

The Choice between Private and Public Capital Markets: The Importance of Disclosure Standards and Auditor Discipline to Countries Divesting State-owned Enterprises

Omrane Guedhami

Memorial University of Newfoundland, St. John's, NL A1B 3X5, Canada
guedhami@mun.ca

Jeffrey A. Pittman*

Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, China
acjp@ust.hk

Abstract

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Key words: privatization methods; disclosure; auditor discipline; corporate governance

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Abstract

For a sample of 1,866 privatizations from 37 countries, we estimate the impact of disclosure standards and legal institutions that discipline auditors on the method chosen to divest state-owned enterprises. The agency conflict between minority and controlling shareholders can impede a government from privatizing by selling its stake to diffuse investors in the public capital market with a share-issue privatization (SIP) that tends to generate important spillover economic benefits, rather than an asset sale to a small group of buyers. However, prior research implies that accounting transparency plays a natural role in preventing controlling shareholders from siphoning corporate resources by helping minority investors identify any diversionary practices. After controlling for firm-level and other country-level characteristics, we find that SIPs become more likely when countries mandate strict disclosure standards, although this result is sensitive to model specification. In comparison, we provide strong, robust evidence that SIPs are more likely in jurisdictions that relax the burden of proof in civil lawsuits and criminal prosecutions against auditors, leading to more credible financial statements. Collectively, our cross-country research suggests that investors value reforms that subject auditors to more severe private and public enforcement over several other legal determinants, including enhancing disclosure standards.

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1. Introduction

In cross-country research, we estimate the importance of several determinants of financial reporting credibility to the choice between public versus private capital markets' financing. More specifically, we rely on the high information asymmetry environment of the privatization of state-owned enterprises (SOEs) to analyze whether better disclosure standards and legal institutions that discipline auditors in the event of financial reporting failure facilitate privatizing with share issues, rather than asset sales.¹ Our evidence mainly sheds light on which auditor characteristics shape perceptions of privatized firms' accounting transparency. We contribute to extant research by exploiting country-level data to help empirically resolve whether criminally and civilly penalizing auditors for issuing clean opinions on materially misleading financial statements induces higher-quality financial reporting.

The privatization phenomenon that began with the Thatcher government in the U.K. in the early 1980s has raised more than \$1 trillion worldwide from the sale of state-controlled enterprises to private investors in over 100 countries (Gibbon, 2000). These lucrative privatization programs bring benefits ranging from higher state revenues to reducing state intervention in the provision of goods and services in many national economies. Indeed, privatization consistently leads to both cost reductions and quality improvements in the divested firms by staunching politically-motivated resource allocation decisions (World Bank, 1995). Moreover, prior research generally suggests that significant improvements in productivity and profitability routinely follow privatization; e.g., Megginson et al. (1994); Ehrlich et al. (1994); Boubakri and Cosset (1998); and Megginson and Netter (2001).

In fact, Shleifer (1998: 136) concludes that this evidence is mainly responsible for the gradual evolution in policy analysts' and academic researchers' take on privatization from qualified acceptance toward enthusiastic support for these transactions: "How the world has changed! In the last 20 years, governments in market economies throughout the world have

¹ Guedhami and Pittman (2006) find evidence supporting Bushman and Smith's (2003) argument that regime shifts within a country like privatization provide rich terrain for examining the role of financial reporting credibility determinants to economic outcomes. For expositional convenience, we always refer to the sale of state-owned enterprises to a small number of buyers as "asset sales", although these transactions are also known as "private sales".

privatized the very state firms in steel, energy, telecommunications and financial services that the Nobel laureates approvingly saw nationalized a few decades earlier. Communism has collapsed almost everywhere in the world, and reform governments throughout the formerly socialist world have embarked on massive privatization programs. The economic policies of developing countries turned squarely to private ownership. In market economies, government provision of such basic services as garbage collection and education has come into question, and has increasingly been replaced with private provision...”

However, Dyck (2001: 59) warns that more recent research has begun to emerge that suggests that privatizations: “...have allowed profits to be diverted to the grabbing hands of insiders in privatized firms.” According to Shleifer and Vishny (1997) and La Porta et al. (2002b), the primary agency conflict in firms outside the U.S. and the U.K. remains the expropriation of minority investors by controlling shareholders, rather than Berle and Means (1932) professional managers neglecting to serve the interests of all shareholders.² Internationally, dispersed ownership structures are the exception rather than the norm with concentrated ownership becoming a rational substitute when laws protecting investors are poor (La Porta et al., 1998 and Boubakri et al., 2005). Extensive cross-country research implies that weak corporate governance engenders the information asymmetry between minority and controlling shareholders that is behind heavy ownership concentration around the world; e.g., Becht and Roell (1999); La Porta et al. (1998, 1999a); and Claessens et al. (2000).

This serious agency problem can deter privatizing countries eager to transfer government-owned enterprises to private hands from implementing share-issue privatization (SIP) programs. Smaller investors may refuse to participate in these share issues when they sensibly anticipate that insiders have strong incentives to exploit their positions to extract private benefits of control, which they hide by manipulating financial statements to suppress information about underlying firm performance. Dyck and Zingales (2004) find that in countries with large private benefits, measured by the premium paid in control transactions,

² There are several ways that insiders can orchestrate the diversion of corporate resources, including manipulating transfer prices, hiding related-party transactions, and even blatant theft (Johnson et al., 2000; La Porta et al., 2002b; and Volpin, 2002). Although the agency conflict between controlling and minority shareholders that dominates in most countries generates the tension in our hypotheses tests, we stress that the legal institutions affecting corporate transparency should moderate the agency conflict between managers and all shareholders equally for share-issue privatizations and asset sales.

governments tend to divest state-owned enterprises by negotiating asset sales instead of floating a SIP. Similarly, Megginson et al. (2004) show that a strong legal tradition and good protection of minority shareholders increases the likelihood that the government will choose to privatize through a SIP. In this study, we conjecture that accounting transparency can protect minority shareholders given that the siphoning of corporate resources requires self-dealing dominant shareholders to conceal their diversionary practices through opportunistic financial reporting (La Porta et al., 1998 and Dyck and Zingales, 2004).³

Governments typically prefer share-issue privatizations, which can involve millions of domestic investors, to generate considerable spillover benefits for their economies. In the interest of developing their capital markets by enhancing liquidity and broadening equity ownership, privatizing governments often gladly sacrifice some proceeds from the transaction by underpricing these securities. For example, Boutchkova and Megginson (2000) report evidence that large-scale privatization programs were instrumental in stimulating financial markets worldwide, particularly for governments with the political objective of cultivating an “equity culture” by persuading individuals and institutions to actively trade in those markets. McLindon (1996) and Subrahmanyam and Titman (1999) argue that SIPs can precipitate a snowball effect with countries enjoying impressive growth as the greater stock market liquidity and efficiency becomes an important catalyst for firms to go public. However, consistent with Megginson et al.’s (2004) evidence, Dyck (2001: 77) explains that countries are forced to resort to: “...asset sales rather than share issues in privatization programs when formal governance chains are weak. Asset sales are usually associated with the sale of a majority stake to a single investor or to a consortium of investors that have been approved under some pre-qualification screening process...Among countries with relatively weak formal protections, very few countries use share issues for a large proportion of privatizations.”

Besides that the severe information asymmetry that accompanies the transfer from state to private ownership presents a fertile testing ground for our predictions (Denis and McConnell, 2003 and Guedhami and Pittman, 2006), identifying the privatization method

³ Hingorani et al. (1997) provide evidence from the first round of the Czech Republic’s mass privatization in 1991 that even highly imperfect financial statements are informative to minority investors. In his influential discussion on the steps a government should take before executing a privatization, Gibbon (1997) stresses the importance of providing investors with reliable accounting data on the SOE being divested.

determinants is inherently interesting since governments in most emerging markets and industrialized countries have initiated major privatization programs that are expected to intensify (World Bank, 2001).⁴ Indeed, Bortolotti et al. (2004), among others, explain that the proliferation of these programs has made privatization a separate field of empirical capital markets research.⁵ Megginson and Netter (2001: 17) observe that although researchers: "...have learned much about selling assets in well-developed capital markets, we still have a limited understanding of the determinants and the implications of the privatization method for state-owned assets." Reinforcing the valuable policy implications of our results, we respond to Bushman and Smith's (2001, 2003) call for evidence on the role of countries' information infrastructure—including whether more rigorous audit regimes reduce distortion in corporate disclosures—in the efficient allocation of capital. Similarly, Ball (2001) points out that despite its economic importance international accounting research on expropriation is scarce. We help address this oversight by evaluating whether legal institutions that may determine financial reporting credibility improve the plight of minority investors susceptible to controlling shareholders indulging in private benefits at their expense.

Recent research highlights that in addition to the characteristics of the to-be-privatized firm, governments recognize the importance of the economic and institutional environments, especially legal institutions, to the success of their privatization programs (Megginson et al., 2004 and Boubakri et al., 2005). In particular, governments are more reluctant to divest state-owned enterprises in the public capital market with a share-issue privatization when the information asymmetry that enables controlling shareholders' to divert corporate resources is worse. After controlling for firm-level and other country-level characteristics in a sample 1,866 privatizations from 37 countries, we document that share-issue privatizations are more likely when countries mandate strict disclosure standards, although this finding is quite sensitive to model specification.

⁴ In their comprehensive surveys of the literature on the privatization experience, Megginson and Netter (2001) and Djankov and Murrell (2002) point out that countries' modernization of other corporate governance mechanisms frequently coincides with privatizations, increasing the power of our tests to identify the relations under study. We extend extant research by analyzing the link between country-level characteristics that affect accounting transparency and the privatizing governments' choice between private and public capital markets.

⁵ For example, Megginson and Netter (2001) mention that the ten largest (and 30 of the 35 largest) share issues in financial history have been privatizations.

In sharp contrast, we provide strong, robust evidence that this probability is higher when countries rely on legal institutions that genuinely discipline auditors to alleviate the agency conflict between minority and controlling shareholders, consistent with Ball's (2001) and Dyck's (2001) predictions. Specifically, our research indicates that share-issue privatizations become more likely when countries relax the burden of proof in civil and criminal cases against auditors, suggesting that investors perceive that firms' financial reporting is more credible in these jurisdictions. Reflecting the first-order economic importance of our point estimates, these results imply that lowering the variables that gauge the burden of proof in civil and criminal actions against auditors in our tests from the 90th to the 10th percentiles translates into share-issue privatizations becoming 9 and 31 percent more likely, respectively. Moreover, in horse-race regressions, we find that securities laws that facilitate civil and criminal litigation against auditors dominate the impact of other institutions, including disclosure standards, in explaining privatizing governments' choice between private and public capital markets in our data. From a policy perspective, we interpret our evidence as providing empirical support for the proposition that investors value legislative reforms that expose auditors to more severe private and public enforcement in the event of financial reporting failure.

Our evidence on the legal institutions that support high-quality financial reporting is grounded in recent international corporate governance research on the role of securities laws. After assembling a unique cross-country database of rules and regulations governing security issuance, La Porta et al. (2006) document that disclosure liability standards matter to stock market development. We extend their analysis to consider an important aspect of stock market development, namely the choice between privatizing with a share issue or an asset sale. In particular, we empirically test Ball's (2001) claim that legal institutions that discipline auditors affect accounting transparency more than simply imposing extensive disclosure standards. By focusing on the privatization of SOEs, our research intersects with Dyck and Zingales's (2004) and, especially, Megginson et al.'s (2004) evidence that the choice of the privatization method reflects the amount of private benefits of control and the quality of surrounding institutions. More specifically, we complement their findings with evidence that the country-level audit regime—laws specifying the burden of proof in civil and criminal litigation against auditors—helps curb the amount of private benefits and, in turn, affects the government's choice between private and public capital markets. Finally, our study relates to Guedhami and

Pittman (2006), who find that ownership concentration is lower in countries with securities laws that set a lower burden of proof for auditor discipline (i.e., countries where the extraction of private benefits of control is expensive). However, we undertake a more direct approach by isolating the determinants of the privatization method using a large sample of privatized firms.

The remainder of the paper is organized as follows. Section 2 reviews prior theory and evidence to motivate the testable hypotheses. Section 3 outlines our research design and reports descriptive statistics on the regression variables. Section 4 covers the empirical evidence, including our sensitivity analysis. The conclusions in Section 5 identify some implications for future research.

