Do Foreigners Invest Less in Poorly Governed Firms?

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Abstract

As domestic sources of outside finance are limited in many countries around the world, it is important to understand factors that influence whether foreign investors provide capital to a country's firms. We study 4,409 firms from 29 countries to assess whether and why concerns about corporate governance result in fewer foreign holdings. We find that foreigners invest less in firms that reside in countries with poor outsider protection and disclosure *and* have ownership structures that are conducive to governance problems. This effect is particularly pronounced when earnings are opaque, indicating that information asymmetry and monitoring costs faced by foreign investors likely drive the results.

Keywords: Corporate governance, Foreign investment, Ownership structure, Information flow, Earnings management, Shareholder base, Home bias

JEL Classifications: D82, F30, G14, G15, G32, G34, K22, M41

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> "The fundamental issue for everyone involved in financial markets today, regardless of company or country, must be to maintain high standards – legal, regulatory, and ethical – that breed trust and confidence. … Capital will flee environments that are unstable or unpredictable – whether that's a function of lax corporate governance, ineffective accounting standards, a lack of transparency, or a weak enforcement regime. Investors must see for themselves that companies are living up to their obligations and embracing the spirit underpinning all securities laws." [William Donaldson, Chairman of the U.S. Securities and Exchange Commission, 2005].

Introduction

Domestic sources of outside finance are limited in many countries around the world (Giannetti and Koskinen, 2007). In response, many capital markets have been liberalized and foreign capital has become an increasingly important source of finance (Bekaert, Harvey and Lumsdaine, 2002). Given the growing significance of foreign financing and the fact that access to foreign capital may well be uneven across firms and countries, it is important to understand more fully the factors that make investors shy away from providing capital to foreign firms.

Poor corporate governance is one factor that draws considerable attention from outside investors and regulators. Institutional investors frequently claim that they avoid foreign firms that are poorly governed.[1] Similarly, as the quote above makes clear, regulators are concerned that weak governance and low transparency hinder foreign investment and impede financial development. At the same time, outside investors who fear governance problems and expropriation by insiders can reduce the price they are willing to pay for a firm's shares. As a result of price protection, even poorly governed firms should offer an adequate return, raising the questions of whether and why governance concerns manifest themselves in fewer holdings by foreign outside investors.

We examine these questions for a sample of 4,409 firms from 29 countries for which we have comprehensive data on foreign holdings by U.S. investors in 1997. We present new evidence that U.S. investors, which comprise about half of all foreign portfolio investment worldwide, do in fact hold fewer shares in foreign firms where managers and their families have high levels of

control and hence ownership structures that are more conducive to expropriation by controlling insiders. We argue that information problems faced by U.S. investors play a central role in this result. Consistent with this idea, we show that the negative relation between insider control and foreign holdings is more pronounced in countries with weak disclosure rules and poor shareholder protection. Similarly, in these countries, U.S. holdings are lower for firms that engage in more earnings management, and are further reduced when firms with opaque earnings also have high levels of insider control.

It is often argued that foreign investors are at an informational disadvantage relative to local investors (Brennan and Cao, 1997; Kang and Stulz, 1997; Choe, Kho, and Stulz, 2005). Building on this notion, we advance the idea that information asymmetries between foreign and local investors are particularly pronounced with respect to the evaluation of a firm's governance structure and the scope for expropriation by controlling insiders. In many countries, business transactions, financing arrangements, and, ultimately, corporate governance are shaped not by arm's length dealings, but by relationships among a tightly knit group of controlling families and managers. Understanding these relationships and, in particular, assessing whether they pose a threat to outside investors requires among other things an intricate knowledge of political connections, banking relations, family social status, connections among the business elite, all of which foreigners are less likely to have.

