

Do Lawyers Matter in Initial Public Offerings?

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Abstract

We find that law firm fixed effects contribute more to the explained variation in IPO underpricing than underwriter fixed effects. This result is robust to controls for issuer and deal characteristics, as well as time and industry fixed effects. We confirm the persistence in underpricing for legal advisers and propose a link between issuers' law firms and post-IPO litigation risk. Legal adviser fixed effects provide significant explanatory power in models of post-IPO litigation outcomes, and law firm reputation is a significant determinant of underpricing. However, the explanatory power of reputation is small relative to the law firm fixed effect. The remaining unexplained variation likely results from issuers selecting legal advisers based on the issuer's unique risk profile and law firm's expertise.

I. Introduction

Legal counsel is all but a necessity in initial public offerings (IPOs). The initial issuance of equity to the publicly traded markets is one of the largest and most economically meaningful transactions for growing companies, and in almost every IPO (99%), issuers retain outside legal counsel. These law firms play a central role in ensuring that issuers comply with securities regulations, including disclosure laws, and work to limit their client's exposure to liability from shareholder suits and regulators. In spite of the ubiquity and importance of lawyers in the IPO process, there is little research on the significance of law firms on IPO outcomes. For comparison, a brief review of the IPO literature reveals dozens of papers on the importance of underwriters on initial returns (underpricing), and over a hundred papers using underwriter characteristics, such as reputation, as control variables in studies of underpricing.

Our evidence indicates that law firm fixed effects contribute more to the explained variation of underpricing than underwriter fixed effects. This surprising result holds after controlling for deal and issuer characteristics, as well as year and industry fixed effects. In multivariate models, the legal adviser for the issuing firm contributes 15% to 20% of the explained variation in initial returns, and 2% to 3% of the total variation in initial returns. This contribution is greater than any other characteristic or fixed effect, except year of issuance.

We validate this result by checking that a significant fixed effect is not generated from random assignment of law firms to IPOs in a simulation. We randomly assign law firms to IPOs and perform an F-test of the significance of law firm effects. After repeating this process 1,000 times, the F-statistics generated are not more likely to be statistically significant than random. That is, the fixed effect attributable to law firms appears genuine under this falsification test.

We also confirm that the IPO performance attributable to law firms indicates persistence across time in IPO returns. We document that past underpricing has a strong and significant

positive correlation with future underpricing for issuers using the same legal adviser. Similarly, Bao and Edmans (2011) find past returns predict future returns for investment banks advising acquirers in acquisitions. It is perhaps more surprising to see persistence in returns in the market for legal advice. The market for law firms is much less concentrated than for investment banks, and competition is more likely to drive out an inferior quality in the provision of legal services.

Given the large and significant relation between law firms and underpricing, we ask what mechanisms drive the explanatory power of law firms. Following Lowry and Shu (2002), we posit that greater underpricing is the result of issuers insuring against future litigation. Litigation risk in the IPO market largely arises from disclosure in the registration statement and prospectus filed by the issuer and given to IPO investors. Any material misstatements in the disclosures can result in class action litigation arising from section 10b-5 and 11 claims. In multivariate regressions of the likelihood of litigation, we again document the relative importance of law firm choice. In probit models of the probability of disclosure-related litigation, law firm indicators contribute a large increase in the explained variation, improving the pseudo-R² between 15% to 20%, whereas underwriter fixed effects add little to explain the litigation model. This is consistent with a litigation-based explanation for the importance of law firms in IPOs.

The link between law firm choice, litigation risk, and underpricing could stem from two non-exclusive sources. First, issuers with particular disclosure needs could hire law firms with relevant expertise, and the persistence in underpricing simply reflects the type of deal and needs of the issuer. Under this selection hypothesis, persistence survives because issuers with similar risks tend to underprice to a similar degree and retain similar legal counsel.

Second, lawyer quality could vary across firms. Golubov, Yawson, and Zhang (2015) find evidence of “extraordinary acquirers”, as bidder fixed effects explain more variation in acquisition announcement returns than any other deal characteristic. Similarly, if superior drafting, counselling, and lawyering reduce the litigation risks, issuers have less need to

underprice as insurance against disclosure-related litigation. That is, law firms' skill and reputation could drive the variation in underpricing.

Motivated by the literature on underwriters in IPOs, we test for the importance of law firm reputation using size (top 10 by market share) as a proxy for reputation and skill. This is consistent with evidence on law firm recruitment. The largest law firms typically recruit the highest ranked students and pay the highest salaries.¹ We find reputation is associated with *greater* underpricing. This result is inconsistent with law firm reputation benefitting issuers. We expect that this counterintuitive correlation emanates from a selection process in which issuers retain high reputation law firms in sensitive deals with higher disclosure needs or litigation risk.

To mitigate bias resulting from ex ante litigation risk, we follow Lowry and Shu (2002) and use a turnover-based proxy for litigation risk. First, we match each IPO issuer with a set of publicly-traded peer firms. We match based on several firm characteristics for each issuer and then take the median turnover for each matched group and use this as a measure of the issuer's turnover, which is a proxy for litigation risk. We then control for ex ante litigation risk with the turnover variable in regressions of underpricing and litigation outcomes.

We find that litigation risk proxy is positively and significantly related to underpricing, which is consistent with the notion that issuers offer their equity at a greater "discount" when issuers are riskier or more likely to generate litigation. After controlling for litigation risk, we find that the relation between legal adviser reputation and underpricing becomes negative and significant. That is, after we control for the effects of ex ante litigation risk, law firm reputation seems to reduce risk, with investors willing to pay more (receive lower first-day returns) to participate in IPOs with issuers with reputable law firms.