2. Hypotheses Development

The privatization method decision for governments in many ways resembles the choice facing firms on whether to rely on private or public capital markets for financing (Megginson et al., 2004). Reinforcing that investors discount the securities of firms that are lesser known, prior theory (e.g., Chemmanur and Fulghieri, 1999) and evidence (e.g., Ljungqvist and Wilhelm, 2003) implies that there is more uncertainty about firms going public at an earlier stage in their lives. In fact, Coffee (1999: 9) contends that privatized firms suffer even worse agency problems:

Privatized firms do not evolve over time from smaller firms, beginning with the usual incubation period at the venture capital stage and progressing through the initial public offering, but instead are created Minerva-like by governmental fiat. Dispersed ownership is more transient and vulnerable in this context, because it does not gradually develop over time, but instead arrives overnight at the outset of the firm's existence...privatization often short-circuits [the] contracting process by simply creating a dispersed shareholder base. A stable equilibrium is thus not reached. The result is that the shareholders have less well defined legal rights and are more vulnerable to opportunistic actions by those in control.⁶

Similar to the sale of a private firm through an initial public offering, the government must consider the extent of information asymmetry about the state-owned enterprise before

⁶ Consistent with Coffee's (1999) perspective, there is compelling evidence that initial (market-adjusted) returns on privatization IPOs significantly exceed the initial returns on private-sector IPOs. For example, Ljungqvist et al. (2003) find that privatization IPOs are systematically more underpriced—in the range of 14 percentage points—than are private-sector IPOs. In absolute terms, Jones et al. (1999) report that the mean (median) level of underpricing is 34 percent (12 percent) for initial share-issue privatizations and 9 percent (3 percent) for seasoned ones.

settling on the privatization method, especially since Boubakri et al. (2005) document that ownership tends to be highly concentrated in newly privatized firms. Extant evidence suggests that the large private benefits of control that attend heavy ownership concentration stem from poor external corporate governance; e.g., La Porta et al. (1998, 1999a) and Bebchuk (1999).

Although the privatizing governments may prefer a SIP from a policy perspective, they realize that the agency conflict between minority and controlling shareholders may undermine this choice unless credible financial information is available. In the context of privatization, Dyck (2001: 62) stresses the role of information in preventing expropriation by inside shareholders who control and frequently manage the firm:

Effective corporate governance institutions improve information flows and avoid what is often called the 'lemons problem'. That is, insiders have an incentive to provide information about good investment projects, but they also have an incentive to withhold information when investment projects go bad or when they (insiders) have been diverting promised returns. Investors know that bad information is covered up and act accordingly, raising the returns required or refusing to invest at all. In contrast, where information flows to outsiders are timely, accurate and credible, diversions are more difficult to hide.⁷

Consistent with analytical research that committing to high-quality disclosure moderates information asymmetry e.g., Diamond and Verrecchia (1991) and Easley and O'Hara (2004), credible financial reporting protects minority shareholders since their expropriation by controlling shareholders hinges on these private benefits remaining secret (La Porta et al., 1998 and Dyck and Zingales, 2004). Megginson and Netter (2001) conjecture that financial statement manipulation is worse for firms privatized outside the U.S. Hung (2000) and Ball (2001) hold that strong investor protection improves contracting by limiting insiders' discretion over their choice of accounting policies and estimates. Leuz et al. (2003) find that earnings management is more pervasive in Western European countries that afford investors less protection, which implies that insiders opportunistically distort financial reporting to conceal underlying economic performance when they are accruing large private benefits by depriving smaller shareholders. Hail and Leuz (2006) document that the cost of capital is lower for firms from

⁷ Ball (2001: 128) echoes these concerns by advocating that reforms to countries' systems of corporate financial reporting focus on improving transparency with early revelation by motivating firms to "...disclose bad decisions and report losses in a timely fashion."

countries that require more extensive disclosure. Indeed, the value relevance of reported earnings and accruals depend on legal institutions (Ali and Hwang, 2000 and Ball et al., 2000).

Meggison et al. (2004: 2841-2842) conclude that: “since the investors in SIPs would be predominantly small shareholders, we would expect more SIPs in countries providing stronger legal and political protections for minority positions...privatizing governments should consider the degree of information asymmetry about the value of the asset to be privatized in choosing the optimal privatization method and should be more likely to use private sales (i.e., asset sales) when it is more difficult to value the enterprise.” Returning to another situation that involves choosing between private and public capital markets, Pagano and Röell (1996) model that firms rather go public when better disclosure standards lead to higher-quality financial reporting. In their analysis, greater accounting transparency for public companies enables controlling shareholders to pre-commit to “fair play”—i.e., refraining from personally consuming corporate resources—since private benefits become harder to extract when external monitoring is easier.⁸ Countries can intervene in their capital markets by mandating strict disclosure standards to protect minority investors against controlling shareholders covertly seizing corporate resources. We predict that governments located in countries that prescribe better financial reporting standards, which may curtail the private benefits of control by helping outside investors detect any diversionary activities, are more apt to divest state-run enterprises with share-issue privatizations instead of asset sales (all hypotheses are stated in alternate form):

H₁: Share-issue privatizations are more likely, *ceteris paribus*, in countries with strict disclosure standards.

Disclosure regulation alone may not matter without supporting enforcement (Bhattacharya and Daouk, 2002). The country-level auditing infrastructure may play a natural economic role in alleviating the agency conflict between minority and controlling shareholders that can impede governments from initiating share-issue privatizations programs. Ball (2001) argues that unless countries liberalize their securities laws to discipline auditors for issuing clean opinions on materially deficient financial statements corporate governance reforms meant to improve accounting transparency, including requiring firms to comply with international

⁸ In a similar vein, Boot et al. (2006) argue that private equity markets are more attractive than public share issues in countries with lax corporate governance.

disclosure standards, will be ineffective. In particular, countries can improve contracting by setting a lower burden of proof in civil litigation against auditors. Legal institutions that subject auditors to more severe discipline are essential to motivating auditors to constrain dominant insiders' discretion over the financial reporting process according to Ball (2001).

Moreover, La Porta et al. (2006) highlight that U.S. securities laws reflect that the private recovery of investors' losses is more efficient when external auditors are held legally liable for the veracity of the information that they produce. Indeed, McGraw (1982) outlines how the architects of the SEC choose to focus on financial and information intermediaries rather than the firms issuing securities. Similarly, Dyck (2001: 72) emphasizes the importance of standardizing private contracting with civil litigation that enhances the role of auditors as information intermediaries to governments selling state-owned firms:

Information intermediaries are private firms that are naturally more interested in profits than in producing public goods...information intermediaries might find it more profitable not to collect information, or they could withhold information if their profits derived more from other business relationships with the firms they monitored...A key element in structuring intermediaries' incentives is finding the right mix of private and state regulatory solutions...For example, where [their] reputations have less established value, more active state involvement might be warranted until private solutions can operate effectively...Where the incentives of these intermediaries are weak, they can become major obstacles to any governance reforms.

Corroborating Dyck's (2001) perspective, some recent international research implies that financial statement users' perceive that auditors' concerns about protecting their reputations might not lead to higher-quality financial reporting.⁹ Guedhami and Pittman (2006) fail to find that the presence of a Big Four auditor lowers corporate ownership concentration, their proxy for information asymmetry, indicating that minority investors do not incrementally value monitoring by these auditors. They interpret this evidence as suggestive that investors surmise that Big Four auditors' interest in preserving their brand name reputations is inadequate to induce more credible financial reporting. Additionally, although Mansi et al. (2004) and Pittman and Fortin (2004) report that borrowing costs are higher for U.S. firms without Big Four auditors to compensate for the greater uncertainty about their debt issues, this

⁹ Similar to recent privatization method choice research that has had difficulty collecting firm-specific data (e.g., Megginson et al., 2004), we could not examine the influence of auditor choice in our setting without literally decimating our sample.

evidence that financing is cheaper for firms retaining Big Four auditors does not necessarily extend to other jurisdictions; e.g., Khurana and Raman (2004).¹⁰

Consequently, countries that relax the burden of proof in civil lawsuits against auditors may benefit from firms becoming better known to outside investors, which reduces the opportunity for controlling shareholders to siphon corporate resources without incurring legal penalties or ruining their own reputations.¹¹ Minority investors may consider that financial statements become more informative when legal institutions facilitate the recovery of damages in the event of audit failure, which translates into the following prediction:

H₂: Share-issue privatizations are more likely, *ceteris paribus*, in countries in which plaintiffs' burden of proof in civil lawsuits against auditors is lower.

Another mechanism available to governments striving to reduce the agency conflict between minority and controlling shareholders by deterring firms from making materially deficient disclosures is public enforcement in the form of criminal sanctions against auditors. In complementing private enforcement, imposing a lower standard of proof in criminal cases of financial fraud involving auditors may have a sobering impact on their incentives to prevent insiders' from concealing the diversion of corporate resources by manipulating the financial statements.¹² Indeed, recent watershed accounting scandals worldwide have led to renewed calls for regulators to help restore investor confidence in the financial markets by enacting laws that discipline auditors with criminal sanctions.¹³ In our third hypothesis, we predict that the probability that the government will pursue a share-issue privatization is higher for

¹⁰ Still, other evidence runs in the opposite direction such that the importance of auditor choice to external monitoring in firms outside the U.S remains inconclusive; e.g., Fan and Wong (2005) find that Asian firms experiencing worse agency problems are more likely to rely on a Big Four auditor.

¹¹ Easterbrook and Fischel (1984) explain that unless specific securities laws are in place litigation is ordinarily governed by private contract and tort law, which can involve considerable uncertainty for investors who have to turn to the courts to resolve issues like intent and negligence. La Porta et al. (2006) argue that tort and contract litigation may be too expensive and unpredictable to deter firms from excessively manipulating their disclosures.

¹² La Porta et al. (1997) and DeFond and Hung (2004) provide evidence that a strong surrounding enforcement regime matters more to effective corporate governance than extensive investor protection laws.

¹³ For example, auditors in the U.S. technically can be imprisoned for up to 10 years under the securities fraud provisions of the Sarbanes-Oxley Act of 2002.

jurisdictions that have lower standards for holding auditors criminally responsible for violating securities laws:

H₃: Share-issue privatizations are more likely, *ceteris paribus*, in countries in which governments' burden of proof in criminal cases against auditors is lower.

3. Data and Descriptive Statistics

3.1 The Sample

The initial sample of privatization transactions from around the world is drawn by merging two main sources of privatized firms' listings: the World Bank's extensive privatization transactions database (8,349 observations), which focuses on developing countries, and the Privatization Barometer database (1,347 observations), which focuses on developed countries and transition economies, to obtain a total of 9,696 privatizations executed from 1977 to 1999. The combined database represents the transaction level; hence a privatized firm may appear more than once in the sample. For each transaction, the database provides the privatization year, country of origin, industry affiliation, percentage of capital privatized, total transaction proceeds, total transaction proceeds in foreign currency, the buyers' identities and the percentage which they were allocated, and, importantly for our purposes, the privatization method (share-issue privatization versus asset sale).

From these 9,696 observations, we exclude: 153 duplicates; 129 observations with incomplete data on the shares sold and other transaction details; 139 observations for which the share sold is negative, zero, or greater than 100%; 64 observations involving no transfer of ownership (e.g., leases, management contacts, dilutions, or restitutions); and, lastly, 2,557 observations without data on the privatization method. After merging this database with the securities laws database (La Porta et al., 2006) and the Database on Political Institutions (Beck et al., 2001), we lose another 2,227 observations, leaving 2,470 usable observations to this point. Finally, we follow Boubakri et al. (2005), Dyck and Zingales (2004), and Megginson et al. (2004)

by excluding 604 observations from formerly communist countries, which yields a final sample consisting of 1,866 privatization transactions from 37 countries covering 1980 to 1999.^{14 15 16}

Table 2 presents descriptive statistics on the government's stake sold and the value of the privatization transaction for both the entire sample and after bisecting by the transaction method into share-issue privatizations (SIP) and asset sales. For the complete sample of 1,866 privatization transactions, the average (median) stake sold is 62.85% (61.90%), generating, on average, \$296.84 million in proceeds, for a total of \$0.5 trillion. The classification by privatization method indicates that asset sales are predominant (64%), with the average asset sale privatizing a larger proportion of the SOE's capital (79.11%) compared to the average SIP (37.85%), but generates substantially lower privatization proceeds (\$171.14 million) compared to \$519.67 million for the average SIP. These statistics are consistent with the privatization literature suggesting that asset sales result in a significant decline in postprivatization government ownership, which is more likely to engender high private ownership

¹⁴ At least four reasons justify the exclusion of the ex-communist countries. First, privatization in these countries is mainly conducted through voucher privatizations, which involves the distribution of vouchers to citizens for free or at a low price. Second, the traditional law system in these countries is based on the Soviet law, which has undergone many changes in the transition period (La Porta et al., 2000). Third, the postprivatization ownership structure in these countries is mainly in the hands of insiders (managers and employees). Fourth, importantly, these countries ordinarily lack established stock markets and legal institutions supporting corporate governance at the initial stages of privatization programs, and comparable data on securities laws are not available. Recent studies on privatizations in transition economies are summarized in Djankov and Murrell (2002).

¹⁵ To ensure the accuracy of our data, especially the coding of the privatization method as a share-issue privatization or an asset sale, we cross-check the 1,866 privatization transactions with the following multinational sources of privatization data: (i) Megginson's (2003) continually updated list of privatized firms in 56 developed and developing countries, (ii) Boubakri et al.'s (2005) sample of privatized firms from 39 countries, and (iii) several country sources of privatization data described in the Appendix.

