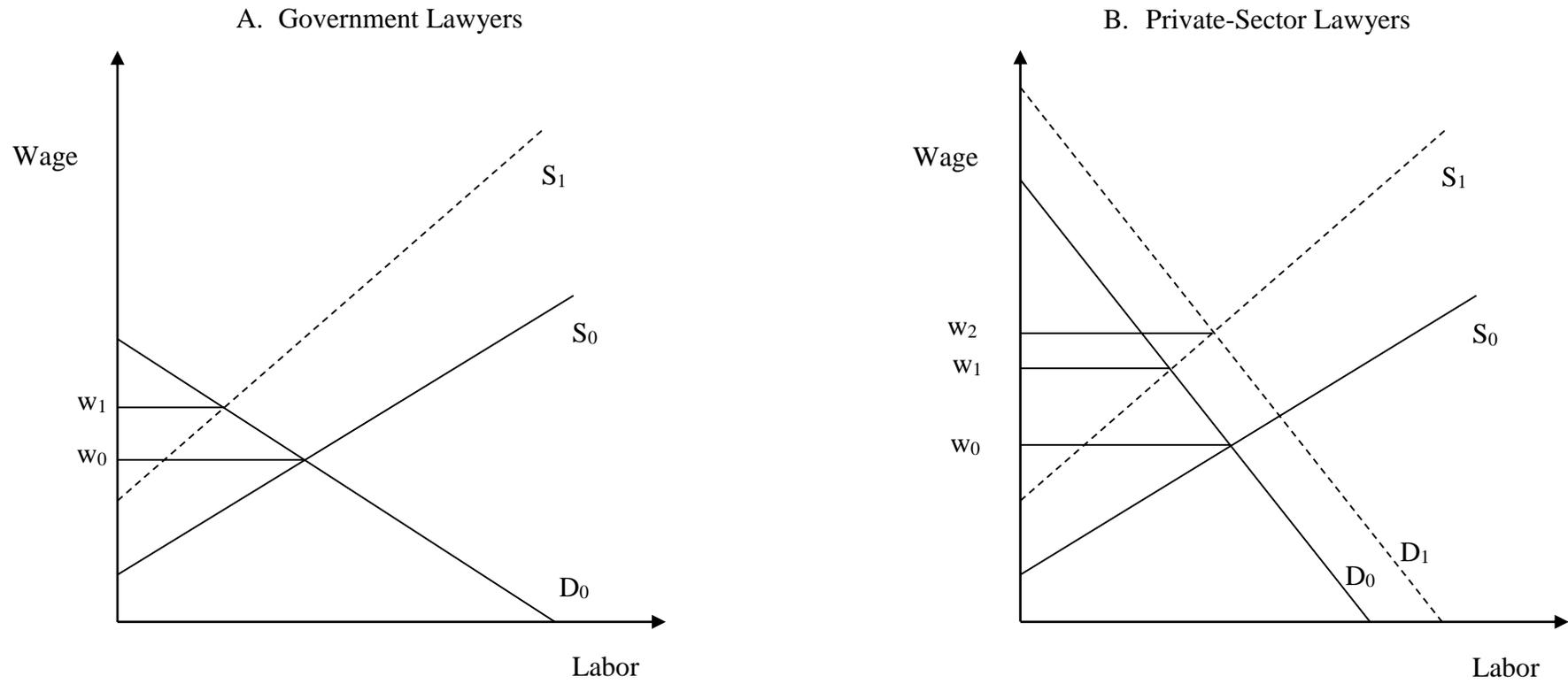


Table 1: Summary Statistics for AJD Wave 1

Employer	Government	Private Law Firm
<i>Earnings and Employment</i>		
Annual Salary (2002 dollars)	\$49,960	\$87,861
Employed Full-Time	98.8%	97.9%
Hours Worked per Week	45.0	49.9
<i>Demographics</i>		
Age (years)	31.7	31.6
Non-White	18.4%	13.4%
Female	48.8%	47.7%
<i>Education</i>		
Law School GPA Greater than 3.5	18.5%	30.4%
Attended a Top 10 Law School	3.0%	9.1%
Attended a Top 11-20 Law School	6.2%	10.2%
Educational Debt	\$60,853	\$60,197
<i>Personal Goals</i> ¹		
Desire to Help Society (5 pt scale: 1=not important, 5=very important)	3.7	3.1
Desire for Financial Security/Wealth (5 pt scale: 1=not important, 5=very important)	3.8	4.2
<i>Parental Characteristics</i>		
Has Non-Citizen Parent	11.1%	17.8%
Has Lawyer Parent	10.9%	10.3%
Sample Size	281	1,051