These information asymmetries can influence the investment decisions of foreign investors in two ways. First, they give rise to an adverse selection problem when investors transact in foreign markets (Akerlof, 1970; Milgrom, 1981).[2] As a result, investors underinvest in foreign stocks because they do not expect to receive a fair return based on the prices at which locals would transact. Consistent with this reasoning, Choe, Kho, and Stulz (2005) find that for Korean stocks prices move more against foreign investors than domestic investors before trades. Second, once an investment is made, firms with suspect governance structures require more monitoring than well-

governed firms and this is likely to be more costly for foreign investors. In addition, poorly governed firms often actively hide the extent of their governance problems and expropriation activities, for instance, by providing opaque financial statements and managing earnings (e.g., Fan and Wong, 2002; Leuz, Nanda and Wysocki, 2003). Again, local investors are probably better equipped to unravel these activities, resulting in lower monitoring costs. Finally, understanding insider relationships is arguably more important in countries where outside investors are poorly protected, and certainly more costly in countries where firms provide little information publicly. As a result, we do not expect investors' governance concerns to matter to the same degree everywhere.

Stulz (1981) shows in an equilibrium model that out-of-pocket costs incurred in holding foreign assets can induce investors to underweight foreign securities. While Stulz (1981) models these costs as a tax that equally affects all foreign holdings of domestic investors, his basic insight can be extended to a situation where information costs related to governance differ across investors, firms, and countries (see Cooper and Kaplanis (1986, 2000) for such extensions).[3] These papers form the theoretical basis of our argument that, in equilibrium, governance structures that are particularly taxing with respect to their information and monitoring costs can manifest themselves in lower foreign holdings.

To test these hypotheses, we obtain U.S. holdings by merging comprehensive security-level data on all U.S. investors' positions in non-U.S. equities from the 1997 U.S. Treasury and Federal Reserve Board benchmark survey. With respect to governance, we construct nominal and relative proxies indicating the extent to which managers and their families are in control of firms. We do so for two reasons. First, insider control is often difficult to evaluate for outsiders: it could be benign but it may also be a source of investor concern. The opaque nature of insider control is what creates information problems for foreign investors (relative to locals), which is precisely what we need for our main argument. Second, managers and families around the world generally obtain control by

owning far less than 100% of a firm's cash flow rights. These controlling insiders have not only the ability but also an incentive to expropriate outside investors (Jensen and Meckling, 1976; La Porta, Lopez-de-Silanes, and Shleifer (hereafter LLS), 1999). Consistent with this notion, Claessens, Djankov, Fan, and Lang (2002) and Lins (2003), among others, show that high levels of managerial and family control are associated with lower firm values, particularly when external shareholder protection is poor.[4] Thus, our control proxies are likely to indicate ownership structures that, at least in principle, are more conducive to governance problems and expropriation of outside investors. We obtain our ownership and control data from Claessens, Djankov, and Lang (2000) (Japan), Faccio and Lang (2002) (Western Europe), and Lins (2003) (emerging markets) and combine these datasets in a consistent fashion.

As there can be a host of reasons why foreign investors avoid or seek stocks from a particular country, such as the degree of market integration, benefits from diversification, transaction costs, restrictions on capital flows, proximity, and language, we control for country-fixed effects in our tests. Thus, we analyze which stocks U.S. investors choose *within* a given country. Because poor institutions are likely to exacerbate the information problems faced by foreign investors, we also partition our sample using measures from LLS (2006) that capture a country's disclosure regulation and outside investor protection. We expect holdings effects to be particularly pronounced in countries with weak institutions.

Consistent with this prediction, we find strong evidence that U.S. investors hold significantly fewer shares in firms with high levels of managerial and family control when these firms are domiciled in countries with weaker disclosure requirements, securities regulations, and outside shareholder rights, or in code-law countries. In contrast, firms with substantial managerial and family control do not experience less foreign investment when they reside in countries with extensive disclosure requirements and strong investor protection. We interpret this evidence as

suggesting that poor firm-level governance deters foreign portfolio investment in countries with poor investor protection and low transparency.

It is important to note that we obtain these results after accounting for a firm's free float. Thus, our findings are not simply mechanical in that higher insider control implies that there are fewer shares for outside investors, be they foreign or local. The results also do not merely reflect the concentration of ownership. It is managerial and family control that matters for foreign investment; concentrated holdings by other types of blockholders are insignificant in our models. Moreover, we find that the relation between foreign investment and insider control is non-linear: foreigners reduce their holdings only when insiders' control rights exceed a threshold beyond which they effectively control the firm, consistent with our predictions. Finally, our regressions are robust to momentum and liquidity effects and include factors closely linked to firms' market values, such as the book-to-market ratio, MSCI index membership, and cross-listing. Thus, our findings hold even after controlling for valuation differences across firms, which among other things could reflect differences in the level of insider control.