¹⁶ Although our sample size is very similar to recent research; e.g., Bortolotti et al. (2004) and Megginson et al. (2004), we inspect the data to consider whether this sample appears representative of the population, especially the distribution of SIPs, given that the screening above leads to considerable attrition (we continue to exclude formerly communist countries from this analysis). First, based on the sample of 3,644 privatization transactions with complete information on the privatization method, the average stake sold is 69.6 percent, generating, on average, \$170.51 million in proceeds. Second and most importantly, the total value of all proceeds in our final sample represents 89.2 percent of the total proceeds based on the sample of 3,644 transactions (78.6 percent when we include formerly communist countries). Third, share-issue privatizations account for 25.1 percent of all 3,644 privatization transactions. Finally, when we examine the geographical and calendar year distributions of the privatization transactions, we find that Europe and Central Asia, and Latin America and the Caribbean account for the bulk of these transactions (58.5 percent), with the vast majority occurring during the 1990s (94.7 percent). All of these statistics closely resemble those for our sample, providing some assurance that our results are not spuriously driven by the sample selection process.

concentration, while SIPs tend to involve larger SOEs, with partial, staggered sales (Jones et al., 1999; Boubakri et al., 2005).

Table 3 provides descriptive statistics on the privatization transactions, classified by privatization method and by year, according to the country (Panel A), the geographical region as categorized by the World Bank (Panel B), and the legal origin (Panel C). Panel A reveals that the vast majority of the privatization transactions occurred in the 1990s (94.6%).¹⁷ These figures largely reflect the recent trend towards large-scale privatizations in emerging markets (e.g., Brazil, India, Peru, and Turkey). We highlight that asset sales dominate in Turkey (7.13 % of all transactions classified as an asset sale), the U.K. (7.02%), Brazil (6.86%), Germany (6.27%), and Peru (5.95%), while the proportion of SIPs is highest in India (3.97% of all transactions classified as SIP) and Egypt (3.38%); these countries are among the world's most active privatizers. The proportion of asset sales is highest in 1997 and 1998, representing 30% of all asset sale transactions in the 1990s according to Panel A.

In Panel B, we report the geographical distribution of the transactions classified by privatization method. The overwhelming bulk of the transactions occur in Europe and Central Asia (49.5%), followed by Latin America and the Caribbean (25.1%), with asset sales the predominant privatization method (nearly 80% of all transactions). Countries from these two regions have been using privatization as a tool for economic reform, mobilization of foreign investment, and development of their national stock markets. In contrast, although the privatization activity is modest in the three other regions (25.4%), SIPs are more common there (66%). This evidence is consistent with countries from North Africa and Middle East and South Asia being less eager to pursue privatization activity evident in that they sold only a small fraction of their large public sector. This suggests weaker commitment to these economic reforms stemming from poor institutional infrastructure for privatization.

Panel C reports the privatization transactions according to the country's legal system. French civil law countries account for the lion's share of the privatization transactions (59.9%), followed by English common law countries (26.5%). This finding is consistent with the

¹⁷ Increasing the power of our tests, the sample includes transactions from eight (Argentina, Austria, Brazil, Columbia, Italy, Mexico, Turkey, and Venezuela) of the ten countries afflicted with the highest private benefits of control according to Dyck and Zingales (2004).

relatively large size of the SOE sector in civil law countries driven by the prominent role of state intervention in these economies (Bortolotti et al., 2004; La Porta et al., 1999). Additionally, the German civil law countries are associated with the highest proportion of asset sales (79% of all transactions in these countries), followed by the French civil law countries (68%).

Overall, the distribution of privatization transactions implies important differences across countries, regions, and legal systems concerning the extent of privatization activity and, importantly, the choice of the privatization method. This diversification across geographic regions, with different economic and institutional environments, and legal origins facilitates examining whether cross-country differences in accounting transparency determinants—namely, disclosure standards and auditor discipline—explain privatizing governments' choice between divesting a state-owned firm in the private capital market by negotiating an asset sale to a small group of buyers, or in the public capital market with a SIP.

3.2 Explanatory Variables

The descriptive statistics in the previous section corroborate prior evidence that asset sales are more likely to be associated with higher stakes being sold in privatized firms, and higher private ownership concentration, while SIPs are associated with partial, staggered sales, and lower private ownership concentration. In this section, we outline the explanatory variables that enable our research to shed light on whether legal institutions affecting financial reporting quality are partly behind these fundamental differences between the privatization methods.

Disclosure Standards and Audit Infrastructure Variables. We exploit La Porta et al.'s (2006) cross-country database on securities regulations pertaining to disclosure requirements and enforcement to provide evidence on the predictions in H₁ to H₃. Their database compiles answers received by December 2000 to questionnaires sent to security-law attorneys from the 49 countries with the largest stock market capitalization in 1993. Their main finding is that laws mandating disclosure and facilitating private enforcement through liability rules are associated with more developed stock markets. We rely on several of La Porta et al.'s (2006) constructs for quantifying the legal institutions governing security issuances:

(a) *DISCLOSURE*. This index measures the strength (quality) of stock exchange-mandated disclosure requirements related to: delivery of a prospectus; compensation of directors and key officers; ownership structure; insider ownership; contracts outside the ordinary course of business; and transactions between the issuer and its directors, officers, and/or large shareholders.¹⁸ The index ranges between 0 and 1 with higher values indicating stricter disclosure requirements. In addressing our research questions on the impact of *regulation* on financial reporting credibility, we primarily focus on *DISCLOSURE* to capture differences across countries' legal regimes in the information available to non-controlling shareholders. Moreover, La Porta et al.'s database (2006) on security issue institutions naturally suits the relations that we examine—namely, the determinants of the government's decision on whether to conduct a share-issue privatization when selling a state-owned enterprise. Still, similar to Guedhami and Pittman (2006) and Hail and Leuz (2006), we later consider whether our results are sensitive to replacing this proxy with *CIFAR*, which is an index developed by the Center for International Financial Analysis and Research that reflects firms' disclosure practice.

(b) *SUE AUDITOR*. This index measures the capacity of investors to recover losses in the form of damages from the auditor in a civil lawsuit for misleading audited financial information accompanying the prospectus. This variable incorporates four liability standards by equaling: one when investors are only required to prove that the audited financial information accompanying the prospectus contains a misleading statement; two-thirds when investors must also prove that they relied on the prospectus and/or that their loss was caused by the misleading accounting information; one-third when investors must also prove that the auditor was negligent; and zero when restitution from the auditor is either unavailable or the liability standard is intent or gross negligence.

(c) *SANCTION AUDITOR*. This index measures the burden of proof in criminal prosecutions of auditors for misleading financial information accompanying the prospectus. This variable equals: zero when the auditor cannot be held criminally liable if the financial statements accompanying the prospectus are materially misleading; one-half when the auditor

¹⁸ This index captures several standard techniques available to corporate insiders to deprive minority investors by extracting private benefits, including receiving excessive compensation, owning shares with superior voting rights, manipulating transfer prices, and arranging non-arms-length transactions; e.g., Johnson et al. (2000) and La Porta et al. (2002b). Information disclosure is a prerequisite to legal action (Dyck and Zingales, 2004).

can be held criminally liable if aware that these financial statements are materially misleading; and one when the auditor can also be held criminally liable if negligently unaware that these financial statements are materially misleading.

Table 4 reports descriptive statistics for the sample of 31 countries. The average quality of disclosure standards (*DISCLOSURE*) is 0.54, with the highest score of 0.92 in India, Malaysia and Thailand—all of which belong to emerging markets with a common law tradition—and the lowest score of 0 in Ecuador and Uruguay. Turning to the audit infrastructure (i.e., enforcement) variables suggests a different story. Investors benefit from the lowest burden of proof in civil liability cases against auditors for losses stemming from misleading financial information (*SUE AUDITOR* = 1) in Denmark, the Netherlands, and the Philippines—countries with a civil law tradition—while Austria, Germany, Thailand, and Uruguay rank the lowest on this scale (0). The index of criminal sanctions applicable to the firm's auditor (*SANCTION AUDITOR*) ranges from the lowest value of 0 for Argentina, Brazil, Denmark, Pakistan, and Portugal to the highest value of 1 for Belgium, India, Ireland, Malaysia, Nigeria, Thailand, and Zimbabwe—these countries constitute vastly different economic and legal settings—with the remaining nine countries having a score of 0.5. Interestingly, although Denmark and Thailand score high on *SUE AUDITOR* and *SANCTION AUDITOR*, respectively, the situation is reversed for these countries when considering the other index, implying that the two constructs are characterizing different dimensions of the audit environment.

Legal Environment. Although accounting transparency is the main focus of this paper, other legal institutions could influence the choice of the privatization method and the ensuing ownership structure. Megginson et al. (2004) find that privatization through SIPs are more likely to occur in countries with strong protection of minority owner rights. In the same vein, Boubakri et al. (2005) find that governments tend to privatize higher stakes when there is poor investor protection, resulting in high private ownership concentration. The authors interpret this evidence as consistent with privatization occurring mainly through asset sales in less protective countries. Likewise, Dyck and Zingales (2004) document that privatizing governments are more likely to choose asset sales and that ownership is more concentrated in countries in which private benefits of control are greater, i.e., countries with weak legal protection. We use the following constructs, derived from La Porta et al. (1998), to control for the quality of the legal environment:

(a) *COMMON*. This variable identifies the legal origin of the company law or commercial code of each country. It is set equal to one for English common law economies, and zero otherwise.

(b) *RIGHTS*. This variable specifically measures the level of minority shareholders' protection against managers or controlling shareholders afforded by statutory corporate law. This proxy, which La Porta et al. (1998) label "antidirector rights", aggregates six provisions related to voting rights: the country allows shareholders to mail their proxy vote; shares are not blocked prior to the General Shareholders' Meeting; the country allows cumulative voting for directors; an oppressed minorities mechanism exists; the minimum fraction of share capital that entitles a shareholder to call for an Extraordinary Shareholders' Meeting does not exceed ten percent; and shareholders have preemptive rights at new equity offerings.

(c) *JUDICIAL*. As a proxy for legal enforcement, we use La Porta et al.'s (1998: 1140) index of the efficiency of the judicial system given that strong legal enforcement can substitute for the weakness of rules since "active and well-functioning courts can step in and rescue investors abused by the management."

Table 4 reports that the sample average antidirector rights (*RIGHTS*) score is 2.76, with the highest score of 5 in Chile, India, Pakistan, South Africa and the U.K.—mostly common law countries—and the lowest score of 0 in Belgium. Reassuringly, there is variation in shareholder rights even within each legal system. For example, Thailand's antidirector rights score is 2, while Chile's score is 5. The index of legal enforcement (*JUDICIAL*) is highest (10) in Denmark, Finland, the Netherlands, Sweden, and the U.K., and lowest in Indonesia (2.50) and Thailand (3.25). Interestingly, with the exception of India, none of the countries with the highest antidirector rights score, rank high on either *SUE AUDITOR* or *SANCTION AUDITOR*. Similarly, with the exception of Denmark and the Netherlands, none of the countries with the highest efficiency of the judicial system score rank high on either *SUE AUDITOR* or *SANCTION AUDITOR*. Finally, it deserves noting that countries with relatively low antidirector rights scores (e.g., Austria, Belgium, Denmark, Finland, Germany, and the Netherlands) tend to rank high in the efficiency of the judicial system, consistent with a strong system of legal enforcement serving to substitute for weak investor protection laws.

Political Environment. The privatization literature is replete with analytical and empirical research that suggests that the decision to privatize as well as the design of privatization programs are rooted in the country's political environment. Specifically, in comparison to left-wing administrations, it is often argued that right-wing governments are more receptive to market-oriented reforms, including large scale privatizations in which significant stakes in privatized firms are allocated to middle-class voters who will become more inclined as shareholders to vote with the right in the future (Biais and Perotti, 2002; Bortolotti et al., 2004). In another dimension of the political environment that may affect the extent of privatization, more stable, credible governments can privatize higher stakes and private investors are willing to invest a large portion of their wealth in privatized firms (Bortolotti et al., 2004; Boubakri et al., 2005). We follow prior research by capturing these aspects of the political environment with the following constructs:

(a) *RIGHT WING.* A dummy variable equal to one when the executive in a country is identified as right wing, and zero otherwise. We retrieve this variable from a new cross-country dataset of political structure compiled by the Development Research Group of the World Bank (Beck et al., 2001).¹⁹ Beck et al. (2001) relate the categorization right-left to preferences regarding greater or less state intervention in the economy.

(b) *GOVERNMENT STABILITY.* We employ the index of government stability provided by International Country Risk Guide (ICRG). This indicator measures the credibility and ability of the government to implement declared economic reforms and privatization, which reduces private investors' concerns about future policy reversals (Perotti, 1995; Boubakri et al., 2005).