¹In Wave 1, law graduates were asked: "How important was each of the following goals in your decision to attend law school?" Answers are given based on a five point scale, with 1 meaning "irrelevant" to their decision and 5 meaning "very important" to their decision. In Wave 2, law graduates were asked a parallel set of questions, namely: "How important are each of the following long term goals to you?" Again, answers are given based on a five point scale, with 1 meaning "not important at all" and 5 meaning "very important."

Table 2: Characteristics of Lawyers in the Upper 10 Percent of Each Sector's Earnings Distribution (AJD Wave 1)

	Private Law Firm	Government
Annual Salary (2002 dollars)	\$180,410	\$78,218
Hours Worked per Week	54.2	45.2
Law School GPA Greater than 3.5	45.8%	39.5%
Attended a Top 10 Law School	39.2%	19.3%
Attended a Top 11-20 Law School	16.8%	9.4%
Desire to Help Society ¹ (5 pt scale: 1=not important, 5=very important)	2.9	3.7
Desire for Financial Security/Wealth ¹ (5 pt scale: 1=not important, 5=very important)	4.1	3.6

¹In Wave 1, law graduates were asked: "How important was each of the following goals in your decision to attend law school?" Answers are given based on a five point scale, with 1 meaning "irrelevant" to their decision and 5 meaning "very important" to their decision.

Table 3: Probit Lawyer Sector Choice Model for AJD Wave 1
(1=government; 0=private law firm)

	Coefficient (Robust SE)
Age	0.0365
(years)	(0.0465)
Age Squared	-0.000498
(years)	(0.000577)
Non-White	0.362
(1=non-white; 0=white)	(0.144)
Female	-0.0333
(1=female; 0=male)	(0.100)
Law School GPA Greater than 3.5	-0.244
(1= yes; 0=otherwise)	(0.124)
Law School GPA Less than 3.0	0.339
(1= yes; 0=otherwise)	(0.126)
Law School Did Not Give GPA	0.514
(1= yes; 0=otherwise)	(0.408)
Attended a Top 10 Law School	-0.777
(1= yes; 0=otherwise)	(0.244)
Attended a Top 11-20 Law School	-0.318
(1= yes; 0=otherwise)	(0.192)
Attended a Top 21-100 Law School	0.174
(1= yes; 0=otherwise)	(0.120)
Graduated with Over \$50k of Educational Debt	0.0661
(1= yes; 0=otherwise)	(0.103)

Table 3: Probit Selection Model for AJD Wave 1
(continued)

	Coefficient (Robust SE)
Desire to Help Society¹ (5 pt scale: 1=not important, 5=very important)	0.210 (0.0438)
Desire for Financial Security/Wealth¹ (5 pt scale: 1=not important, 5=very important)	-0.212 (0.0448)
Has Non-Citizen Parent (1= yes; 0=otherwise)	-0.526 (0.184)
Has Lawyer Parent (1= yes; 0=otherwise)	0.0619 (0.155)
Regional Dummies²	Yes
Constant	-1.004 (0.977)
Sample Size	1,332
Pseudo R²	0.124

¹In Wave 1, law graduates were asked: "How important was each of the following goals in your decision to attend law school?" Answers are given based on a five point scale, with 1 meaning "irrelevant" to their decision and 5 meaning "very important" to their decision.

²Wave 1 regions, which indicate where an individual currently lives, include: New York City, District of Columbia, Chicago, Los Angeles, Atlanta, Houston, Minneapolis, San Francisco, Connecticut, New Jersey, Florida, Tennessee, Oklahoma, Indiana, St. Louis, Utah, Oregon and Boston. New York City was used as the reference case in the above regression.