Our results across countries with different institutions are consistent with the interpretation that, for foreign investors, information problems for firms with potentially problematic governance structures play an important role. Stringent disclosure requirements make it less costly to become informed about potential governance problems. They level the playing field among investors making it less likely that locals have an information advantage. Strongly enforced minority shareholder protection reduces the consumption of private control benefits and thus decreases the importance of information regarding these private benefits. In contrast, low disclosure requirements and weak investor protection exacerbate information problems and their consequences.

To provide another test of whether information problems are at the core of the holdings results, we directly use proxies for poor information flows to outsiders. Leuz, Nanda, and Wysocki

(2003) and Haw, Hu, Hwang, and Wu (2004) show that earnings management is more pervasive in countries with weak investor protection and in firms where ownership structures are more conducive to outsider expropriation.[5] These prior findings support the notion that information flows to outside investors are particularly poor in countries and firms with weak governance.

To illustrate the role of information for our foreign holdings results, we first replace the control-based variables with firm-level earnings management proxies and re-estimate our models to see whether these proxies yield similar results. Consistent with our main argument, we find that foreign holdings of U.S. investors are negatively related to the presence of firm-level earnings management in countries with weak disclosure requirements, securities regulation and outside shareholder protection. Next, we introduce an interaction between earnings management and insider control to partition the sample into cases where insider control is more likely to be a problem (indicated by high levels of earnings management) and cases where insider control is more likely to be benign. As predicted, we find that, in countries with low securities and disclosure regulation, foreigners shy away the most from firms where insiders are in control and earnings management is high. These results lend further credence to our interpretation that information problems associated with poor governance deter foreign investment.

Our paper makes several contributions. First, we provide new evidence for a large sample across many countries that foreigners do indeed invest less in poorly governed firms that reside in countries with weak legal institutions. As discussed in more detail in the next section, prior studies on foreign portfolio investment are largely limited to particular recipient countries and have produced mixed results. Second, our result that governance matters primarily in countries with poor investor protection may explain why studies based on U.S. firms show relatively weak portfolio holding effects. In the U.S., shareholders are generally well protected and governance differences are comparatively small. This is not true in many countries around the world, and is one reason why

we study the effects internationally. Third, we use firm- and country-level proxies for poor information flows to provide evidence that the governance effect on foreign holdings stems at least in part from information problems, shedding some light on the mechanism for our main finding.

The remainder of the paper is organized as follows. Section 1 discusses the empirical literature on international portfolio holdings, particularly as it relates to information and governance problems. Section 2 describes our data and sample selection. Section 3 presents the empirical findings. Section 4 presents robustness checks. Section 5 concludes.

1. Discussion of Related Literature

Perhaps the closest precursor to our study is Dahlquist, Pinkowitz, Stulz, and Williamson (2003) (hereafter DPSW). The main point of DPSW is that, in international portfolio allocation studies, foreign investment should be scaled by free float (the percentage of shares not closely held), and not by market capitalization, to account for the percentage of investable shares. We follow this insight. In addition, DPSW provide a series of country-level and firm-level tests of the relationship between corporate governance and foreign investment. At the country-level, DPSW find that of a battery of country-level governance variables, only a proxy for government expropriation risk matters; they conclude that 'for a given supply of shares, U.S. investors do not invest less in a country because minority shareholders are less well protected or because laws are not enforced' (page 104). DPSW also conduct some firm-level tests for a single country using investment in Swedish firms. In those tests, they find no evidence that firm-level ownership impacts foreign investment above and beyond the reduction-in-supply effect of reduced float. In contrast, another firm-level study of Swedish firms by Giannetti and Simonov (2006) finds that foreign investors are less likely to invest in a Swedish firm if its controlling shareholders have greater incentives to expropriate outside investors.