Other Control Variables. In step with recent studies on the determinants of privatization (i.e., decision, method, and extent) and postprivatization ownership concentration in privatized firms (e.g., Bortolotti et al., 2004; Megginson et al. 2004; Boubakri et al., 2005; Guedhami and Pittman, 2006), we control for: (a) *GINI.* An assessment of income inequality proxied by the

¹⁹ Based on the party name, Beck et al. (2001) define the political orientation (i.e., right, left, and center) as follows: Right if parties are defined as conservative, Christian democratic, or right-wing; Left if a party is defined as communist, socialist, social democratic, or left-wing; and Center if a party is defined as centrist or when the position of the party can best be described as centrist, e.g., party advocates strengthening private enterprise but also supports a redistributive role for government. Otherwise, the political orientation of the executive is classified as missing.

United Nation's Gini Coefficient, with higher scores indicating more unequal income distribution. We control for income inequality since evidence in Boubakri et al. (2005) includes that ownership concentration, which is most likely associated with asset sales, is more prevalent in countries where income inequality is higher—supporting Biais and Perotti's (2002) conjecture that income inequality may affect the design of privatization and resulting ownership structure of privatized firms. (b) *LGDP*. We include the natural logarithm of GDP per capita given extant evidence that the level of economic development influences the privatization design and, more generally, ownership structures and capital markets development (e.g., Bortolotti et al., 2004; La Porta et al., 1997, 1998). Additionally, more developed countries generally enjoy better institutions that limit the benefits of private control. (c) *LATE*. A dummy variable equal to one if the privatization transaction occurs after the sample median privatization year (1995), and zero otherwise. Boubakri et al. (2005) argue that this variable is meant to capture the timing of the privatization process, including “the privatizing government's preferences on the choice of the to-be-privatized firm and the extent of the stake sold.” Finally, we control for firm size (*SIZE*), which stands for the natural logarithm of the size of the privatization issue, and industry affiliation, by including a set of dummy variables representing each of the following industries: financials, manufacturing, telecommunications, transportations, and utilities since governments are reluctant to relinquish control by privatizing big stakes in firms from these strategic sectors.

4. Empirical Evidence

We conduct our inquiry in two steps. First, we perform univariate comparisons after bisecting our sample according to the privatization method (SIP versus asset sale). Second, we perform a multivariate analysis to investigate the impact of disclosure standards and surrounding auditing infrastructure on the privatization method decision, while controlling for the legal and political environments and other firm- and country-level determinants.

4.1 Univariate Results

In an initial approach to our research questions, Table 6 reports measures of central tendency for all explanatory variables for the SIP and non-SIP (i.e. asset sale) subsamples, with test statistics for differences in the mean and median values. Consistent with the prediction in

H₁, *SIP* is positively associated with stricter disclosure requirements (*DISCLOSURE*), with the differences in means and medians between the subsamples statistically significant at the 1 percent level. Similarly, the means and medians for *SUE AUDITOR* and *SANCTION AUDITOR* are significantly larger at the 1 percent level, suggesting that share-issue privatizations become more likely when countries relax the burden of proof in civil and criminal cases against auditors, consistent with the predictions in H₂ and H₃, respectively.

Several other interesting relations involving the legal and political factors emerge from the univariate analysis in Table 6. For example, the proportion of common law countries is significantly higher (at the 1 percent level) for the *SIP* sample (37 percent) compared to the asset sale subsample (21 percent). However, the two other proxies for the quality of the legal environment (*RIGHTS* and *JUDICIAL*) are not statistically significant between the sub-samples. Unlike the legal environment, the political environment strongly affects the choice between private and public capital markets for governments divesting state-owned enterprises. The proportion of right-wing governments is significantly higher (at the 1 percent level) for the asset sale subsample (73 percent) relative to the *SIP* subsample (49 percent). This result is consistent with right-wing governments relying more on large-scale privatizations, where major stakes in privatized firms are sold to private investors. In the same vein, asset sales are more likely to occur in countries with greater government stability, enhancing its ability to privatize, which hinges on private investors' perceptions about the likelihood of future policy reversals.

Turning to the control variables, we find that privatizations through *SIPs* are more apt to occur when countries' social inequality is less important. The mean (median) *GINI* index is 37.3 (34.4) for the *SIP* subsample compared to 40.64 (41.15) for the asset sale subsample, with the differences significant at the 1 percent level. Finally, *SIPs* are significantly and positively associated with larger firms from strategic industries. Although these univariate tests uncover some interesting binary relations—including preliminary results consistent with our three predictions—they ignore the impact of other potential determinants. In the next section, we extend our analysis by more rigorously examining whether the evidence on these predictions persists in a multivariate framework.

4.2 Multivariate Results

In Table 7, we report the results of a multivariate logistic regression analysis of the impact of disclosure standards and legal institutions that discipline auditors on the choice between public and private capital markets for governments privatizing state-owned enterprises.²⁰ Specifically, we estimate several specifications of the following model (time subscripts are omitted for notational convenience):

$$SIP_i^c = \beta_0 + \beta_1 DISCLOSURE^c + \beta_2 LIABILITY^c + \beta_3 LEGAL^c + \beta_4 POLITICAL^c + \beta_5 CONTROLS_i^c + \sum_{k=1}^{K-1} IND_i^c + u_i^c, \quad (1)$$

where for every firm i from country c :

SIP = one if the SOE is privatized through a SIP, and zero if through an asset sale;

$DISCLOSURE$ = an index of disclosure standards;

$LIABILITY$ = a set of country-level variables describing external auditors' civil and criminal liability under securities regulation;

$LEGAL$ = one of the legal proxies outlined in Section 3.2;

$POLITICAL$ = one of the political proxies outlined in Section 3.2;

$CONTROL$ = a set of firm- and country-level control variables outlined in Section 3.2; and

IND = dummy variables controlling for K industry groups.

In the first regression in Table 7, which excludes the legal institution controls, we find that the coefficient for $DISCLOSURE$ is positive and statistically significant at the 10 percent level, lending some support to H_1 . In contrast, we find strong evidence supporting that investors value legal institutions that discipline auditors in the event of financial reporting failure. Specifically, the coefficient for $SUE AUDITOR$ is positive and statistically significant at the 1 percent level, consistent with the prediction in H_2 that privatization through a SIP is more likely in countries where plaintiffs' burden of proof in civil lawsuits against auditors for issuing

²⁰ Least-squares estimation results on our predictions are virtually identical. All tabulated regressions are estimated with robust standard errors corrected for firm-level clustering to reflect that some sample firms have multiple privatization transactions. Our findings are not sensitive to applying clustering by country, industry, or year.

a clean opinion on materially misleading financial statements is lower. Reflecting the first-order economic importance of the point estimate for *SUE AUDITOR* in the basic regression (1), moving from the 90th to the 10th percentile (e.g., Brazil versus Indonesia) increases the likelihood of privatizing the average SOE (i.e., all other explanatory variables are set at their mean values) through a SIP by 9 percent. Similarly, we estimate a positive and statistically significant relation at the 1 percent level between *SANCTION AUDITOR* and *SIP*, consistent with the intuition behind H₃ that share-issue privatizations are more likely in jurisdictions with lower standards for holding auditors criminally liable. This determinant is also economically material: gauging *SANCTION AUDITOR*'s impact by moving from the 90th to the 10th percentile translates into a share-issue privatization becoming 31 percent more likely.²¹

Collectively, the positive and strongly significant coefficients on *SUE AUDITOR* and *SANCTION AUDITOR*, along with the marginally significant coefficient on *DISCLOSURE*, back Ball's (2001) arguments and Guedhami and Pittman's (2006) evidence that legal institutions that genuinely motivate auditors to constrain insiders' discretion over the financial reporting process improve contracting more than imposing extensive disclosure standards. Although Guedhami and Pittman's (2006) evidence suggests that corporate ownership concentration is lower in countries with securities laws that specify a lower burden of proof in civil and criminal litigation against auditors, we provide a more direct approach by focusing on the privatization method. Indeed, our evidence captures the fact that asset sales are more likely to engender concentrated ownership.

In regressions (2) through (4), we follow standard practice for mitigating multicollinearity concerns by initially separately controlling for the impact of individual legal institutions on the choice of privatization method. Importantly, we continue to find that *SUE AUDITOR* and *SANCTION AUDITOR* exhibit positive and strongly significant coefficients after introducing these proxies for the legal protection afforded investors. Interestingly, the coefficient for *DISCLOSURE* is positive and statistically significant in two out of these three

²¹ The range between the 90th and 10th percentiles is 0.66 for *SUE AUDITOR* and 1 for *SANCTION AUDITOR*. Given that neither *SUE AUDITOR* nor *SANCTION AUDITOR* is continuous, it is prudent to evaluate economic importance by moving down one category in each discrete distribution with respect to the median value, which implies 7.9 percent and 17.5 percent reductions in SIP probability, respectively. The magnitude of the coefficients on *SUE AUDITOR* and *SANCTION AUDITOR* in the other regressions in Tables 7 and 8 are generally similar to the baseline estimates in column (1).

specifications. In the horse-race regression (5), which incorporates all of the legal institution controls, *SUE AUDITOR* and *SANCTION AUDITOR* remain positive and significant at the 1 percent level.²² However, *DISCLOSURE* becomes almost identically zero in this full model, corroborating recent cross-country evidence that suggests that formal disclosure standards may be largely ineffective for improving accounting transparency; e.g., Ball et al. (2003), Haw et al. (2004), and Guedhami and Pittman (2006). The bottom line from the Table 7 regressions is that securities laws that liberalize civil and criminal litigation against auditors play a major role in explaining privatizing governments' choice between public and private capital markets in our data, consistent with Ball's (2001) conjectures.

Reinforcing the univariate evidence, the results for the legal institution controls are mixed. *COMMON* loads positive and significant in regressions (2) and (5), suggesting that governments in common law countries (i.e., more protective jurisdictions) are more likely to privatize in the public capital market with a share offering, consistent with Dyck and Zingales (2004) and Boubakri et al. (2005). In contrast, the coefficients for *RIGHTS* and *JUDICIAL*, finer proxies for the extent of investor protection and enforcement, are always negative and significant at the 1 percent level. Although the coefficients on *RIGHTS* and *JUDICIAL* are inconsistent with our predictions, one possible explanation for these results is that the variable *COMMON* does not adequately reflect the underlying legal protection construct as discussed above but rather the fact that civil law countries are characterized by a relatively large SOE sector, hence, large stakes are being privatized (Bortolotti et al., 2004).

For the explanatory variables identifying the political environment, the results indicate a strong, robust impact on the probability of a SIP, consistent with extant research on the political economy of privatization policies. In particular, we find that the coefficient on *RIGHT WING* is always negative and significant at the 1 percent level, implying that right-wing governments are more eager to privatize significant stakes to middle-class voters as a strategic policy to ensure their re-election. Additionally, the coefficient for *GOVERNMENT STABILITY* is negative and highly significant in all regressions, consistent with the argument that more stable, credible

²² The predictable increase in explanatory power in the horse-race regression in column (5) does not come at the expense of *SUE AUDITOR* or *SANCTION AUDITOR*, which remain positive and statistically significant at the 1 percent level. More generally, the fit of our Table 7 models (Pseudo R^2 ranging from 17 to 22 percent) is comparable to recent research on privatization methods; e.g., Dyck and Zingales (2004), Megginson et al. (2004) and Boubakri et al. (2006b).

governments are associated with larger stakes being privatized and their private investors are more enthusiastic about investing in privatized firms.

Finally, we observe several interesting results—all statistically significant relations are in the predicted directions—for the firm- and other country-level control variables in Table 7. First, the coefficient for *GINI* is generally negative and significant, which implies that the probability of a SIP is decreasing in the extent of income inequality. This finding is consistent with evidence in Boubakri et al. (2005) suggesting that ownership concentration in privatized firms, which is most likely associated with asset sales, prevails in more unequal societies. Second, the level of economic development *LGDP* has a positive and statistically significant link with *SIP*. This result supports the argument that more developed countries tend to have higher-quality institutions and more developed capital markets, influencing the amount of private benefits of control, the structure of corporate ownership, and, more importantly, the design of privatization programs. Third, the coefficient for *SIZE* is positive and significant at the 1 percent level in all specifications, implying that larger SOEs are more likely to be privatized through SIPs. This result fits with prior research that ownership concentration is lower in larger firms; e.g., La Porta et al. (1998) and Boubakri et al. (2005).

4.3 Sensitivity Analysis

Consistent with Ball's (2001) arguments, the evidence in Section 4.2 collectively implies that enacting better disclosure standards to improve accounting transparency will be futile unless moored to reforms to surrounding legal institutions that hold auditors more responsible—both criminally and civilly—for financial reporting failure. In this section, we consider whether our results are robust to addressing concerns about sample composition, regression variable specifications, and correlated omitted variables. In short, our extensive sensitivity analyses summarized in Table 8 strongly corroborate our earlier evidence that private and public enforcement of securities laws applying to auditors facilitates divesting state-owned firms through share offerings. For the sake of parsimony, we report estimates based on regression (2) in Table 7, which controls for the legal origin. We note that none of the results reported in this section are qualitatively affected by including the two other legal proxies, *RIGHTS* and *JUDICIAL*. Except for the robustness tests dealing with alternative proxies or

additional controls, we focus our analysis on the test variables when interpreting whether our results are sensitive to the following issues.