Table 4: Probit Model of a Lawyer's Decision to Stay in Government

(1=stay in government; 0=switch to a private law firm)

	Coefficient (Robust SE)
Age (years)	0.0820 (0.0333)
Non-White (1=non-white; 0=white)	0.588 (0.332)
Law School GPA Greater than 3.5 (1= yes; 0=otherwise)	-0.564 (0.385)
Law School GPA Less than 3.0 (1= yes; 0=otherwise)	-1.366 (0.380)
Attended a Top 10 Law School (1= yes; 0=otherwise)	-1.980 (0.612)
Constant	-1.202 (1.009)
Sample Size	130
Pseudo R ²	0.226

Table 5: Sector Selection Probit Model for AJD Wave 2
 (1=government lawyer; 0=private firm lawyer)

	Coefficient (Robust SE)
Age (years)	0.0116 (0.105)
Age Squared (years)	0.000146 (0.00126)
Non-White (1=non-white; 0=white)	0.320 (0.165)
Female (1=female; 0=male)	0.113 (0.112)
Law School GPA Greater than 3.5 (1= yes; 0=otherwise)	-0.332 (0.142)
Law School GPA Less than 3.0 (1= yes; 0=otherwise)	0.0694 (0.146)
Law School Did Not Give GPA (1= yes; 0=otherwise)	-0.238 (0.366)
Attended a Top 10 Law School (1= yes; 0=otherwise)	-0.433 (0.245)
Attended a Top 11-20 Law School (1= yes; 0=otherwise)	-0.303 (0.189)
Attended a Top 21-100 Law School (1= yes; 0=otherwise)	-0.196 (0.129)

Table 5: Sector Selection Probit Model for AJD Wave 2
(continued)

	Coefficient (Robust SE)
Graduated with Over \$50k of Educational Debt (1= yes; 0=otherwise)	-0.000611 (0.115)
Desire to Help Society¹ (5 pt scale: 1=not important, 5=very important)	0.396 (0.0598)
Desire to Accumulate Wealth¹ (5 pt scale: 1=not important, 5=very important)	-0.475 (0.0595)
Has Non-Citizen Parent (1= yes; 0=otherwise)	-0.213 (0.169)
Has Lawyer Parent (1= yes; 0=otherwise)	-0.0961 (0.191)
Regional Dummies²	Yes
Constant	-0.596 (2.142)
Sample Size	904
R²	0.196

¹In Wave 2, law graduates were asked: "How important are each of the following long term goals to you?" Answers

²Wave 2 provides information on the state in which a respondent is currently employed. Due to sample size limitations, we only included dummy indicators for whether the respondent lived in the Northeast, the District of Columbia, the South, or the West.

Table 6: Earnings Equation for AJD Wave 1

	Without Correction for Selection ²	With Correction for Selection ²
	Coefficient (Robust SE)	Coefficient (Robust SE)
Works in Government (1= government; 0=private law firm)	-0.401 (0.0217)	-0.592 (0.0866)
Employed Full-Time (1= yes; 0=otherwise)	0.464 (0.102)	0.462 (0.103)
Hours Worked per Week	0.00294 (0.00083)	0.00296 (0.00082)
Age (years)	0.0679 (0.00974)	0.0684 (0.0098)
Age Squared (years)	-0.000894 (0.00012)	-0.000901 (0.00012)
Non-White (1=non-white; 0=white)	0.0773 (0.0278)	0.0858 (0.0277)
Female (1=female; 0=male)	-0.0596 (0.0202)	-0.0568 (0.0201)
Law School GPA Greater than 3.5 (1= yes; 0=otherwise)	0.204 (0.0239)	0.193 (0.0249)
Law School GPA Less than 3.0 (1= yes; 0=otherwise)	-0.165 (0.0263)	-0.146 (0.0277)
Law School Did Not Give GPA (1= yes; 0=otherwise)	0.00789 (0.0594)	0.0471 (0.0604)
Attended a Top 10 Law School (1= yes; 0=otherwise)	0.385 (0.0402)	0.360 (0.0424)
Attended a Top 11-20 Law School (1= yes; 0=otherwise)	0.253 (0.0335)	0.239 (0.0339)
Attended a Top 21-100 Law School (1= yes; 0=otherwise)	0.0866 (0.0241)	0.0970 (0.0245)
Inverse Mills Ratio	X	0.120 (0.0531)
Regional Dummies ¹	Yes	Yes
Constant	9.615 (0.226)	9.655 (0.229)
Sample Size	1,332	1,332
R ²	0.592	0.594

¹Wave 1 regions, which indicate where an individual currently lives, include: New York City, District of Columbia, Chicago, Los Angeles, Atlanta, Houston, Minneapolis, San Francisco, Connecticut, New Jersey, Florida, Tennessee, Oklahoma, Indiana, St. Louis, Utah, Oregon and Boston. New York City was used as the reference case in the above regression.