¹ For example, see <https://abovethelaw.com/2018/06/salary-wars-scorecard-which-firms-have-announced-raises-2018/>

Finally, we note that the benefit from retaining reputable legal counsel is not costless. We examine legal fees paid by issuers. Even after controlling for the size of the issue and several other deal characteristics, there is a significantly positive correlation between the retention of a top tier law firm and the legal fees paid by the issuer.

Our results contribute the literature on the importance of advisers and their reputation in initial public offerings. This literature focuses on the importance of underwriter reputation and its influence on underpricing (e.g., Carter and Manaster, 1990). We also speak to the literature on the role of underpricing in reducing litigation risk (Lowry and Shu, 2002). Our evidence also speaks to the role of improving client outcomes by aiding in disclosure, risk reduction and risk allocation. The evidence of beneficial effects of law firms and their reputations supports theories of lawyers as “transaction cost engineers”, reducing deal costs to the benefit of their clients (Gilson, 1998).

The remainder of the paper proceeds as follows. Section 2 presents a review of related literature. Section 3 describes the data. Section 4 presents the results of underpricing regressions with fixed effects and provides evidence on the mechanisms that provide variation in legal adviser fixed effects. In Section 5, we conclude.

II. Literature Review and Hypotheses

Prior literature utilizes fixed effect techniques to document the importance of unobserved, time-invariant characteristics in corporate finance, and the importance of such effects is difficult to overstate. Lemmon, Roberts, and Zender (2008) reveal how little is known about firms’ capital structures, as the majority of the variation in firms’ capital structure results from time-invariant, unexplained components. Golubov, Yawson, and Zhang (2014) show that bidder fixed effects explain more in bidder returns than all other commonly used determinants combined. Bertrand and Schoar (2003) document significant variation in investment and

financing across manager fixed effects, and similarly, Graham, Li and Qiu (2011) show that manager fixed effects dominate firm fixed effects in explaining a number of corporate policies.

There is also evidence that advisers to firm significantly affect corporate outcomes at the adviser level. For example, Bao and Edmans (2011) find that bidder returns are largely explained by investment bank adviser fixed effects, and that past returns predict future returns. The most closely related study to our paper is Hoberg (2007), who examines underwriter fixed effects in a model of underpricing and documents persistence in IPO returns for underwriters.

While our paper applies similar methodology as these related papers, the focus of our analysis on legal advisers provides significant contributions. We are the first to document the significance of legal advisers within this fixed effect framework. This framework allows us to demonstrate the importance of lawyers in IPOs, as related research on legal advisers shows weak or counter-intuitive results. For example, Beatty and Welch (1996) find little evidence of a correlation between law firm reputation and underpricing or disclosures. Barondes, Nyce, and Sanger (2007) find that issuer law firm reputation is positively correlated with underpricing, although their study focuses on identifying the effect of underwriters' law firms. In corporate acquisitions, Krishnan and Masulis (2013) find that reputable law firms are associated with inferior outcomes for their (bidder) clients, as premiums increase with law firm reputation.

More importantly, we show that the magnitude of law firms' effect on variation in underpricing is economically significant. The importance of underwriters is documented in numerous studies (e.g., Beatty and Ritter, 1986; Carter and Manaster, 1990; Chen and Ritter, 2000; Corwin and Schultz, 2005; Bhattacharya, Borisov, and Yu, 2015). Since law firms provide greater explanatory power in underpricing regressions than underwriters, the paucity of literature on the role of legal advisers in IPOs demonstrates a large gap in the literature and our understanding about the mechanisms that contribute to first day returns in equity issuance.

Given the importance of law firms in IPOs, we ask what mechanisms drive the relation between law firm choice and underpricing. We propose two non-mutually exclusive hypotheses. First, we posit that heterogeneity across law firms affects the (expected) underpricing demanded by investors. This could arise through multiple channels. A skilled law firm could manipulate the information environment through due diligence efforts and disclosures. Under Rock's (1986) model, differential information asymmetry across investors drives greater underpricing as uninformed investors demand greater returns. If skilled law firms alleviate informational problems, then investors demand less underpricing.

In addition, law firms can have deal-invariant effects on underpricing through certification. Prior literature on underwriters (Carter and Manaster, 1990; Bhattacharya, Borisov, and Yu, 2015), venture capitalists (Megginson and Weiss, 1990; Krishnan, Ivanov, Masulis, and Singh, 2009), auditors (Beatty, 1989), and issuing managers (Chemmanur and Paeglis, 2005) suggests that the reputation of the parties involved in an IPO provides assurance to investors about the quality of a deal, reducing underpricing. Due to the confidentiality requirements, fiduciary duties, and the unique role of attorneys with respect to their clients, professional reputation is paramount among law firms. Any injury to a law firm's reputation could dramatically reduce the firm's ability to attract and retain clients. For example, Vinson & Elkins lost 9.5% of its clients in the wake of the Enron scandal.² Hence, a law firm that risks significant reputation by advising an issuer, could alleviate investors' concerns about deal risk.

The second, non-exclusive hypothesis suggests there are law firm fixed effects resulting from a selection process, rather than law firms' skill or reputation. Law firms frequently advertise their expertise in various fields of law, industry, or other field. Particular types of issuers could be drawn to legal advisers for their relevant expertise. Analogously, Fee, Hadlock, and Pierce (2013) present evidence questioning if manager-fixed effects are driven by manager-specific style that

² <https://www.chron.com/business/enron/article/Enron-loss-major-blow-to-V-E-law-firm-2092214.php>

determines corporate policy. Rather, their evidence suggests that changes in corporate policies relate to management hiring and retention decisions. Under our selection hypothesis, issuers with similar risk profiles tend to choose the same law firms, and variation in risk is priced into issues. Any observed law firm fixed effect results from similarity in law firms' clients, not law firms' effect on the information environment through skill or signalling of client quality.