Other studies that analyze the effect of governance on foreign investment provide a mixed picture. Chan, Covrig, and Ng (2005) study country-level mutual fund holdings and find that international investors avoid countries with a lower government expropriation risk, which contradicts the results in DPSW. In contrast to Chan et al. (2005), Giannetti and Koskinen (2007), using the same source data on holdings, find that funds put a larger share of their assets in countries with better scores for private enforcement of investor rights. Aggarwal, Klapper, and Wysocki (2005) find that U.S. mutual funds overweight emerging markets that have stronger accounting standards, shareholder rights and legal frameworks. They find that U.S. mutual fund investment in a firm (indicated by a dummy) is positively related to the firm's accounting quality, but they also report that this result goes away when holdings are measured relative to MSCI index weights. Gelos and Wei (2005) find that less opaque emerging market countries have greater weights in mutual funds' portfolios. Ferreira and Matos (2007) find that institutions invest more in countries with strong governance measures and invest less in firms with a larger proportion of shares that are closely held. A common feature of the above studies is that they measure foreign portfolio investment relative to firms' total equity market capitalization, rather than relative to the percentage of shares that are not closely held, as suggested by DPSW.

While extant country-level regressions such as those in DPSW (2003) do not find a link between governance and foreign investment once a firm's free float is controlled for, these findings do not necessarily imply that such a link does not exist. It is possible that foreign investors overweight firms for which governance is expected to be strong and underweight firms with weak governance, resulting in no effect in the aggregate. Moreover, it is possible that these within-country effects occur only in some, but not all countries. As discussed in the introduction, any potential foreign investor response to poor governance is likely to be muted in countries with strong investor protection and governance systems.[6] This logic could explain why firm-level studies on

foreign holdings, such as those conducted for Sweden (DPSW, 2003; Giannetti and Simonov, 2006), and studies on institutional investment and corporate governance based on U.S. firms (e.g., Bushee, Carter and Gerakos, 2006) produce weak or mixed results.

Alternatively, it is conceivable that investors sufficiently discount shares of poorly governed firms so that all investors receive a fair return, and hence that there is no holdings effect. La Porta, Lopez-de-Silanes, Shleifer, and Vishny (hereafter LLSV) (2002), Lins (2003), Nenova (2003), Doidge (2004), Dyck and Zingales (2004), Klapper and Love (2004), Lang, Lins, and Miller (2004), and Kalcheva and Lins (2007) provide evidence consistent with the notion that outside investors, in aggregate, price protect against expropriation, particularly in countries with poor institutions. However, the key question for our analysis is whether this price discount is sufficient for foreign investors, considering that they face information problems and monitoring costs beyond those of domestic investors.

In sum, a more thorough understanding of the relation between corporate governance and foreign investment calls for tests that discriminate, within country, based on firm-level governance proxies and do so for a wide range of countries to exploit country-level variation in corporate governance and transparency. We conduct such tests in this paper. Our investigation is unique because we combine data on ownership structures and insider control rights for a large number of firms with a comprehensive dataset on foreign U.S. holdings for these firms. Prior empirical work on this topic has been hampered by data limitations because firm-level data on governance and foreign holdings are hard to obtain. In addition, our paper illustrates that it is important to consider both firm and country factors in explaining whether and why foreign investors shy away from poorly governed firms.

2. Sample Selection and Variable Construction

2.1 A Firm-Level Measure of Foreign Holdings

We design our tests to investigate foreign holdings through the eyes of U.S. investors. In particular, we use a mandatory and confidential benchmark survey conducted by the U.S. Treasury Department and the Federal Reserve Board of the holdings of all U.S. investors as of December 1997 to obtain our foreign investment proxy: the percentage of a firm's free float that is held by U.S. investors. While we refer the reader to the Griever, Lee, and Warnock (2001) primer for a detailed discussion of this survey, it is important to note a few of its features. First, it covers all U.S. investors, not just institutions, and all foreign equities, not just those that trade in U.S. markets. By aggregating the security-level data, it forms the official U.S. estimate of the aggregate foreign holdings of U.S. investors. Second, data quality is very high because reporting to the survey is mandatory (there are substantial penalties for noncompliance) and its usage as the official national estimate subjects the data to extensive cross-checks by the Federal Reserve Bank of New York.[7]