²Dependent variable is Ln(Annual Salary), adjusted to \$2002.

Table 7: Earnings Equation for AJD Wave 2

	Earnings Equation ² Without Correction for Selection	Earnings Equation ² With Correction for Selection
	Coefficient (Robust SE)	Coefficient (Robust SE)
Works in Government (1= government; 0=private firm)	-0.391 (0.0295)	-0.614 (0.0699)
Employed Full-Time (1= yes; 0=otherwise)	0.433 (0.108)	0.409 (0.108)
Hours Worked per Week	0.00425 (0.00184)	0.00427 (0.00184)
Age (years)	0.0608 (0.0312)	0.0567 (0.0308)
Age Squared (years)	-0.000778 (0.000383)	-0.000701 (0.000378)
Non-White (1=non-white; 0=white)	0.0497 (0.0394)	0.0686 (0.0393)
Female (1=female; 0=male)	-0.133 (0.0317)	-0.121 (0.0319)
Law School GPA Greater than 3.5 (1= yes; 0=otherwise)	0.0769 (0.0403)	0.0583 (0.0413)
Law School GPA Less than 3.0 (1= yes; 0=otherwise)	-0.168 (0.0363)	-0.165 (0.0361)
Law School Did Not Give GPA (1= yes; 0=otherwise)	-0.0504 (0.113)	-0.0583 (0.116)
Attended a Top 10 Law School (1= yes; 0=otherwise)	0.424 (0.0572)	0.393 (0.0572)
Attended a Top 11-20 Law School (1= yes; 0=otherwise)	0.153 (0.0721)	0.134 (0.0721)
Attended a Top 21-100 Law School (1= yes; 0=otherwise)	0.0531 (0.0371)	0.0387 (0.0365)
Inverse Mills Ratio	X	0.163 (0.0480)
Regional Dummies¹	Yes	Yes
Constant	9.618 (0.633)	9.769 (0.625)
Sample Size	904	904
R²	0.384	0.393

¹Wave 2 provides information on the state in which a respondent is currently employed. Due to sample size limitations, we only included dummy indicators for whether the respondent lived in the Northeast, the District of Columbia, the South, or the West.

²Dependent variable is Ln(Annual Salary), adjusted to \$2002.

Table 8: Characteristics of Split-Decision Government v. Private Cases

Case Issue Area	%
Criminal Procedure	37%
Civil Rights	14%
First Amendment	9%
Due Process	3%
Privacy	2%
Attorneys	1%
Unions	5%
Economic Activity	10%
Judicial Power	9%
Federalism	1%
Federal Taxation	8%
Miscellaneous	1%
Case Outcomes	
Win Margin	
<i>1 Vote</i>	31%
<i>2 Votes</i>	4%
<i>3 Votes</i>	25%
<i>4 Votes</i>	4%
<i>5 Votes</i>	20%
<i>6 Votes</i>	2%
<i>7 Votes</i>	14%
Government Wins	62%
Government is Petitioner	52%
Federal Government Attorney is Top Advocate	10%
Private Attorney is Top Advocate	4%
Number of Cases	527

Table 9: Probit Model of a Government Win in a Split-Decision U.S. Supreme Court Case
(1=Government wins case; 0=Government loses case)

	Coefficient (Robust SE)
Case Topic Dummies	Yes
Natural Court Dummies	Yes
Petitioner is Federal Government (1=yes; 0=no)	0.327 (0.123)
Federal Government Attorney is Top Advocate (1=yes; 0=no)	0.0220 (0.196)
Private Attorney is Top Advocate (1=yes; 0=no)	-0.676 (0.316)
Constant	-1.561 (0.738)
Sample Size	527
Pseudo R ²	0.082