III. Data Sources

We use the Thomson Financial Securities Data Company (SDC) new issues database to identify U.S. IPOs over the period of 1989-2016. The sample starts from 1989 because SDC starts to provide information on IPO legal advisers from 1986, and we need three-years of IPO data to compute the market shares of legal advisers. We exclude issues by closed-end funds, real estate investment trusts (REITs), American depository receipts (ADRs), unit offers, limited partnerships, and issues below \$5. We also require that IPO companies have daily returns data from Center for Research in Security Prices (CRSP) and financial statement data available from Compustat. The final sample consists of 5,691 IPOs.

Table 1 presents basic summary statistics for our sample of IPOs. Mean underpricing is 20.5% with a median of 8.8%, which is higher than some prior studies but still consistent with historical variation in U.S. underpricing (Ljungqvist, 2007). The rate of litigation for our sample IPOs is larger than documented in Lowry and Shu (2002), but is similar to that found in Hanley and Hoberg (2012), suggesting that litigation is more prevalent in recent years. We define high reputation law firms as the ten largest law firms by market share in the prior three years. It is also worth noting that under our definition of reputation, only 18.3% of issuers retain a high reputation law firm. This is low relative to the number of deals that use a reputable underwriter (71%), suggesting the market for law firms is not as concentrated.

IV. Issuer Law Firms and Deal Outcomes

i. Individual Law Firms and Underpricing

In Table 2, we estimate law firm-specific heterogeneity on underpricing with fixed effects. This provides an estimate of the importance of law firm choice for issuers. In Panel A, we model the first day returns for IPOs with controls for deal characteristics, including IPO size (proceeds), overhang, industry market-to-book ratio, an indicator for underwriter reputation, and the presence of a venture capitalist. We also include industry and year indicators to capture industry-specific factors and hot markets in the following model:

$$\begin{aligned} \text{Underpricing}_i &= \alpha + \beta X_i + \lambda_1 \text{Law Firm FE} + \lambda_2 \text{Underwriter FE} + \lambda_3 \text{Industry FE} \\ &+ \lambda_4 \text{Year FE} + \varepsilon \end{aligned}$$

where X_i represents deal characteristics for an IPO, β is a vector of coefficients for deal characteristics, and λ_i represent vectors of coefficients on indicators for law firm, underwriter, issuer industry, and year of IPO.³

We use column 1 as a baseline regression and add law firm fixed effects in column 2. The adjusted R-squared increases from 20.7% to 21.5%, or an increase of 3.9%. However, the increase in R-squared may not fully capture the extent to which the fixed effects explain underpricing. To measure the relative importance of law firms, we use a variance decomposition.

In Panel B of Table 2, presents the results of the decomposition (ANCOVA) of variance of underpricing. Column 1 shows the decomposition with only year and issuer industry indicators. The effect of time is particularly pronounced. The R-squared and adjusted R-squared are 18.7% and 17.6%, and year indicators contribute around 77.3% of this explained variation in

³ We create indicators only for law firms and underwriters with at least 10 observations in the sample, as there is limited power to estimate the effects of advisers with fewer observations. Advisers with fewer than 10 observations are captured in the intercept.

underpricing. In column 2, we add underwriter fixed effects and find they comprise 18.2% of the explained variation.

In column 3, we add indicators for individual law firms retained by issuers in IPOs. The additional variance explained and the contribution to explained variance for law firms is similar to that of underwriters. That is, the explained variation increases around 2% from the base model when law firm fixed effects are added, and the law firm indicators contribute around one fifth of the explained variation. Intuitively, law firm-specific attributes explain around 4% of underpricing, similar to that variation explained by underwriters.

In column 4, we include law firm and underwriter indicators, and in column 5, we include these indicators as well as deal characteristics. In both models, the law firm indicators contribute more to the explained variation in underpricing than the underwriter for the IPO. These results demonstrate that time-invariant components of legal advisers have larger effects on underpricing than those of underwriters, suggesting the choice of legal adviser provides as much or more information about underpricing as the choice of underwriter.

We take the fixed effects estimated in Table 2 and present a histogram of the distribution in Figure 1. The distribution reveals a right skew. There are few legal advisers with extreme negative average underpricing, possibly due to price support in offerings with price declines. In the right tail, we see around 10% of the law firms are “top performers” with greater than 20% first day returns on average. Since there is no upper bound on the first day returns to issuers, a large law firm fixed effect could result from an extreme observation that pushes up the mean underpricing associated with a law firm, or a law firm could have persistently higher returns.

Prior literature shows that a test of the joint significance of fixed effects can reject the null (no fixed effect), even when observations are randomized to eliminate the existence of any fixed effect (Fee, Hadlock, and Pierce, 2013). To check for a spurious significant correlation of

law firm fixed effects with underpricing, we provide a falsification test. We randomize the sample law firms with respect to the IPOs in the sample. An F-test should not detect any fixed effect in this simulated sample. We iterate this procedure 1,000 times to produce 1,000 F-statistics and associated p-values. We plot the histogram of these p-values in Figure 2. Casual inspection reveals that F-statistics do not appear to be more significant than a random draw, suggesting that the law firm fixed effect is not driven by an artefact of the data.

In Table 3, we provide direct evidence on the persistence of underpricing for legal advisers. Similar to Bao and Edmans (2011), we sort law firms by their past performance over the past year (or two or three years) and follow their performance in terms of underpricing over the following year (or two or three years). We focus on the highest and lowest quintiles of past performance to test for persistence in those law firms associated with the higher and lowest initial returns. The results of differences between the two quintiles are in the last column.

We find that comparisons are similar irrespective of how far back or forward we look. In general, those law firms associated with the greatest underpricing in the past (1, 2, or 3 years) continue to have greater underpricing. Relative to law firms associated with lower first day returns, the highest quintile law firms have around 10% greater underpricing on average in future IPOs (1, 2, or 3 years). For example, law firms in the largest underpricing quintile will experience underpricing of around 24.3% in the following year, whereas those in the lowest quintile are associated with average underpricing of 14.8%. The difference between these two quintiles is significant at the 1% level in T-tests, revealing that the persistence is statistically significant.