Sample Composition. We begin by excluding all privatization transactions that occurred during the 1980s to reflect: (i) that many of the country-level variables, including our key tests variables *DISCLOSURE*, *SUE AUDITOR*, and *SANCTION AUDITOR*, relate to the 1990s; and (ii) any sample selection bias due to incomplete privatization data for the 1980s compared to the 1990s. In regression (1), *SUE AUDITOR* and *SANCTION AUDITOR* continue to load positive, consistent with H_2 and H_3 . In another variant, we exclude—sequentially (not reported) and altogether (regression (2))—privatization transactions for the years 1994 and 1998, which are characterized by the lowest proportion of SIPs in our data. Again, the estimate for *DISCLOSURE* remains statistically indistinguishable from zero in these smaller samples, while those for *SUE AUDITOR* and *SANCTION AUDITOR* indicate a strong positive association between the audit environment and the likelihood of a share-issue privatization.

In regression (3), we discard large privatization transactions that exceed \$1 billion which might be systematically associated with SIPs irrespective of the impact of other factors; i.e., this provides some assurance that potential confounding stemming from asset sales becoming virtually infeasible for privatizing governments in these situations is not mechanically behind any evidence supporting our predictions. Reinforcing our earlier results, the coefficients on the auditor discipline variables are still positive and statistically significant, implying that financial reporting becomes more informative when countries enact securities laws that set a lower burden of proof in civil and criminal litigation involving auditors. Similarly, we exclude all telecom and utilities transactions, which are considerably more likely to involve a SIP according to prior research. Regression (4) clearly confirms our previous conclusions on the importance of *SUE AUDITOR* and *SANCTION AUDITOR*. These results suggest that our evidence is not driven by large transactions or the inclusion of certain industries.

Regression Variable Specifications. Although our primary proxy for the quality of disclosure standards derived from La Porta et al. (2006) suits the hypothesized relation under study—recent cross-country research that relies on *DISCLOSURE* to capture financial reporting regulation motivates this design choice; e.g., Hail and Leuz (2006) and Guedhami and Pittman (2006)—we consider two alternative measures. In regression (5), we replace *DISCLOSURE* with

CIFAR, which is an index representing the mean number of 90 items included in the annual reports of a sample of domestic firms published by the Center for International Financial Analysis and Research, despite that both Bushman and Smith (2001, 2003) and Hail and Leuz (2006) criticize its empirical validity for measuring disclosure standards in an economy. The positive and strongly significant coefficients on *SUE AUDITOR* and *SANCTION AUDITOR* persist in this specification.²³ However, the coefficient on *CIFAR* is negative and significant in this specification, inconsistent with the prediction in H_1 . Yet, this evidence is consistent with Guedhami and Pittman (2006) who find that *CIFAR* loads positively and significantly in postprivatization ownership concentration regressions in contradiction to their prediction.

In unreported results, we specify another proxy, *ACC*, which is a sub-component of the *OPACITY INDEX* developed by Kurtzman et al. (2004). Although the country coverage with respect to this variable is limited, we were able to include the majority of our sample countries (25).²⁴ Interestingly, the results indicate that the coefficient for *ACC* is positive and significant at the 5 percent level. To ensure that this conclusion is not driven by the countries excluded from the regression, we run two logit regressions with *DISCLOSURE* or *CIFAR*, but without these countries. The unreported results from these two logit regressions (with respect to *DISCLOSURE* or *CIFAR*) are quite similar in direction and statistical significance, to the logit results presented in Table 7 (*DISCLOSURE* is generally weakly significant) and regression (5) in Table 8 (*CIFAR* is negative and significant). More importantly, *SUE AUDITOR* and *SANCTION AUDITOR* remain positive and significant in all specifications, suggesting that legal institutions governing auditors provide valuable supporting infrastructure for monitoring.

Although our key test variables are derived from LLS (2006), we check the robustness of our results to using alternative data. Specifically, we consider another proxy for criminal litigation against auditors derived from a newly released survey data compiled by the International Federation of Accountants (IFAC) under its *Assessment of the Regulatory and Standard-Setting Framework*.²⁵ Despite that the limited country coverage of the database lowers

²³ Re-estimating after including *DISCLOSURE* and *CIFAR* (Hail and Leuz, 2006), or excluding both variables, provides very similar evidence on *SUE AUDITOR* and *SANCTION AUDITOR*.

²⁴ The countries with missing data are: Jordan, Kenya, Peru, Sri Lanka, Uruguay, and Zimbabwe.

²⁵ We assemble this proxy by assigning the value one for positive answers to IFAC (2004, page 43) survey question #110, "...is there a mechanism at the stock exchange(s) for monitoring and enforcing financial

the sample to 1,005 observations, we find in unreported logistic regression results that *SANCTION AUDITOR* loads positive at the 1 percent level.

Correlated Omitted Variables. Although our research questions are rooted in Ball's (2001) and Dyck's (2001) arguments, our strong results on the importance of auditor liability measures may stem from correlated omitted variables that capture other aspects of liability standards in securities laws.²⁶ For example, greater recourse to sue corporate insiders translates into smaller private benefits of control (Zingales, 1995). Apart from legal institutions involving auditors, La Porta et al. (2006) construct two proxies to distinguish between cases against issuers/directors and distributors, which are specified in a similar way as *SUE AUDITOR* and *SANCTION AUDITOR*. By averaging the three sub-indices of liability standards to incorporate both civil and criminal litigations against issuers/directors, distributors, and accountants, La Porta et al. (2006) derive the "liability standard" index and "criminal sanctions" index which are shown to be positively associated with various measures of stock market development, including ownership concentration. Given that the "liability standard" and "criminal sanctions" indices are comprehensive (i.e., include auditors), we compute two measures of civil and criminal liability against issuers/directors and distributors as an average of their respective sub-indices. We label the resulting variables *SUE_ALT* and *SANCTION_ALT*.²⁷

In regression (6), we challenge our earlier evidence on the role of auditor discipline by introducing *SUE_ALT* and *SANCTION_ALT*. Importantly, including these measures does not qualitatively affect our results on *SUE AUDITOR* and *SANCTION AUDITOR*, which remain positive and statistically significant at the 1 percent level. In regression (7), we examine the impact of *SUE_ALT* and *SANCTION_ALT* on the probability of a SIP while excluding *SUE AUDITOR* and *SANCTION AUDITOR*. Interestingly, the coefficients for *SUE_ALT* and *SANCTION_ALT* are statistically insignificant at conventional levels, suggesting that these forms of litigation do not explain the choice of privatization method. Overall, these findings, which provide some assurance that we are cleanly identifying the role of private and public

reporting, accounting, and auditing of listed entities?", and zero otherwise. 19 out of the 37 sample countries answered this question, with 12 countries coded 1.

²⁶ We thank Clive Lennox for noticing this issue.

²⁷ The pairwise correlations between *SUE_ALT* (*SANCTION_ALT*) and the test variables *DISCLOSURE*, *SUE AUDITOR* and *SANCTION AUDITOR* are 0.28 (-0.07), -0.80 (-0.07), and 0.09 (0.47), respectively.

enforcement against auditors, strongly corroborate Ball's (2001) arguments and Guedhami and Pittman's (2006) evidence that investors value legal institutions that discipline auditors.

In their investigation of the influence of securities laws on stock market development, La Porta et al. (2006) consider three additional sources of variation across countries, which may apply to our analysis. First, these securities laws may proxy for social capital. Although they later rule out this competing explanation, we include their proxy of social capital (*TRUST*), which measures trust among strangers, in regression (8). The coefficients for *SUE AUDITOR* and *SANCTION AUDITOR* remain positive and significant at the 1 percent level in this specification. Second, privatizing governments intent on promoting an "equity culture" among individuals and institutions may rely on securities laws "because their institutions are more democratically responsive to the interests of small investors." The results (not reported) on *SUE AUDITOR* and *SANCTION AUDITOR* are not sensitive to including a measure of the degree of democracy in a country based on the "democratic accountability" index produced by ICRG.²⁸

Third, one might argue that the extent of privatization and, hence its design, is related to the role of the state in the economy, which might be considered an equilibrium outcome (Bortolotti et al., 2004). Therefore, our results could spuriously reflect omitted variable bias driven by failing to control for the size of state if disclosure or liability standards are negatively correlated with the size of the state in the economy. To improve the precision of our estimates, we follow La Porta et al. (2006) by including two controls for the role of the state in the economy: (i) the fraction of the assets of the top 10 banks in a given country owned by the government of that country in 1995, derived from La Porta et al. (2002a), and (ii) the fraction of capital stock in the hands of SOEs, derived from La Porta et al. (1999b). In regression (9), the results based on the first measure, which is available for all 37 sample countries, indicate that controlling for the role of the state in the economy does not affect our previous inferences, particularly the evidence that *SUE AUDITOR* and *SANCTION AUDITOR* are important determinants of the likelihood of a SIP. Interestingly, the proxy for the role of the state in the economy loads positive, suggesting that the probability of a SIP becomes more likely when the state is large. These findings hold when we use the second proxy for the role of the state in the

²⁸ We note that the pairwise correlations between the measure of democracy and our test variables are quite low: *DISCLOSURE* ($\rho=0.17$), *SUE AUDITOR* ($\rho=-0.11$), and *SANCTION AUDITOR* ($\rho=-0.09$).

economy, despite the fact that three countries (Finland, Jordan, and Zimbabwe) are excluded from this analysis due to data unavailability.

Another potential omitted variable is the size of the country's equity market (Dyck and Zingales, 2004 and Hail and Leuz, 2006). However, the appropriateness of this control as a right-hand side variable is questionable given the evidence that stock market development is endogenous to legal institutions and securities laws (La Porta et al., 1997, 2006). Nonetheless, in the interest of shedding light on whether its inclusion affects our inferences on the test variables, we follow recent research by controlling for the size of the stock market, proxied by the total market capitalization of all domestic firms scaled by GDP. In regression (10), we report that *SUE AUDITOR* and *SANCTION AUDITOR* continue to load positive and significant at the 1 percent level, while *DISCLOSURE* is positive and significant at the 10 percent level.

A related concern is that the legal institutions are also endogenous to privatization in general and to the privatization method in particular. Boubakri et al. (2006a) find evidence that the privatization method, specifically the use of a SIP, leads to higher demand for better legal institutions in both developing and developed countries. In our setting, this reverse causality issue is undermined by the high variation in several measures of investor protection as described in Section 3.2, including the proxies for the quality of the audit environment across the sample countries. For example, both Brazil and the U.K. are intensive privatizers with asset sales emerging as the dominant privatization method, but rank quite differently on various dimensions of the legal environment. Still, similar to Dyck and Zingales (2004), Hail and Leuz (2006), and La Porta et al. (2006), we address this concern using the instrumental variables methodology. Although choosing a suitable instrument in cross-country designs is non-trivial (Bushman and Smith, 2001), we follow these studies by relying on the country's colonial legal origin, which is highly correlated with almost all of the country-level variables, including *DISCLOSURE*, *SUE AUDITOR*, and *SANCTION AUDITOR*, as an exogenous instrument. Following La Porta et al. (2006), we replace *DISCLOSURE*, *SUE AUDITOR* and *SANCTION AUDITOR* with the principal component of these variables, which we instrument for the legal origin. This unreported estimation indicates that the coefficient for the principal component is positive and highly significant, supporting our previous inferences even after partially handling the endogeneity issue.

Other Tests. Finally, we continue to estimate strong positive relations between *SIP* and the auditor discipline variables, *SUE AUDITOR* and *SANCTION AUDITOR*, when we: (i) include a dummy for severely indebted countries based on the World Bank's classification to control for countries' indebtedness on the theory that public finance imbalances may drive the government's decision to privatize as well as the design and the extent of privatization (Ramamurti, 1992 and Bortolotti et al., 2004); (ii) include calendar year dummy variables to replace the privatization timing dummy (*LATE*); (iii) exclude firms from countries that might dominate the data by contributing a disproportionate number of observations to the main sample (specifically, Brazil, Germany, Peru, Turkey, and the U.K.); (iv) include alternative measures for the legal environment (i.e., a comprehensive index of investor protection derived from La Porta et al. (2006) and the index of Rule of Law derived from La Porta et al. (1998)); (v) use the average *SIP* proportion at the country-level as our dependent variable; (vi) control for industry affiliation with dummy variables reflecting Campbell's (1996) 12 industries; and (vii) evaluate statistical significance with Newey and West (1987) standard errors to correct for heteroskedasticity and (first-order) serial correlation.²⁹

5. Conclusions

We analyze the impact of legal institutions that shape the credibility of corporate financial reporting on the choice between divesting a state-owned enterprise by selling some or all of a government's stake to dispersed investors in the public capital market with a share-issue privatization, or in the private capital market by negotiating an asset sale to a small set of buyers. Although governments generally prefer *SIPs* that prior research suggests generate several important benefits that can drive the development of their economies, the agency conflict between controlling and minority shareholders can frustrate this policy option. Shleifer and Vishny (1997) and La Porta et al. (2000) argue that the primary agency conflict besetting firms outside the U.S. and the U.K. is the expropriation of smaller investors by controlling shareholders rather than the expropriation of all shareholders by managers. Since outside investors are understandably reluctant to participate in share issues when they rationally anticipate that controlling shareholders will exploit their positions to pocket corporate

²⁹ Although our sample composition mirrors Megginson et al.'s (2004) by including all privatization transactions, the results are virtually identical when we limit the sample to one transaction per firm, dispelling any doubt that our evidence is an artifact of multiple observations of the same firm.

resources, accounting transparency can play a natural role in preventing these insiders from concealing their diversionary practices. Our research provides insight on which financial reporting-related institutions have a chilling effect on insiders' hiding incentives, which is evident in how a government privatizes a state-run firm.