Table 10: Career Trajectories of Top Supreme Court Advocates^a

Top Advocate ^b	Years in Federal Government	Years out of Federal Government
Andrew J. Pincus	1985, 1986, 1987	2008
Carter G. Phillips	1981, 1983	1992, 1995, 1999, 2008, 2011
Charles A. Rothfeld	1984, 1985, 1986, 1987	2007, 2009
Donald B. Verrilli	2011, 2012	2002
Gregory G. Garre	2002, 2003, 2007, 2008	2011
John G. Roberts, Jr.	1989, 1990	1989
Maureen E. Mahoney	1991, 1992	1993, 1998, 2006, 2008
Patricia A. Millet	2002, 2004, 2005	2009
Paul D. Clement	2001, 2002, 2003, 2004, 2005, 2006, 2007	2011
Stephen M. Shapiro	1980	2004
Theodore B. Olson	2001, 2002, 2003	1995, 2008, 2009

^aTable 10 shows the years in which a top advocate argued at least one of the Supreme Court cases in our analysis sample. Thus, the table does not list an advocate's total number of years of government and non-government service, but rather lists the data points (aka, cases) in our sample in which the lawyer argued on behalf of the government or a non-government entity.

^b The government positions held by these top advocates are as follows: Andrew J. Pincus (Assistant to the Solicitor General); Carter G. Phillips (Assistant to the Solicitor General); Charles A. Rothfeld (Assistant to the Solicitor General); Donald B. Verrilli (Associate Deputy Attorney General, Solicitor General); Gregory G. Garre (Assistant to the Solicitor General, Principal Deputy Solicitor General, Solicitor General); John G. Roberts, Jr. (Special Assistant to the Attorney General and Principal Deputy Solicitor General); Maureen E. Mahoney (Deputy Solicitor General); Patricia A. Millet (Assistant to the Solicitor General); Paul D. Clement (Principal Deputy Solicitor General, Acting Solicitor General, Solicitor General); Stephen M. Shapiro (Assistant to the Solicitor General); Theodore B. Olson (Assistant Attorney General, Solicitor General).

Appendix Table 1: Probit Model of Changes in Personal Goals

	Altruism (1=helping society was more important in wave 2 than in wave 1; 0=otherwise)		Wealth (1=financial security/wealth was more important in wave 2 than in wave 1; 0=otherwise)	
	Without Controls	With Controls	Without Controls	With Controls
	Coefficient (Robust SE)	Coefficient (Robust SE)	Coefficient (Robust SE)	Coefficient (Robust SE)
Age (years)	X	0.00488 (.00843)	X	0.00692 (0.00978)
Non-White (1=non-white; 0=white)	X	-0.160 (0.109)	X	-0.128 (0.126)
Female (1=yes; 0=otherwise)	X	-0.0294 0.0841	X	0.140 (0.0967)
Attended a Top 10 Law School (1= yes; 0=otherwise)	X	-0.166 (0.135)	X	-0.162 (0.181)
Has Non-Citizen Parent (1= yes; 0=otherwise)	X	0.562 (0.125)	X	0.468 (0.145)
Has Lawyer Parent (1= yes; 0=otherwise)	X	0.0464 (0.126)	X	0.143 (0.147)
Switched from Government to Private Law Firm (1= yes; 0=otherwise)	-0.0505 (0.175)	-0.0626 (0.181)	0.254 (0.186)	0.273 (0.188)
Switched from Private Law Firm to Government (1= yes; 0=otherwise)	0.00921 (0.137)	0.0246 (0.137)	-0.278 (0.181)	-0.265 (0.183)
Constant	-0.722 (0.0432)	-0.893 (0.272)	-1.266 (0.0506)	-1.589 (0.324)
Sample Size	1,625	1,585	1,625	1,585
Pseudo R ²	0.0001	0.016	0.0049	0.023