Thus far, our evidence is consistent with a large, significant law firm specific effect of on underpricing and a strong persistence of the law firm effect across time periods. However, fixed effect models do not suggest why there is a time-invariant component of underpricing associated with legal advisers. In the next sections, we provide evidence on the mechanisms generating the law firm fixed effects in underpricing.

ii. Evidence on the Legal Adviser Fixed Effect

In this section, we examine whether litigation risk can explain the law firm specific component of initial returns in public offerings. The primary responsibilities of legal advisers in IPOs include advising clients on liability under securities regulations, which include disclosure-related liabilities from sections 10b-5 and 11. Under federal securities laws, if defendants are liable for violations, damages are calculated from the drop in price relative to the offering price. Ex ante, issuers facing greater litigation risk can lower the offer price to avoid or reduce expected damages. Consistent with this, Lowry and Shu (2002) and Hanley and Hoberg (2012) present evidence that issuers underprice to hedge against future litigation.

If issuers select law firms due to their expertise managing certain risks or other issuer characteristics that could lead to legal liability and those risks induce issuers to underprice to a different degree, then the legal adviser fixed effects could result from unobserved risk factors associated with new issues. Legal advisers and issuers could match with each other based on (unobserved) issue or firm characteristics that could drive underpricing. For example, an issuer may work with a law firm that they have worked with in the past, because the law firm has specialized knowledge of firm characteristics, and these characteristics could be related to underpricing. Similarly, Yasuda (2005) studies underwriter selection for debt offerings. She finds bank relationships are a significant determinant of underwriter choice, even beyond any effect of the relationship on fees charged to the issuer.

Additionally, law firms may have a more direct effect on underpricing. If they have knowledge and expertise that can reduce risk for issuers, then issuers can reduce underpricing, as less underpricing would be necessary to insure against litigation. The degree of underpricing and risk reduction could vary with a law firm's quality or reputation. In short, we expect underpricing varies with deal characteristics related to law firm choice, the quality of the law firm, or both.

Due to the difficulty finding good proxies for legal risks and law firm quality, we cannot directly include these deal characteristics in our models. However, we provide additional analyses on the source of variation in initial returns across law firms. First, we study litigation. We run probit regressions in which the dependent variable equals one if the issuer is subject to securities class actions resulting from disclosure claims, ie, section 10b-5 or section 11 claims. Data on litigation come from Stanford's class action database.

Table 4 presents the results. Column 1 models the probability of litigation as a function of deal characteristics, year fixed effects, and industry fixed effects. We exclude law firm fixed effects from this model, so it serves as a baseline for comparison. In column 2, we include law firm fixed effects. We see the pseudo R-squared increases from 0.172 to 0.203, suggesting law firm fixed effects also provide significant explanatory power in models of litigation. This is consistent with an association between individual law firms and the legal risks to issuers.

For comparison, in column 3 we report the increase in pseudo R-squared from adding underwriter fixed effects. Compared to the baseline in column 1, the pseudo R-squared only increases from 0.172 to 0.179. In column 4, we include both underwriter and legal adviser fixed effects, which produces a pseudo R-squared of 0.215. This evidence is consistent with law firms having a stronger association with prospective litigation at the time of the IPO than underwriters, as well as the idea that the law firm fixed effect in underpricing relates to legal risks that influence underpricing.

To provide further evidence on whether law firms affect risks associated with issuance or are selected based upon issue risk, we study reputation. We focus on law firm reputation, motivated by prior work showing that underwriter reputation is a characteristic that has a significant effect on underpricing. Prior literature uses measures of market share to proxy for reputation. However, we acknowledge that this measure is an imperfect proxy.

Market share is a common measure of reputation auditors or investment banks, but the structure of the market for legal services makes market share less informative for law firms. For example, four audit firms comprise the vast majority of the market for audits, and approximately 10 investment banks service the majority of the of the merger and IPO markets by value. Moreover, Dunbar (2000) documents that market shares for larger investment banks are more sensitive to IPO performance, suggesting larger underwriters have more at stake. In contrast, market shares decline smoothly for law firms, providing no natural distinction between a “bulge bracket” and smaller firms. Nevertheless, there remains strong sentiment about the prestige of the largest law firms relative to smaller firms, and we classify the top 10 law firms by IPO market share over the past three years as having high reputation.

Table 5 presents regressions of underpricing. The main independent variable of interest is an indicator that equals one in deals in which the issuer retained a high reputation legal adviser (“Reputable Issuer LA”). In our first regression in column 1, we again control for the size of the issuer (log of proceeds), overhang, market-to-book ratio, underwriter reputation, venture capitalist backing, and fixed effects for year and industries. The coefficient on the indicator for legal adviser reputation is positive and marginally significant at the 10% level. This positive coefficient is surprising, as one might expect law firm reputation provides a certification effect, reducing risk around the IPO. However, if issuers are aware of risks when selecting legal advisers, they may retain the most reputable law firms when they expect litigation.

We proxy for ex ante litigation risk with a measure of share turnover to help further understand the relation between legal advisers and underpricing. For each issuer in the sample, we create a matched sample of public firms with similar firm characteristics. We then take the median of the matched group’s turnover as an estimate of the issuer’s turnover. In column 2 of Table 5, we report an underpricing regression including our proxy for litigation risk. There is a positive and significant (1% level) relationship between the turnover measure and underpricing.

If firms underprice more with greater litigation risk (Hanley and Hoberg, 2012), then the strong correlation supports our use of turnover as a proxy for litigation risk.