A more ideal dataset would be a mapping of security-level investment from each country into the firms of all other countries, but such a dataset does not exist because so few countries collect security-level cross-border holdings data. Recently, security-level datasets on *institutional* cross-border holdings have emerged, but these datasets suffer from two shortcomings: (i) reporting requirements for institutions vary greatly across countries and (ii) such data can only inform us about holdings *through* a country's institutions (for example, through a Swiss mutual fund) but cannot identify the ultimate holders (who might, in this example, be Austrian). Having only the holdings of U.S. investors, as we do, is clearly a limitation as well, but in return we obtain data that are of the highest quality. Moreover, U.S. investors are collectively very important; in aggregate, they hold 47% of the world's international equity positions.[8]

It is important to note that, unlike many papers in this literature, we scale U.S. holdings by a firm's *free float,* defined as the percentage of shares not held by 5 percent or greater blockholders (see also DPSW, 2003). Scaling by market capitalization – the usual technique – could

mechanically produce a negative relation between governance and foreign holdings, given that our governance measures are derived from insider holdings. Firms where a family or management group has control would have fewer shares available to outside investors and would naturally have less outside investment. Scaling by float is more conservative and avoids potentially hardwiring the results.

2.2 Firm-level Corporate Governance Variables

Our main argument is that information problems are likely to play a major role, if in fact foreign investors avoid poorly governed firms. Specifically, we maintain that foreign investors are at an informational disadvantage relative to local investors and that these information asymmetries are particularly pronounced when it comes to evaluating firms' governance and ownership structures. The idea is that, in many countries around the world, financing arrangements, ownership structures and corporate governance are often complex and relatively opaque, and families control many businesses. These arrangements and control structures often arise in response to poorly protected property and investor rights (e.g., LLSV, 1997; 1999). Understanding these control structures and the family motives requires intricate social and institutional knowledge, which many foreigners lack or find costly to obtain. As a consequence, firms with potentially problematic governance structures are particularly taxing to foreign investors in terms of their information and monitoring costs.[9]

Given these arguments and our hypotheses, we construct proxies indicating ownership structures that are likely to be costly to evaluate and, at least in principle, more conducive to governance problems.[10] We obtain ownership and control structure data for Western European firms from Faccio and Lang (2002); for emerging market firms from Lins (2003); and for Japan from Claessens, Djankov, and Lang (2000). Ownership and control data for Japanese and emerging market firms are from the 1995/1996 period and those from Western Europe range from 1996 to

1999, with the majority of sample observations occurring in 1996. We confine our analysis to non-financial firms to maintain consistency across the three ownership and control structure datasets. Claessens, Djankov and Lang (2000), Faccio and Lang (2002), and Lins (2003) report ownership and control statistics for various types of blockholders. For instance, all three studies report the percentage of total ultimate control rights held by Family/Management, Government, Widely-Held Corporations, Widely-Held Financials, and Miscellaneous (which includes ownership by Trusts, Cooperatives, Foundations, Employees, etc.).

In constructing our ownership-based governance proxies, we focus on managerial and family control rights because it is the management group (and their families) that actually makes the operational and financial decisions of a firm and it is these decisions that potentially expropriate outside investors. We seek to construct measures indicating that a family or a firm's management is effectively in control of the firm because, all else equal, insiders' ability to expropriate minority shareholders will be highest when their control of a firm cannot be challenged by other blockholders or groups of shareholders (e.g., institutional investors).

Because effective managerial control depends on the control rights held by management as well as the control rights held by outside blockholders, we use both nominal and relative measures of effective managerial control in our analysis. The *nominal* one is the percentage of control rights held by the management group and its family. We use this measure two ways. First, we use it stand-alone so that its effect is linear, with the idea that higher levels of managerial control correspond to more effective control of a firm. Second, we test for a non-linear relation on the premise that when insider control is low, additional ownership may have positive incentive alignment effects, but then give way to negative effects, as insider control and entrenchment increases (e.g., Morck, Shleifer Vishny, 1988; McConnell and Servaes, 1990). Our *relative* measures attempt to capture the entrenchment side of the relation by using an increasingly strict definition of insider control. In

many cases, it is not necessary to own a majority stake to have effective control and to prevent interference by other blockholders. The three relative measures of effective managerial control, listed from least stringent to most stringent, are indicator variables set equal to one when Family/Management control rights exceed: 1) the median level of Family/Management control rights of all sample firms in the country; 2) the median level of Family/Management control rights of all sample firms in the country as well as the control rights held by any other blockholder in the firm; or 3) 50% of the total outstanding shares of a firm.