Countries are eager to improve corporate governance to alleviate the agency conflict between insiders and minority investors that represents a major obstacle to conducting a share-issue privatization. In a sample of 1,866 privatizations from 37 countries, we find that investors value reforms that increase the severity of private and public enforcement against auditors for issuing an unqualified opinion on materially deficient financial statements over several other legal determinants, including adopting better disclosure standards. Economically, we estimate that, on average, share-issue privatizations become 9 and 31 percent more likely when the variables that calibrate the burden of proof in civil and criminal litigation against auditors in our regressions are lowered from the 90th to the 10th percentiles, respectively. Our evidence that external monitoring of privatized firms improves when countries liberalize their securities laws to impose more discipline on auditors complements recent international research that suggests that institutions that constrain insiders' discretion over the financial reporting process enhance accounting transparency more than formal disclosure standards; e.g., Ball et al. (2003) and Haw et al. (2004). Similarly, our results on the role of auditor discipline to high-quality financial reporting reinforce Guedhami and Pittman's (2006) cross-country evidence on the importance of this infrastructure to reducing ownership concentration in non-U.S. firms. More generally, we contribute to the expanding literature on the link between a country's institutional characteristics and good corporate governance.

This research could be extended by examining whether other country-level auditing characteristics affect the financing decision on whether to privatize in the public or private capital markets. For example, given the continuing debate in the U.S. and elsewhere over mandatory auditor rotation, this setting would suit investigating whether investors perceive that financial statements become more informative in countries that require either audit-firm or audit-partner rotation.

APPENDIX
Supplementary Privatization Data Sources

Country	Information Source
<i>Latin America and the Caribbean</i>	
Argentina	http://www.mecon.gov.ar/default_english.htm
Brazil	http://www.bndes.gov.br/english/
Chile	http://www.corfo.cl/
Colombia	http://www.dnp.gov.co/
Mexico	http://www.shcp.gob.mx/english/index.html
<i>East-Asia and the Pacific</i>	
Indonesia	http://www.bumn-ri.com/
Philippines	http://privatization.dof.gov.ph/
Thailand	http://www.mof.go.th/sepc/
<i>South Asia</i>	
India	http://divest.nic.in/ http://dpe.nic.in/
Pakistan	http://www.privatisation.gov.pk/
Sri Lanka	http://www.perc.gov.lk/
<i>Sub-Saharan Africa</i>	
Kenya	http://www.investmentkenya.com/
Nigeria	http://www.bpeng.org/10/Index.asp
South Africa	http://www.dpe.gov.za/home.asp
Zimbabwe	http://www.paz.co.zw/
<i>Middle East and North Africa</i>	
Egypt	http://www.mpe-egypt.com/ http://www.tiaaegypt.com/
Jordan	http://www.epc.gov.jo/
Morocco	http://www.finances.gov.ma/
<i>Europe and Central Asia</i>	
Turkey	http://www.oib.gov.tr/

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TABLE 1
Variables, Definitions, and Data Sources

Variable	Definition	Source
Panel A. Legal Institutions		
<i>DISCLOSURE</i>	An assessment of disclosure requirements relating to: (1) prospectus; (2) compensation of directors and key officers; (3) ownership structure; (4) inside ownership; (5) contracts outside the ordinary course of business; and (6) transactions between the issuer and its directors, officers, and/or large shareholders. The index ranges from 0 to 1, with higher values indicating more extensive disclosure requirements.	La Porta et al. (2006)
<i>SUE AUDITOR</i>	Index of the procedural difficulty in recovering losses from the auditor in a civil liability case for losses due to misleading statements in the audited financial information accompanying the prospectus. Equals one when investors are only required to prove that the audited financial information accompanying the prospectus contains a misleading statement. Equals two-thirds when investors must also prove that they relied on the prospectus and/or that their loss was caused by the misleading accounting information. Equals one-third when investors must also prove that the auditor acted with negligence. Equals zero if restitution from the auditor is either unavailable or the liability standard is intent or gross negligence.	La Porta et al. (2006)
<i>SANCTION AUDITOR</i>	An index of criminal sanctions applicable to the auditor (or its officers) when the financial statements accompanying the prospectus omit material information. Equals zero if the auditor cannot be held criminally liable when the financial statements accompanying the prospectus are misleading. Equals one-half if the auditor can be held criminally liable when aware that the financial statements accompanying the prospectus are misleading. Equals one if the auditor can also be held criminally liable when negligently unaware that the financial statements accompanying the prospectus are misleading.	La Porta et al. (2006)
<i>COMMON</i>	A dummy variable equal to one for firms from English common law countries, and 0 otherwise.	La Porta et al. (1998)
<i>RIGHTS</i>	This index of anti-director rights is formed by adding one when: (1) the country allows shareholders to mail their proxy vote; (2) shareholders are not required to deposit their shares prior to the General Shareholders' Meeting; (3) cumulative voting or proportional representation of minorities on the board of directors is allowed; (4) an oppressed minorities mechanism is in place; (5) the minimum percentage of share capital that entitles a shareholder to call for an Extraordinary Shareholders' Meeting is less than or equal to ten percent (the sample median); and (6) shareholders have preemptive rights that can only be waived by a shareholders meeting. The index ranges from zero to six.	La Porta et al. (1998)
<i>JUDICIAL</i>	Assessment of the efficiency and integrity of the legal environment as it affects business, particularly foreign firms, produced by the country risk rating agency Business International Corp. It may be taken to represent investors' assessment of conditions in the country in question. Average between 1980 and 1983. The scale ranges from 0 to 10 with lower scores representing lower efficiency levels.	La Porta et al. (1998)
<i>CIFAR</i>	Index created by examining and rating companies' 1995 annual reports on their inclusion or omission of 90 items. These items fall into seven categories: general information, income statements,	La Porta et al. (2006)

balance sheets, funds flow statement, accounting standards, stock data, and special items. A minimum of 3 companies in each country were studied.

Panel B. Firm-Level and Other Country-Level Variables

<i>SIP</i>	A dummy variable equal to one for firms privatized through share-issue privatizations, and zero for firms privatized through private sales.	Authors' calculation
<i>SIZE</i>	The natural logarithm of the privatization offer (U.S. \$ million).	Authors' calculation
<i>LATE</i>	A dummy variable equal to one if the privatization transaction occurs after the sample median privatization year (1995), and zero otherwise.	Authors' calculation
<i>RIGHT WING</i>	A dummy variable equal to one when the executive in the country is identified as right or central wing, and zero otherwise.	Beck et al. (2004)
<i>GOVERNMENT STABILITY</i>	The International Country Risk Guide's assessment of the country's government stability.	ICRG (2004)
<i>GINI</i>	The United Nation's index of income inequality in the country.	United Nations (various reports)
<i>LGDP</i>	The natural logarithm of the country's gross domestic product per capita for the year.	World Bank (2004)

TABLE 2*Summary Statistics for the Privatization Transactions: Method, Stake Sold, and Size of the Offer*

	Full sample	SIPs	Asset Sale
Number of privatizations	1,866	673	1,193
Percentage of stake sold	62.85 [61.9]	37.85 [27.95]	79.11 [100.00]
Size of the offer (US \$ million)	296.84 [28.26]	519.67 [55.20]	171.14 [20.01]
Total Value of all offerings (US \$ million)	553,909.07	349,734.83	204,174.24

Notes: This table reports descriptive statistics on the privatization method and the transaction's characteristics, including the percentage of stake sold and the size of the offer, for a total of 1,866 privatization transactions from 37 countries over the period 1980-1999. All data is collected from the World Bank's Privatization Transactions database and Privatization Barometer, and cross-checked with Megginson's (2003) continually updated list of privatized firms and Boubakri et al.'s (2005) sample of privatized firms. Median values are in parentheses. Communist and ex-communist countries are excluded from the analysis.

TABLE 3

Distributions of Privatization Transactions by Year, Country, Region, and Legal Origin

	Method	Pre-1990	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total	%
Panel A. By Country														
Argentina	Asset Sales	0	3	2	6	4	11	5	9	6	3	1	50	2.68
	SIP	0	0	1	1	2	2	0	0	0	1	1	8	0.43
Austria	Asset Sales	0	2	0	3	4	0	3	0	1	3	1	17	0.91
	SIP	6	1	0	2	3	3	3	2	1	0	2	23	1.23
Belgium	Asset Sales	0	2	0	0	1	2	2	1	0	0	1	9	0.48
	SIP	0	0	0	0	0	0	0	2	0	0	0	2	0.11
Brazil	Asset Sales	0	0	4	14	6	12	8	16	26	32	10	128	6.86
	SIP	0	0	0	0	0	3	0	0	4	7	0	14	0.75
Chile	Asset Sales	0	0	0	0	1	3	2	2	0	2	2	12	0.64
	SIP	0	1	0	0	2	0	0	0	0	0	0	3	0.16
Colombia	Asset Sales	0	0	0	0	0	0	0	5	2	0	0	7	0.38
	SIP	0	0	1	0	1	1	0	3	1	1	0	8	0.43
Denmark	Asset Sales	0	0	0	0	0	0	0	0	0	0	0	0	0.00
	SIP	0	0	0	0	1	2	0	1	0	0	0	4	0.21
Ecuador	Asset Sales	0	0	0	0	0	3	2	0	0	0	0	5	0.27
	SIP	0	0	0	0	1	5	0	0	0	0	0	6	0.32
Egypt	Asset Sales	0	0	0	0	0	3	0	1	5	13	5	27	1.45
	SIP	0	0	0	0	1	7	8	26	15	6	0	63	3.38
Finland	Asset Sales	0	1	1	0	3	5	4	3	4	0	3	24	1.29
	SIP	4	0	0	0	2	3	1	2	1	3	2	18	0.96
France	Asset Sales	4	1	4	5	3	2	4	5	4	2	1	35	1.88
	SIP	2	1	1	1	4	3	3	3	1	2	4	25	1.34
Germany	Asset Sales	1	2	45	19	9	10	6	3	7	8	7	117	6.27
	SIP	4	0	1	0	0	1	0	1	1	2	2	12	0.64
Greece	Asset Sales	0	0	4	3	1	0	0	1	2	0	2	13	0.70
	SIP	0	0	0	0	1	0	0	1	2	5	5	14	0.75
India	Asset Sales	0	0	0	0	0	0	0	0	0	0	1	1	0.05
	SIP	0	0	20	15	12	9	5	1	7	1	4	74	3.97
Indonesia	Asset Sales	0	0	0	0	0	0	0	0	0	1	2	3	0.16
	SIP	0	0	0	0	0	2	2	2	1	0	2	9	0.48
Ireland	Asset Sales	0	0	2	2	0	0	0	2	0	1	3	10	0.54
	SIP	0	0	2	0	0	0	1	0	0	0	1	4	0.21

Venezuela	Asset Sales	0	0	1	0	1	3	2	5	4	3	17	36	1.93
	SIP	0	1	0	1	0	0	0	1	0	0	0	3	0.16
Zimbabwe	Asset Sales	0	0	0	0	0	1	0	0	0	0	1	2	0.11
	SIP	0	0	0	0	0	1	1	0	3	0	1	6	0.32
Total														
	Asset Sales	43	21	94	106	74	151	137	140	181	158	88	1193	63.93
	SIP	58	32	62	59	66	65	60	84	81	66	40	673	36.07
All		101	53	156	165	140	216	197	224	262	224	128	1866	100

Panel B. By Geographical Region

East Asia and Pacific

Asset Sales	0	0	0	0	1	2	13	6	8	2	5	37	2.0
SIP	2	0	4	7	2	7	10	7	2	1	4	46	2.5

Europe and Central Asia

Asset Sales	41	18	74	76	52	59	71	62	82	75	44	654	35.0
SIP	36	21	25	16	30	23	22	25	20	26	28	272	14.6

Latin America and Caribbean

Asset Sales	0	3	10	25	21	73	42	45	70	58	30	377	20.2
SIP	0	2	7	9	9	12	2	18	15	16	1	91	4.9

North Africa and the Middle East

Asset Sales	0	0	0	0	0	3	1	1	5	13	5	28	1.5
SIP	0	0	0	0	1	7	8	26	16	7	0	65	3.5

South Asia

Asset Sales	0	0	1	0	0	8	9	23	3	9	1	54	2.9
SIP	1	4	22	21	15	13	17	4	23	13	5	138	7.4

Sub-Saharan Africa

Asset Sales	2	0	9	5	0	6	1	3	13	1	3	43	2.3
SIP	19	5	4	6	9	3	1	4	5	3	2	61	3.3

Panel C. By Legal Origin

<i>English</i>	Asset Sales	23	2	17	18	11	32	27	52	33	19	11	245	13.1
	SIP	28	11	34	33	27	19	28	14	29	17	10	250	13.4
<i>French</i>	Asset Sales	19	14	30	60	45	101	97	78	134	125	57	760	40.7
	SIP	16	20	27	23	32	34	27	64	48	43	24	358	19.2
<i>German</i>	Asset Sales	1	4	45	22	13	10	9	3	8	11	8	134	7.2
	SIP	10	1	1	2	3	4	3	3	2	2	4	35	1.9
<i>Scandinavian</i>	Asset Sales	0	1	2	6	5	8	4	7	6	3	12	54	2.9
	SIP	4	0	0	1	4	8	2	3	2	4	2	30	1.6

Notes: This table provides some descriptive statistics for the sample of 1,866 privatization transactions classified by privatization method and by year, according to the country (Panel A), the geographical region as categorized by the World Bank (Panel B), and the legal origin (Panel C).