In column 3, we include the measure of turnover, the indicator for law firm reputation, and an interaction of the two in an underpricing regression. The coefficient on law firm reputation flips sign, becoming negative and significant, suggesting high reputation law firms lead to less underpricing, after controlling for the effects of turnover. The coefficient on turnover remains positive and significant, as issuers increase underpricing to provide insurance against legal liability. The third coefficient reveals a positive and significant effect on underpricing from the interaction of high litigation risk and law firm reputation. This suggests reputable law firms are associated with greater underpricing in the most risky issuances. In the most legally sensitive deals, issuers may both underprice and hire reputable law firms to help insure against expected litigation. While cross-sectional results are only suggestive, our evidence is consistent with the presence of both selection effects and reputational benefits on underpricing.

In unreported analysis, we also study the relation between law firm reputation and language in the IPO prospectus, the main disclosure document to shareholders. The prospectus is prepared by the issuer, legal adviser, and underwriter. It acts as both a means of reducing information asymmetry and potentially preventing litigation risk. For example, Field, Lowry, and Shu (2005) find that disclosure of bad news reduces litigation risk. We find higher reputation law firms are associated with more opaque, “legal”, and longer prospectuses. This is consistent with greater drafting ability of high reputation law firms, as well as a selection effect in which issuers choose reputable law firms when disclosure needs and risks are high.

Our evidence suggests law firm reputation can benefit issuers in terms of lower underpricing. Given this significant benefit, we next ask why issuers do not choose high reputation law firms in all IPOs. We expect the costs of hiring legal counsel increase with quality,

and hence we look at legal fees. In Table 6, we regress the log of legal fees on the reputation of the issuer's legal adviser, turnover, control variables, and industry and year fixed effects.

In column 1 of Table 6, we find high reputation law firms charge a premium for their services. This positive, significant correlation holds even after controlling for the size of the issue, which is likely the largest determinant of the amount of work involved in an issue. (Legal advisers in IPOs generally charge an hourly rate for their services.) These higher fees are consistent with the notion that issuers must pay a premium for legal services that reduce litigation risk and allow for less underpricing.

The result also suggests that legal needs of issuers vary. If the legal work for IPOs were the same across issues, there would be little room for differentiation in the provision of advisory services for law firms. Issuers would primarily focus on minimizing cost, and legal advisers would primarily compete on price. The variation in fees suggests that law firm compete on more than price, as the legal needs of issuers have issue-specific considerations, which support a selection effect in the provision of legal services.

In Table 7, we present further evidence on variation in fees with a fixed effect model. We again regress legal fees on deal characteristics, but we use law firm fixed effects similar to Table 2. The most prominent result in Panel A is the positive correlation with the size (proceeds) of the deal. Lawyers charge fees based off of the lawyer-hours required for a deal, and larger complex deals are likely the primary determinant of how many hours are required for lawyers to complete their obligations to the issuers, but it is difficult to see the relative importance of law firms in this framework. The adjusted R-squared is higher (0.702), even before we add law firm fixed effects, providing little evidence that law firm skill is valued beyond a firm's ability to manage large issues. However, a complete analysis of the variance requires decomposition.

In Panel B of Table 7, we present a variance decomposition of a model of legal fees that includes deal characteristics, as well as fixed effects for year, industry, underwriter, and legal adviser. Surprisingly, deal size only provides 16.9% of the explained variation in legal fees. Law firm fixed effects contribute 17.9% of the explained variation. This suggests law firms have substantial pricing power when negotiating with issuers. However, this could be consistent with either a skill/certification hypothesis, as higher skill law firms are able to extract higher rents from their ability, or a selection hypothesis, as law firms require more labor and charge higher fees in deals with greater risk. The evidence in Table 6 on law firm reputation suggests that at least a portion of the law firm fixed effect in fees is related to skill.

V. Conclusion

We study the importance of legal advisers in IPOs. Surprisingly, we find the choice of legal adviser explains more variation in underpricing as the choice of underwriter. We confirm that there is significant persistence in underpricing for legal advisers and document the importance of law firm selection to issuers, which has been overlooked in extant literature.

Given the magnitude of the importance of law firms, we ask how they influence IPO outcomes. We also document that law firm fixed effects add significant explanatory power to models of disclosure-related litigation following IPOs, as different law firms can have greater expertise with different industries, risks, and disclosures, they can differentially affect expected litigation outcomes.

While there is an intuitive link between law firms and litigation outcomes, the mechanism that ties law firm selection to underpricing remains elusive. We posit two mechanisms link legal advisers to underpricing. First, issuers could select legal advisers with expertise with the issuer or with specific litigation risks that the issuer faces during an IPO. That is, issuers with higher

litigation risk could choose law firms with relevant expertise and underprice the issue more or less, if litigation risk is higher or lower.

Second, law firms could reduce litigation risk differentially. More skilled or reputable law firms could drive down litigation risk to a greater degree, reducing the need for issuers to insure against litigation risk with greater underpricing. Consistent with variation in the ability of law firms to reduce litigation risk, we find reputable law firms garner larger legal fees, as they extract a premium for reducing the liability and underpricing of the issuers that they represent.

Overall, we present evidence consistent with both mechanisms. Issuers select law firms depending on their legal needs, and law firms are able to indirectly affect underpricing through their effect on litigation risk. While the role of legal advisers in IPOs has largely been unstudied, we demonstrate the importance of law firms is large, comparable to that of underwriters.