In our models, we also analyze the importance of *non-management* blockholdings (Other Blockholders) by using the percentage of control rights held and an indicator variable for non-management control above 50%. We include these tests to make sure that we do not simply pick up the effect of concentrated holdings, and that it is, in fact, managerial and family control that drives our findings.

We note that, in general, our firm-level governance proxies also capture a separation of managerial control and cash flow rights. To the extent that effective managerial or family control can be established by owning fewer than 100% of the cash flow rights, insiders' control and cash flow rights are separated. Generally, managerial control of 51% of a firm's shares confers unequivocal control of the firm and hence results in a 49% wedge between control and cash flow rights. Given the lack of active corporate control markets in most sample countries as well as laws that grant special privileges to large but not necessarily majority blockholders in some countries (e.g., Germany), effective control can often be obtained with substantially less than 51% control, driving a further wedge between control and cash flow rights. But even in the simple case where a controlling manager owns 51% of the shares and diverts one dollar from the firm for personal gain, she bears only 51 cents of the cost, which gives rise to various well-known agency problems

(Jensen and Meckling, 1976). In this sense, our proxies capture not only the ability but also the incentives of controlling insiders to consume private control benefits at the expense of outsiders.[11]

To support this claim for our sample, we analyze (in untabulated regressions) whether our ownership-based governance proxies are associated with a valuation discount similar to those shown in Claessens et al. (2002), LLSV (2002), Lins (2003), Lang, Lins, and Miller (2004), and Kalcheva and Lins (2007). Specifically, we estimate models of Tobin's Q regressed on managerial and family control rights as well as controls for size, leverage, growth opportunities and industry- and country-fixed effects. Similar to prior work, we find that insider control is negatively related to Q in countries with low investor protection and weak securities regulation. Furthermore, non-management blockholdings are not related to Q in either low or high protection countries. This evidence supports our interpretation of the insider-control-based governance proxies.

Finally, we note that data limitations preclude us from computing an explicit wedge between control and cash flow rights. Faccio and Lang and Claessens et al. report the separation of ownership and control for the largest blockholder of their sample firms (which may not be the Family/Management group), while Lins reports this measure for all holdings of the Family/Management group (which may not be the largest blockholder). These limitations are unlikely to be consequential because, as discussed before, control-based proxies typically capture a wedge between control and cash flow rights and are shown to be associated with a valuation discount when external shareholder protection is poor. Relative to the wedge that is implicit in the construction of the control proxies, any further separation of control from cash flow rights via pyramids and superior voting shares is likely to be a second order effect.[12]

2.3 Country-level Corporate Governance and Disclosure Variables

Our hypothesis focuses not only on potential governance problems at the firm level, but also on country-level differences in governance and information flow. Disclosure rules make it easier for

all investors to obtain information to evaluate firms' governance structures, while well-enforced governance rules and investor protection make knowledge about private control benefits and expropriation less important. Thus, we expect that information problems faced by foreign investors are more prevalent in countries with low disclosure requirements and poor and weakly enforced governance rules and investor protection.

We use proxies for weak disclosure and governance from the international literature on stock market development and corporate governance. First, we employ the Disclosure Requirement values reported in Table 2 of LLS (2006). We differentiate between low and high disclosure countries based on whether a country is below or above our sample median score of 0.75 on the Disclosure Requirement measure. Second, we follow Hail and Leuz (2006) and combine the LLS (2006) measures of Disclosure Requirements, Liability Standards, and Public Enforcement into a measure called Securities Regulation. This measure is a comprehensive indicator of disclosure rules and their associated enforcement, both of which should serve to reduce the private benefits of control and thus reduce the importance of information regarding these benefits. Our low Securities Regulation subsample consists of countries that score below our sample median score of 0.58. Third, as an institutional summary measure and a proxy for shareholder protection, we classify non-English legal origin countries as low protection because LLSV (1997, 1998) suggest that countries with a traditional English legal origin tend to provide stronger investor protections. Fourth, we use the updated index for Antidirector Rights in LLS (2006) and classify countries with Antidirector Rights below 4 as low protection countries and those with scores equal to or above 4 as high protection countries.