Appendix Table 2: Summary Statistics for Michigan Law Graduates		
	Government Lawyer	Private Firm Lawyer
<i>Labor and Earnings</i>		
Annual Income (\$2002)	\$67,054	\$105,390
Employed Full-Time	97.9%	95.9%
Hours Worked per Year	2,419	2,599
<i>Demographics</i>		
Age	32	32
Non-White	19.5%	11.3%
Female	44.7%	32.6%
<i>Education</i>		
Law School GPA (standardized by graduation year)	0.052	0.199
Attended University of Michigan as Undergraduate	18.2%	21.9%
Attended IVY League School as Undergraduate	14.6%	14.3%
Educational Debt	\$40,385	\$43,184
<i>Preferences¹</i>		
Concerned about Societal Impact of Work (7 pt scale: 1=much less than most lawyers, 7=much more than most lawyers)	5.49	4.35
Concerned about Making a Lot of Money (7 pt scale: 1=much less than most lawyers, 7=much more than most lawyers)	2.73	3.65
Year of Law School Graduation	1991	1990
Sample Size	329	2,188

¹Respondents were asked: "In comparison to most lawyers your age, how would you rate yourself with regard to the following traits or qualities?" Answers were recorded on a 7 point scale, with 1 indicating "much less than most" and 7 indicating "much more than most."

Appendix Table 3: Sector Selection and Earnings Equations for Michigan Law Graduates

	Probit Selection Model (1=government lawyer; 0=private firm lawyer)	Earnings Equation ² Without Correction for Selection	Earnings Equation ² With Correction for Selection
	Coefficient (Robust SE)	Coefficient (Robust SE)	Coefficient (Robust SE)
Works in Government (1= government; 0=private firm)	X	-0.388 (0.0210)	-0.785 (0.0682)
Employed Full-Time (1= yes; 0=otherwise)	X	0.336 (0.0613)	0.328 (0.0599)
Hours Worked per Year	X	0.000180 (0.0000224)	0.000182 (0.0000222)
Age (years)	0.246 (0.131)	0.0176 (0.0343)	0.0460 (0.0344)
Age Squared (years)	-0.00328 (0.00182)	-0.000321 (0.000480)	-0.000698 (0.000481)
Non-White (1=non-white; 0=white)	0.317 (0.109)	0.113 (0.0270)	0.135 (0.0269)
Female (1=female; 0=male)	0.122 (0.0761)	-0.0182 (0.0171)	0.00338 (0.0177)
Law School GPA (standardized by graduation year)	-0.0976 (0.0457)	0.135 (0.0110)	0.129 (0.0110)
Attended University of Michigan as Undergraduate (1= yes; 0=otherwise)	-0.107 (0.0932)	0.0127 (0.0176)	0.00742 (0.0175)
Attended IVY League School as Undergraduate (1= yes; 0=otherwise)	-0.169 (0.106)	-0.0105 (0.0281)	-0.0130 (0.0278)
Graduated with Over \$50k of Educational Debt (1= yes; 0=otherwise)	-0.255 (0.0894)	X	X

Appendix Table 3: Sector Selection and Earnings Equations for Michigan Law Graduates
(continued)

	Probit Selection Model (1=government lawyer; 0=private firm lawyer)	Earnings Equation ² Without Correction for Selection	Earnings Equation ² With Correction for Selection
	Coefficient (Robust SE)	Coefficient (Robust SE)	Coefficient (Robust SE)
Concerned about Impacting Society ¹ (7 pt scale: 1=much less than most lawyers, 5=much more than most lawyers)	0.304 (0.0331)	X	X
Concerned about Making a Lot of Money ¹ (7 pt scale: 1=much less than most lawyers, 5=much more than most lawyers)	-0.248 (0.0331)	X	X
State and Cohort Dummies ³	Yes	Yes	Yes
Inverse Mills Ratio	X	X	0.251 (0.0426)
Constant	-6.995 (2.347)	10.627 (0.624)	10.121 (0.626)
R ²	0.225	0.358	0.371
Sample Size	2,517	2,517	2,517

¹Respondents were asked: "In comparison to most lawyers your age, how would you rate yourself with regard to the following traits or qualities?" Answers were recorded on a 7 point scale, with 1 indicating "much less than most" and 7 indicating "much more than most."

²Dependent variable is Ln(Annual Salary), adjusted to \$2002.

³In addition to including dummies for state of current residence, analyses include cohort dummies indicating the year in which the lawyer graduated from law school.