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Table 1: Summary Statistics

	N	mean	sd	p25	p50	p75
Underpricing	5691	20.480	39.504	0.000	8.750	25.000
Turnover	5691	0.555	0.350	0.289	0.494	0.738
Volatility	5691	4.061	2.248	2.536	3.532	4.916
Log(Proceed)	5691	17.801	1.132	17.074	17.743	18.469
Overhang	5691	3.091	3.104	1.412	2.389	3.754
Log(Legal Fee)	4906	13.081	0.935	12.429	12.899	13.816
Reputable Issuer LA	5691	0.183	0.386	0.000	0.000	0.000
Reputable Underwriter	5691	0.708	0.455	0.000	1.000	1.000
Lawsuit	3275	0.117	0.321	0.000	0.000	0.000
VC Backed	5691	0.394	0.489	0.000	0.000	1.000

This table reports descriptive statistics for a sample of 5,691 IPOs between 1989 and 2016. Variable definitions are provided in the Appendix.

Table 2: Underpricing and Legal Advisers

Panel A: Regression Analysis

Variables	(1)	(2)	(3)	(4)
Log(Proceed)	3.416*** (0.000)	4.290*** (0.000)	2.248*** (0.001)	3.308*** (0.000)
Overhang	1.352*** (0.000)	1.442*** (0.000)	1.174*** (0.000)	1.289*** (0.000)
MB	0.910* (0.083)	0.418 (0.430)	0.856 (0.104)	0.382 (0.471)
Reputable Underwriter	-0.588 (0.621)	-1.210 (0.315)		
VC Backed	11.10*** (0.000)	8.144*** (0.000)	10.75*** (0.000)	8.085*** (0.000)
Constant	-75.80*** (0.000)	-94.93*** (0.000)	-65.87*** (0.000)	-88.85*** (0.000)
Year Dummies	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes
LA Dummies	No	Yes	No	Yes
Underwriter Dummies	No	No	Yes	Yes
N	5691	5691	5691	5691
R-squared	0.218	0.241	0.237	0.259
Adj. R-squared	0.207	0.215	0.215	0.222

Panel B: Variance Decomposition

Variables	Percentage of Explained Variation
Year Dummies	0.507
Industry Dummies	0.119
Underwriter Dummies	0.118
LA Dummies	0.146
Log(Proceed)	0.022
Overhang	0.048
MB	0.001
VC Back	0.039
N	5691
R-squared	0.259
Adj. R-squared	0.222

This table reports regressions of underpricing, measured as first day returns to issuers on control variables and indicators for year, industry, underwriter, and legal adviser. The sample bids occur between 1989 and 2016. *, **, and *** represent statistical significance at the ten, five, and one percent levels, respectively. Panel A presents coefficients from linear regressions. Issuer Fama-French industry indicators control for industry effects. Panel B includes the same variables as model 4 in Panel A but reports the percentage of explained variance that each variable/fixed effect contributes from an ANCOVA model of variance. Variable definitions are provided in the Appendix.

Table 3: Persistence in an LA's underpricing

Underpricing		Q1		Q5		Comparison	
Past	Future	count	mean	count	mean	Q1-Q5	T-test
1 Year	1 Year	214	14.766	287	24.256	-9.490	-3.617***
	2 Years	165	16.049	257	23.680	-7.631	-3.186***
	3 Years	148	15.720	238	24.146	-8.426	-3.826***
2 Years	1 Year	189	12.460	235	24.572	-12.112	-4.482***
	2 Years	167	13.578	219	24.384	-10.806	-4.552***
	3 Years	144	15.032	200	26.323	-11.291	-4.764***
3 Years	1 Year	174	12.314	208	24.002	-11.688	-4.681***
	2 Years	160	13.884	197	26.799	-12.915	-5.290***
	3 Years	141	15.725	188	30.006	-14.281	-5.444***

This table reports differences in future underpricing by law firm after sorting on past underpricing for the law firm. Law firms are sorted into quintiles, based on the performance of the IPOs on which they advised over the past 1, 2, or 3 years. For law firms in the top (Q5) or bottom (Q1) quintile, the average underpricing is reported for future issues on which the law firm advises over the future 1, 2, or 3 years. The difference across the quintiles is reported in the last two columns with T-statistics from T-tests of the difference in means. The sample bids occur between 1989 and 2016. *, **, and *** represent statistical significance at the ten, five, and one percent levels, respectively.

Table 4: The Probability of a Lawsuit and Legal Advisers

Variables	(1)	(2)	(3)	(4)
Log(Proceed)	0.205*** (0.000)	0.244*** (0.000)	0.167*** (0.000)	0.205*** (0.000)
Overhang	0.0244** (0.012)	0.0262** (0.014)	0.0186* (0.076)	0.0198* (0.081)
MB	0.0730*** (0.001)	0.0648*** (0.006)	0.0740*** (0.002)	0.0699*** (0.005)
Reputable Underwriter	0.0748 (0.447)	0.0364 (0.725)		
VC Backed	0.385*** (0.000)	0.284*** (0.001)	0.371*** (0.000)	0.266*** (0.003)
Constant	-9.184*** (0.000)	-14.70*** (0.000)	-12.11*** (0.000)	-19.19*** (0.000)
Year Dummies	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes
LA Dummies	No	Yes	No	Yes
Underwriter Dummies	No	No	Yes	Yes
N	3178	2921	2913	2696
Pseudo R-squared	0.171	0.203	0.178	0.215

This table reports probit regressions of class action lawsuits from section 10b-5 and 11 claims. Controls include deal characteristics and indicators for year, industry, underwriter, and legal adviser. The sample bids occur between 1996 and 2014. *, **, and *** represent statistical significance at the ten, five, and one percent levels, respectively. Variable definitions are provided in the Appendix.