TABLE 4
Summary Statistics of Explanatory Variables

COUNTRY	N	DISCLOSURE	SUE AUDITOR	SANCTION AUDITOR	COMMON	RIGHTS	JUDICIAL	GOVERNMENT STABILITY	GINI
Argentina	58	0.50	0.33	0.00	0	4.00	6.00	7.50	44.66
Austria	40	0.25	0.00	0.50	0	2.00	9.50	8.03	26.28
Belgium	11	0.42	0.66	1.00	0	0.00	9.50	7.36	29.71
Brazil	142	0.25	0.33	0.00	0	3.00	5.75	8.22	59.88
Chile	15	0.58	0.33	0.50	0	5.00	7.25	8.13	53.10
Colombia	15	0.42	0.33	0.50	0	3.00	7.25	5.67	56.05
Denmark	4	0.58	1.00	0.00	0	2.00	10.00	6.25	36.43
Ecuador	11	0.00	0.33	0.50	0	2.00	6.25	5.36	44.85
Egypt	90	0.50	0.33	0.50	0	2.00	6.50	8.24	29.09
Finland	42	0.50	0.66	0.50	0	3.00	10.00	8.38	22.60
France	60	0.75	0.33	0.50	0	3.00	8.00	7.25	36.54
Germany	129	0.42	0.00	0.50	0	1.00	9.00	6.83	30.64
Greece	27	0.33	0.33	0.50	0	2.00	7.00	8.33	33.18
India	75	0.92	0.66	1.00	1	5.00	8.00	5.83	32.83
Indonesia	12	0.50	0.66	0.50	0	2.00	2.50	8.58	34.17
Ireland	14	0.67	0.66	1.00	1	4.00	8.75	7.79	36.55
Italy	77	0.67	0.33	0.50	0	1.00	6.75	6.42	28.38
Jordan	3	0.67	0.33	0.00	0	1.00	8.66	10.33	37.38
Kenya	34	0.50	0.66	0.50	1	3.00	5.75	7.62	51.92
Malaysia	20	0.92	0.66	1.00	1	4.00	9.00	9.05	48.48
Mexico	59	0.58	0.33	0.50	0	1.00	6.00	7.39	52.70
Netherlands	21	0.50	1.00	0.50	0	2.00	10.00	8.52	32.61
Nigeria	51	0.67	0.66	1.00	1	3.00	7.25	5.94	42.24
Pakistan	45	0.58	0.66	0.00	1	5.00	5.00	7.67	31.21
Peru	128	0.33	0.66	0.50	0	3.00	6.75	7.52	44.89
Philippines	34	0.83	1.00	0.50	0	3.00	4.75	8.68	45.43
Portugal	65	0.42	0.66	0.00	0	3.00	5.50	7.54	35.31
South Africa	11	0.83	0.66	0.50	1	5.00	6.00	9.40	60.39
Spain	67	0.50	0.66	0.50	0	4.00	6.25	7.69	28.01
Sri Lanka	72	0.75	0.66	0.50	1	3.00	7.00	7.54	33.71
Sweden	38	0.58	0.33	0.50	0	3.00	10.00	7.68	29.29
Thailand	17	0.92	0.00	1.00	1	2.00	3.25	7.76	43.59
Turkey	183	0.50	0.33	0.50	0	2.00	4.00	7.52	46.11
U.K.	148	0.83	0.66	0.50	1	5.00	10.00	7.36	35.53
Uruguay	1	0.00	0.00	0.50	0	2.00	6.50	6.00	42.30
Venezuela	39	0.17	0.33	0.50	0	1.00	6.50	8.33	48.81
Zimbabwe	8	0.50	0.66	1.00	1	3.00	7.50	8.25	56.80
AVERAGE		0.54	0.49	0.51	0.30	2.76	7.13	7.62	40.04
ST. DEV		0.23	0.27	0.30	0.46	1.30	1.94	1.06	10.17

Notes: This table, presented in alphabetical order by country, reports descriptive statistics for the country-level explanatory variables used in the logistic multivariate regression analysis of the privatization method. *DISCLOSURE* measures the quality of disclosure requirements based on a disclosure standards index that captures the regulation of information available to minority investors. *SUE AUDITOR* is an index that measures the burden of proof against auditors in civil lawsuits to recover losses due to misleading audited financial information accompanying the prospectus. *SANCTION AUDITOR* is an index of criminal sanctions applicable to the auditor (or its officers) when the financial statements accompanying the prospectus omit material information. Derived from La Porta et al.'s (2006), the three indices range between 0 and 1 with higher values indicating better quality of disclosure standards and the surrounding auditing environment. *COMMON* identifies the legal origin of the company law or commercial code of each country; equals one for English common law economies, and zero otherwise (La Porta et al., 1998). *RIGHTS* and *JUDICIAL* capture the quality of the legal environment based on "antidirector rights" and "efficiency of the judicial system" indices, respectively, from La Porta et al. (1998). Higher values of each index represent stronger legal protection and enforcement of investors' rights. *RIGHT WING* is a dummy variable equal to one when the executive in the country is identified as right or central wing, and zero otherwise. *GOVERNMENT STABILITY* is a measure of the credibility and ability of the government to carry out declared economic reforms and privatization based on the International Country Risk Guide's index of government stability, with higher scores indicating better credibility. *GINI* is an assessment of income inequality in the country, proxied by the United Nation's Gini Coefficient, with higher scores indicating more unequal income distribution. The data sources are identified in Table 1.

TABLE 5
Pearson Correlations

	<i>DISCLOSURE</i>	<i>SUE AUDITOR</i>	<i>SANCTION AUDITOR</i>	<i>COMMON</i>	<i>RIGHTS</i>	<i>JUDICIAL</i>	<i>RIGHT WING</i>	<i>GOVERNMENT STABILITY</i>	<i>GINI</i>
<i>SUE AUDITOR</i>	0.398								
<i>SANCTION AUDITOR</i>	0.498	0.133							
<i>COMMON</i>	0.679	0.454	0.402						
<i>RIGHTS</i>	0.476	0.593	-0.019	0.626					
<i>JUDICIAL</i>	0.256	0.045	0.287	0.269	0.208				
<i>RIGHT WING</i>	0.010	-0.051	0.051	-0.125	-0.105	-0.035			
<i>GOVERNMENT STABILITY</i>	-0.094	0.031	-0.133	-0.084	-0.004	-0.060	-0.170		
<i>GINI</i>	-0.302	-0.030	-0.270	-0.085	0.007	-0.481	-0.050	0.075	
<i>LGDP</i>	0.070	-0.237	0.101	-0.206	-0.232	-0.289	0.252	0.015	0.045

Notes: This table reports Pearson correlations between the country-level explanatory variables. *DISCLOSURE* measures the quality of disclosure requirements based on a disclosure standards index that captures the regulation of information available to minority investors. *SUE AUDITOR* is an index that measures the burden of proof against auditors in civil lawsuits to recover losses due to misleading audited financial information accompanying the prospectus. *SANCTION AUDITOR* is an index of criminal sanctions applicable to the auditor (or its officers) when the financial statements accompanying the prospectus omit material information. Derived from La Porta et al.'s (2006), the three indices range between 0 and 1 with higher values indicating better quality of disclosure standards and the surrounding auditing environment. *COMMON* identifies the legal origin of the company law or commercial code of each country; equals one for English common law economies, and zero otherwise (La Porta et al., 1998). *RIGHTS* and *JUDICIAL* capture the quality of the legal environment based on "antidirector rights" and "efficiency of the judicial system" indices, respectively, from La Porta et al. (1998). Higher values of each index represent stronger legal protection and enforcement of investors' rights. *RIGHT WING* is a dummy variable equal to one when the executive in the country is identified as right or central wing, and zero otherwise. *GOVERNMENT STABILITY* is a measure of the credibility and ability of the government to carry out declared economic reforms and privatization based on the International Country Risk Guide's index of government stability, with higher scores indicating better credibility. *GINI* is an assessment of income inequality proxied by the United Nation's Gini Coefficient, with higher scores indicating more unequal income distribution in the country. Boldface indicates statistical significance at the 1% level. Spearman correlations (unreported for brevity) are consistent with the Pearson correlations.

TABLE 6
Univariate Tests: Privatization Method

	Means		Difference in Means (A)-(B)	Medians		Difference in Medians (C)-(D)
	SIP=1 (A)	SIP=0 (B)		SIP=1 (C)	SIP=0 (D)	
<i>DISCLOSURE</i>	0.60	0.51	0.09*** [<0.0001]	0.58	0.50	0.08*** [<0.0001]
<i>SUE</i>	0.49	0.44	0.05*** [<0.0001]	0.66	0.33	0.33*** [<0.0001]
<i>SANCTION</i>	0.56	0.41	0.15*** [<0.0001]	0.50	0.50	0.00*** [<0.0001]
<i>COMMON</i>	0.37	0.21	0.16*** [<0.0001]	0.00	0.00	0.00*** [<0.0001]
<i>RIGHTS</i>	2.86	2.82	0.03 [0.6052]	3.00	3.00	0.00 [0.8765]
<i>JUDICIAL</i>	6.91	6.98	-0.07 [0.3922]	7.00	6.75	0.25 [0.2380]
<i>RIGHT WING</i>	0.49	0.73	-0.24*** [<0.0001]	0.00	1.00	-1.00*** [<0.0001]
<i>GOVERNMENT STABILITY</i>	7.18	7.69	-0.51*** [<0.0001]	7.00	8.00	-1.00*** [<0.0001]
<i>GINI</i>	37.30	40.64	-3.34*** [<0.0001]	34.40	41.15	-6.74*** [<0.0001]
<i>LGDPC</i>	9.72	9.88	-0.159* [0.0773]	9.37	9.43	-0.06* [0.0818]
<i>LATE</i>	0.403	0.475	-0.07*** [0.0025]	0.00	0.00	0.00*** [0.0025]
<i>SIZE</i>	3.82	2.88	0.943*** [<0.0001]	4.01	3.00	1.01*** [<0.0001]
<i>STRATEGIC</i>	0.46	0.35	0.11*** [<0.0001]	0.00	0.00	0.00*** [<0.0001]

Notes: This table presents the tests of significance of the difference in means and medians of the explanatory variables for share-issue privatizations (SIP=1) and asset sales (SIP=0). *DISCLOSURE* measures the quality of disclosure requirements based on a disclosure standards index that captures the regulation of information available to minority investors. *SUE AUDITOR* is an index that measures the burden of proof against auditors in civil lawsuits to recover losses due to misleading audited financial information accompanying the prospectus. *SANCTION AUDITOR* is an index of criminal sanctions applicable to the auditor (or its officers) when the financial statements accompanying the prospectus omit material information. Derived from La Porta et al.'s (2006), the three indices range between 0 and 1 with higher values indicating better quality of disclosure standards and the surrounding auditing environment. *COMMON* identifies the legal origin of the company law or commercial code of each country; equals one for English common law economies, and zero otherwise (La Porta et al., 1998). *RIGHTS* and *JUDICIAL* capture the quality of the legal environment based on "antidirector rights" and "efficiency of the judicial system" indices, respectively, from La Porta et al. (1998). Higher values of each index represent stronger legal protection and enforcement of investors' rights. *RIGHT WING* is a dummy variable equal to one when the executive in the country is identified as right or central wing, and zero otherwise. *GOVERNMENT STABILITY* is a measure of the credibility and ability of the government to carry out declared economic reforms and privatization based on the International Country Risk Guide's index of government stability, with higher scores indicating better credibility. *GINI* is an assessment of income inequality, proxied by the United Nation's Gini Coefficient, with higher scores indicating more unequal income distribution in the country. *LGDPC* stands for the natural logarithm of GDP per capita. *LATE* is a dummy variable equal to one if the privatization transaction occurs after the sample median privatization year (1995), and zero otherwise. *SIZE* stands for the natural logarithm of the size of the privatization issue. *STRATEGIC* is a dummy variable equal to one for firms from strategic industries (i.e., financial, telecommunications, transportation, utilities) and zero otherwise. The superscripts asterisks ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