Table 5: Relation between Turnover, Reputation, and Underpricing

Variables	(1)	(2)	(3)
Reputable Issuer LA	2.732*		-5.041*
	(0.052)		(0.085)
Turnover		13.75***	11.68***
		(0.000)	(0.000)
Reputable LA * Turnover			12.79**
			(0.014)
Log(Proceed)	3.254***	2.441***	2.277***
	(0.000)	(0.000)	(0.000)
Overhang	1.344***	1.219***	1.217***
	(0.000)	(0.000)	(0.000)
MB	0.966*	0.809	0.846
	(0.066)	(0.123)	(0.106)
Reputable Underwriter	-0.752	-1.036	-1.025
	(0.528)	(0.382)	(0.388)
VC Backed	10.98***	10.92***	10.82***
	(0.000)	(0.000)	(0.000)
Constant	-73.31***	-60.35***	-56.80***
	(0.000)	(0.000)	(0.000)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	5691	5691	5691
R-squared	0.219	0.227	0.229

This table reports regressions of underpricing, measured as first day returns to issuers on proxies for legal adviser reputation, litigation risk, control variables and indicators for year, industry, and legal adviser. The sample bids occur between 1989 and 2016. *, **, and *** represent statistical significance at the ten, five, and one percent levels, respectively. Variable definitions are provided in the Appendix.

Table 6: Legal Fees and Legal Adviser Reputation

	(1)	(2)	(3)
Variables			
Reputable Issuer LA	0.131*** (0.000)		0.191*** (0.000)
Turnover		0.0236 (0.402)	0.0370 (0.211)
Reputable LA * Turnover			-0.0961 (0.118)
Log(Proceed)	0.326*** (0.000)	0.332*** (0.000)	0.325*** (0.000)
Overhang	0.00444 (0.287)	0.00479 (0.257)	0.00419 (0.319)
MB	-0.0117* (0.062)	-0.0145** (0.021)	-0.0117* (0.061)
Reputable Underwriter	0.152*** (0.000)	0.160*** (0.000)	0.149*** (0.000)
VC Backed	0.00582 (0.736)	0.0123 (0.480)	0.00524 (0.762)
Constant	8.083*** (0.000)	7.988*** (0.000)	8.089*** (0.000)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
N	4906	4906	4906
R-squared	0.709	0.707	0.709

This table reports regressions of the log of legal fees on proxies for legal adviser reputation, litigation risk, control variables and indicators for year, industry, and legal adviser. The sample bids occur between 1989 and 2016. *, **, and *** represent statistical significance at the ten, five, and one percent levels, respectively. Variable definitions are provided in the Appendix.

Table 7: Legal Fees and Legal Adviser Fixed Effects

Panel A: Regression Analysis

Variables	(1)	(2)	(3)	(4)
Log(Proceed)	0.334*** (0.000)	0.286*** (0.000)	0.301*** (0.000)	0.265*** (0.000)
Overhang	0.00505 (0.229)	0.00379 (0.309)	0.00460 (0.271)	0.00413 (0.279)
MB	-0.0143** (0.022)	-0.0104* (0.082)	-0.0123** (0.047)	-0.00798 (0.178)
Reputable Underwriter	0.161*** (0.000)	0.0866*** (0.000)		
VC Backed	0.0126 (0.466)	0.00416 (0.817)	-0.0142 (0.430)	-0.0143 (0.440)
Constant	7.965*** (0.000)	8.847*** (0.000)	8.359*** (0.000)	9.012*** (0.000)
Year Dummies	Yes	Yes	Yes	Yes
Industry Dummies	Yes	Yes	Yes	Yes
LA Dummies	No	Yes	No	Yes
Underwriter Dummies	No	No	Yes	Yes
N	4906	4906	4906	4906
R-squared	0.707	0.744	0.718	0.752
Adj. R-squared	0.702	0.734	0.709	0.738

Panel B: Variance Decomposition

Variables	Percentage of Explained Variation
Year Dummies	0.561
Industry Dummies	0.040
Underwriter Dummies	0.049
LA Dummies	0.179
Log(Proceed)	0.169
Overhang	0.000
MB	0.000
VC Back	0.000
N	4906
R-squared	0.752
Adj. R-squared	0.738

This table reports regressions of the log of legal fees in IPOs on control variables and indicators for year, industry, underwriter, and legal adviser. The sample bids occur between 1989 and 2016. *, **, and *** represent statistical significance at the ten, five, and one percent levels, respectively. Panel A presents coefficients from linear regressions. Issuer Fama-French industry indicators control for industry effects. Panel B includes the same variables as model 4 in Panel A but reports the percentage of explained variance that each variable/fixed effect contributes from an ANCOVA model of variance. Variable definitions are provided in the Appendix.

Figure 1: Distribution of Legal Adviser Fixed Effects from a Model of Underpricing

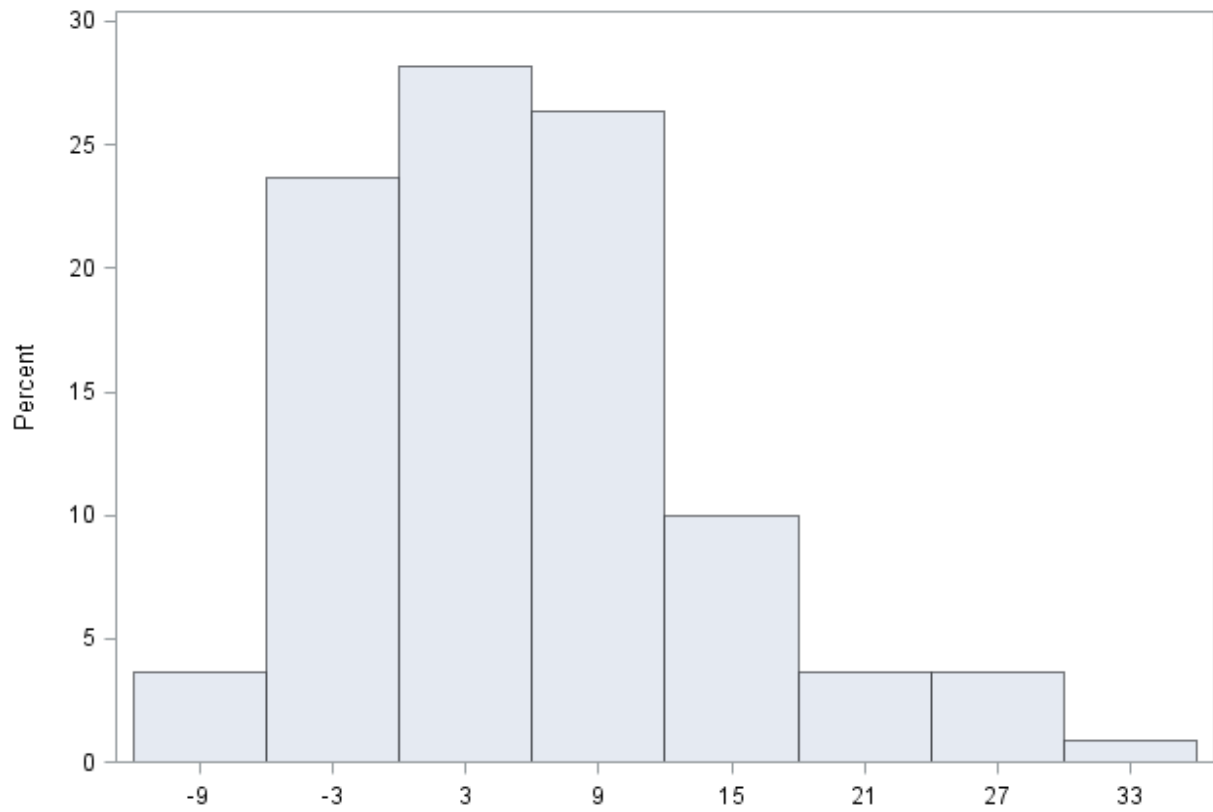
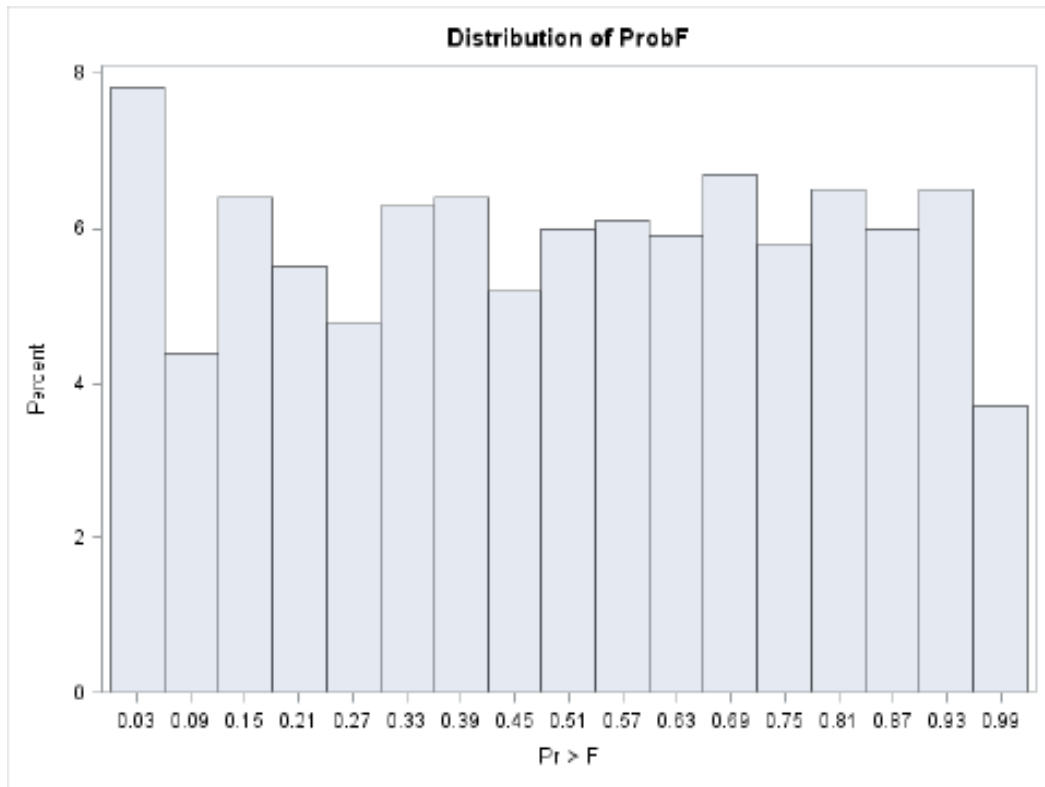


Figure 2 – P-values from F-tests of Legal Adviser Fixed Effect



This figure plots a histogram of p-values from F-tests for 1,000 simulations. For each simulation, we randomize the assignment of legal advisers to IPOs and perform an F-test of the joint significance of the legal advisers in a model of IPOs, including control variables used in Panel A of Table 2.

Appendix: Variable Definitions

Variable	Definition
Log(Proceed)	Log of the IPO proceed
MB	Market to book ratio, which is equal to the market value of the firm equity plus the difference between the book value of the firm's assets and the book value of the firm's equity, divided by the book value of the firm's assets
Overhang	The ratio of retained shares to the shares issued
Reputable LA	A dummy variable that is equal to one if the issuer LA is one of the top ten issuer LAs based on the market shares of IPO proceeds in the three year time window ending on December 31 in the year prior to the IPO
Reputable Underwriter	A dummy variable that is equal to one if the underwriter rank is equal or greater than 8. The underwriter rank is from Jay Ritter's website.
Turnover	The median of the average daily turnover in the matched public companies in the three years prior to the IPO
VC Backed	A dummy variable that is equal to one if the IPO is venture capital backed
Volatility	Standard deviation of the stock return in the 60 days after the IPO