TABLE 7

Multivariate Regression Results for the Impact of Disclosure Standards and Auditor Discipline on the Choice of the Privatization Method

Variable	Prediction	BASIC (1)	COMMON (2)	RIGHTS (3)	JUDICIAL (4)	ALL (5)
<i>DISCLOSURE</i>	(+)	0.720* (1.62)	-0.121 (-0.21)	1.294** (2.56)	0.898** (1.96)	-0.310 (-0.53)
<i>SUE AUDITOR</i>	(+)	0.984*** (2.96)	0.894*** (2.64)	1.457*** (3.74)	0.884** (2.49)	1.266*** (2.94)
<i>SANCTION AUDITOR</i>	(+)	1.476*** (3.83)	1.464*** (3.78)	1.267*** (3.16)	2.059*** (5.75)	1.773*** (4.51)
<i>COMMON</i>	(+)		0.557** (2.42)			1.371*** (4.90)
<i>RIGHTS</i>	(+)			-0.210*** (-3.02)		-0.288*** (-3.22)
<i>JUDICIAL</i>	(+)				-0.357*** (-7.47)	-0.363*** (-6.90)
<i>RIGHT WING</i>	(-)	-1.490*** (-10.40)	-1.476*** (-10.40)	-1.520*** (-10.47)	-1.566*** (-10.26)	-1.536*** (-10.12)
<i>GOVERNMENT STABILITY</i>	(-)	-0.137*** (-3.26)	-0.139*** (-3.29)	-0.127*** (-3.09)	-0.133*** (-2.91)	-0.122*** (-2.70)
<i>GINI</i>	(-)	-0.013* (-1.73)	-0.014* (-1.83)	-0.011 (-1.46)	-0.043*** (-5.02)	-0.042*** (-4.74)
<i>LGDPC</i>	(+)	0.222*** (4.80)	0.250*** (5.21)	0.204*** (4.36)	0.119** (2.49)	0.150*** (2.97)
<i>LATE</i>	(?)	-0.227 (-1.23)	-0.232 (-1.24)	-0.299 (-1.62)	-0.284 (-1.44)	-0.378* (-1.90)
<i>SIZE</i>	(+)	0.219*** (6.92)	0.235*** (7.31)	0.221*** (6.97)	0.260*** (7.91)	0.302*** (8.79)
<i>INTERCEPT</i>	(?)	-2.827*** (-4.33)	-2.751*** (-4.23)	-2.603*** (-3.90)	1.417 (1.58)	1.983** (2.14)
<i>INDUSTRY CONTROLS</i>		YES	YES	YES	YES	YES
Pseudo R ²		17.4%	17.7%	17.9%	21.1%	22.6%
N		1,547	1,547	1,547	1,547	1,547

Notes: This table presents logistic estimation results for the impact of disclosure standards and auditor discipline on the decision about whether to privatize through share-issue privatizations (dependent variable), while controlling for other country-level and firm-level variables. *DISCLOSURE* measures the quality of disclosure requirements based on a disclosure standards index that captures the regulation of information available to minority investors. *SUE AUDITOR* is an index that measures the burden of proof against auditors in civil lawsuits to recover losses due to misleading audited financial information accompanying the prospectus. *SANCTION AUDITOR* is an index of criminal sanctions applicable to the auditor (or its officers) when the financial statements accompanying the prospectus omit material information. Derived from La Porta et al.'s (2006), the three indices range between 0 and 1 with higher values indicating better quality of disclosure standards and the surrounding auditing environment. *COMMON* identifies the legal origin of the company law or commercial code of each country; equals one for English common law economies, and zero otherwise (La Porta et al., 1998). *RIGHTS* and *JUDICIAL* capture the quality of the legal environment based on "antidirector rights" and "efficiency of the judicial system" indices, respectively, from La Porta et al. (1998). Higher values of each index represent stronger legal protection and enforcement of investors' rights. *RIGHT WING* is a dummy variable equal to one when the executive in the country is identified as right or central wing, and zero otherwise. *GOVERNMENT STABILITY* is a measure of the credibility and ability of the government to carry out declared economic reforms and privatization based on the International Country Risk Guide's index of government stability, with higher scores indicating better credibility. *GINI* is an assessment of income inequality, proxied by the United Nation's Gini Coefficient, with higher scores indicating more unequal income distribution in the country. *LGDP* stands for the natural logarithm of GDP per capita. *LATE* is a dummy variable equal to one if the privatization transaction occurs after the sample median privatization year (1995), and zero otherwise. *SIZE* stands for the natural logarithm of the size of the privatization issue. All regressions include unreported industry controls. Beneath each estimate is reported the z-statistic based on robust standard errors adjusted for clustering by firm. The superscripts asterisks ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively, one-tailed when directional predictions are made, and two-tailed otherwise.

TABLE 8
Sensitivity Tests

Variable	Prediction	Transactions before 1990 are excluded	Transactions for the years 1994 and 1998 are excluded	Large transactions are excluded	Telecom and utilities transactions are excluded	Alternative Disclosure Proxy	Country-level Liability Standards#1	Country-level Liability Standards#2	Control for Trust	Control for the Role of the State in the Economy	Control for Stock Market Size
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<i>DISCLOSURE</i>	(+)	-0.012 (-0.02)	0.199 (0.30)	-1.000* (-1.65)	-0.888 (-1.43)		-0.865 (-1.34)	0.967* (1.76)	1.774** (2.43)	1.284** (2.25)	1.026* (1.56)
<i>CIFAR</i>	(+)					-0.079*** (-7.19)					
<i>SUE AUDITOR</i>	(+)	0.980*** (2.85)	0.970** (2.44)	0.892** (2.50)	1.373*** (3.47)	1.417*** (4.24)	1.700*** (2.88)		1.439*** (3.11)	1.629*** (4.61)	1.372*** (3.95)
<i>SANCTION AUDITOR</i>	(+)	1.532*** (3.95)	1.462*** (3.28)	1.783*** (4.37)	1.685*** (3.90)	1.710*** (4.45)	3.362*** (5.10)		1.850*** (3.22)	2.060*** (4.61)	1.693*** (4.00)
<i>SUE_ALT</i>	(+)						-1.078** (-2.04)	0.020 (0.06)			
<i>SANCTION_ALT</i>	(+)						-3.151*** (-4.03)	-0.741 (-1.69)			
<i>COMMON</i>	(+)	0.605*** (2.58)	0.409 (1.62)	0.875*** (3.49)	0.745*** (2.96)	1.302*** (5.36)	0.395* (1.65)	0.596** (2.57)	-0.616* (-1.79)	-0.102 (-0.46)	0.773*** (3.18)
<i>RIGHT WING</i>	(-)	-1.468*** (-10.14)	-1.470*** (-9.05)	-1.635*** (-10.91)	-1.688*** (-10.90)	-1.475*** (-9.61)	-1.521*** (-9.95)	-1.543*** (-10.69)	-1.376*** (-7.24)	-1.131*** (-7.68)	-1.412*** (-9.43)
<i>GOVERNMENT STABILITY</i>	(-)	-0.151*** (-3.20)	-0.164*** (-3.72)	-0.143*** (-3.24)	-0.129*** (-2.69)	-0.111** (-2.24)	-0.127*** (-3.00)	-0.151*** (-3.64)	-0.101* (-1.90)	-0.097** (-2.11)	-0.099** (-2.15)

<i>GINI</i>	(-)	-0.009 (-1.14)	-0.014 (-1.55)	0.000 (-0.02)	-0.005 (-0.53)	-0.040*** (-4.29)	-0.005 (-0.56)	-0.023*** (-3.14)	-0.038*** (-2.71)	-0.003 (-0.36)	-0.011* (-1.41)
<i>LGDP</i>	(+)	0.257*** (5.19)	0.273*** (5.12)	0.268*** (5.66)	0.307*** (6.04)	0.276*** (5.30)	0.213*** (4.07)	0.286*** (5.70)	0.175*** (2.83)	0.086* (1.67)	0.227*** (4.68)
<i>LATE</i>	(?)	-0.134 (-0.66)	-0.331* (-1.65)	-0.308 (-1.53)	-0.305 (-1.41)	-0.248 (-1.13)	-0.286 (-1.50)	-0.245 (-1.34)	-0.407* (-1.71)	-0.377* (-1.88)	0.022 (0.11)
<i>TRUST</i>	(?)								-3.925*** (-4.47)		
<i>ROLE OF THE STATE</i>	(?)									3.718*** (10.82)	
<i>STOCK MARKET SIZE</i>	(?)										-1.916*** (-7.16)
<i>SIZE</i>	(+)	0.237*** (7.10)	0.201*** (5.46)	0.189*** (5.56)	0.215*** (6.20)	0.313*** (8.09)	0.265*** (7.78)	0.227*** (6.88)	0.324*** (7.65)	0.338*** (8.86)	0.282*** (7.84)
<i>INTERCEPT</i>	(?)	-3.122*** (-4.57)	-2.943*** (-4.13)	-2.938*** (-4.43)	-3.510*** (-5.06)	2.353** (2.33)	-1.909*** (-2.84)	-1.861*** (-2.69)	-1.956** (-1.99)	-4.983*** (-6.93)	-3.548*** (-5.04)
<i>INDUSTRY CONTROLS</i>		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Pseudo R^2		18.3%	18.2%	17.2%	18.9%	22.0%	19.9%	16.6%	20.6%	23.7%	22.2%
N		1,467	1,193	1,421	1,268	1,403	1,547	1,547	1,220	1,547	1,517

Notes: This table presents logistic estimation results for the impact of disclosure standards and auditor discipline on the decision about whether to privatize through a share-issue privatization (dependent variable). *DISCLOSURE* measures the quality of disclosure requirements based on a disclosure standards index that captures the regulation of information available to minority investors. *SUE AUDITOR* is an index that measures the burden of proof against auditors in civil lawsuits to recover losses due to misleading audited financial information accompanying the prospectus. *SANCTION AUDITOR* is an index of criminal sanctions applicable to the auditor (or its officers) when the financial statements accompanying the prospectus omit material information. Derived from La Porta et al.'s (2006), the three indices range between 0 and 1 with higher values indicating better quality of disclosure standards and the surrounding auditing environment. *COMMON* identifies the legal origin of the company law or commercial code of each country; equals one for English common law economies, and zero otherwise (La Porta et al., 1998). *RIGHT WING* is a dummy variable equal to one when the executive in the country is identified as right or central wing, and zero otherwise. *GOVERNMENT STABILITY* is a measure of the credibility and ability of the government to carry out declared economic reforms and privatization based on the International Country Risk Guide's index of government stability, with higher scores indicating better credibility. *GINI* is an assessment of income inequality proxied by the United Nation's Gini Coefficient, with higher scores indicating more unequal income distribution. *LGDP* stands for the natural logarithm of GDP per capita. *LATE* is a dummy variable equal to one if the privatization transaction occurs after the sample median privatization year (1995), and zero otherwise. *SIZE* stands for the natural logarithm of the size of the privatization issue. In regression (5), we replace *DISCLOSURE* with *CIFAR*, which is an index representing the mean number of 90 items included in the annual reports of a sample of domestic firms produced by the Center for International Financial Analysis and Research and reported by La Porta et al. (2006). In regressions (6) and (7), we include *SUE_ALT* and *SANCTION_ALT* to control for civil and criminal litigation against issuers/directors and distributors based on the average of the sub-indices reported by La Porta et al. (2006). In regression (8), we control for social capital proxied by the variable *TRUST*, which is a measure of trust among strangers, derived from La Porta et al. (2006). In regression (9), we include the fraction of the assets of the top 10 banks in a given country owned by the government of that country in 1995 to control for the role of the state in the economy, derived from La Porta et al. (2002a). In regression (10), we control for stock market size, measured with the ratio of total market capitalization of all domestic listed firms scaled by GDP for the year, using data from the World Bank (2004). All regressions include unreported industry controls. Beneath each estimate is reported the z-statistic based on robust standard errors adjusted for clustering by firm. The superscripts asterisks ^{***}, ^{**}, and ^{*} denote statistical significance at the 1%, 5%, and 10% levels, respectively, one-tailed when directional predictions are made, and two-tailed otherwise.