2.4 Sample Selection and Summary Statistics

We combine the firm-level control structure data presented in Faccio and Lang (2002), Lins (2003), and Claessens, Djankov and Lang (2000), resulting in 6974 firms. We exclude 976 financial

firms. We obtain financial variable data (used in regressions) and float data from the Worldscope database for the year-end closest to December 31, 1997 as our U.S. holdings data are from that point in time and it closely corresponds to the date of our ownership and control data; these data are not available for 1587 firms.[13] Our final sample consists of 4409 firms.

Table 1 provides summary statistics for our sample based on a firm's country of domicile. The table shows that our sample comprises 29 countries and has a large proportion of firms from the U.K. and Japan. In our sample, U.S. investors hold on average 6.4% of the available float and our firms are quite large overall, with mean assets of 1.75 billion U.S. dollars.[14] Columns 4 through 7 detail blockholder statistics for our sample. For the median firm, Family/Management group control is 13%, with wide variation across countries. The median of the control rights held by blockholders other than the Family/Management group is 5%, with a similarly wide variation in this parameter across countries. The table shows that the Family/Management group is by far the dominant type of controlling blockholder. Family/Management group control rights exceed those of any other blockholder for 53% of the sample[15] and exceed 50% of total control rights in 22% of sample firms. These statistics also imply that, when the Family/Management group is in full control of the firm, there typically is a substantial wedge between control and cash flow rights, given that the control rights reported in Table 1 are an upper bound on the group's cash flow rights.

3. Empirical Tests and Results

3.1 Construction of the Empirical Model

Firms with substantial insider holdings will almost surely have narrower total shareholder bases, as fewer shares are available to outside investors. We want to assess whether there is an additional effect of corporate governance on the shareholder base above and beyond this reduction-in-supply effect. Therefore, we exclude shares tied up by insiders and other blockholders and define our foreign investment proxy as the proportion of firm *i*'s free float that is held by U.S. investors:

$$USInvestment_i \equiv \frac{USHoldings_i}{Float_i} \quad (1)$$

While it is crucial to account for a firm's float in our tests, scaling by float mechanically biases our results *against* finding a significant negative relation between Family/Management control and U.S. investment and may even induce a positive relation. This bias occurs because an increase in Family/Management control reduces the available float. That is, U.S. investment as a percentage of float increases, even if the U.S. holdings stay constant. Thus, if we find that Family/Management control is negatively related to U.S. ownership as a share of float, i.e., over and above the supply effect, the inference that foreign investors shy away from firms with poor expected governance is particularly robust. Conversely, any positive effect between U.S. investment and our blockholder control variables has to be interpreted cautiously. We illustrate this effect in Section 4 by also providing results where we scale U.S. holdings by market capitalization, but control for free float on the right-hand side of our model.

The primary variables of interest in our analyses are the ownership-based governance proxies. Before assessing the effects of these variables, it is important to control for a firm's size, leverage, growth prospects, and international presence, because prior studies show that these factors are related to portfolio investment levels. Kang and Stulz (1997) and Dahlquist and Robertsson (2001) document that foreign investors in Japan and Sweden avoid small, highly levered stocks that do not have an international presence, possibly because information about them is less readily available. Consistent with this interpretation, Coval and Moskowitz (1999) find that the local bias is greater for such firms. Foreign investors in Japanese and Swedish equities also show a preference for growth stocks.

We control for *Size*, calculated as the log of total assets converted to thousands of U.S. dollars, and for *Leverage* using the ratio of total debt to total assets. Highly levered firms are more financially vulnerable and, thus, might attract less outside investment. We include a cross-listing

dummy variable, *XLIST*, which takes the value of one if the firm is listed on a U.S. exchange, because cross-listed firms have more of an international presence and having an ADR lowers the direct and indirect barriers to international investment for U.S. investors.[16] For similar reasons, we also control for a firm's inclusion in the MSCI World Index. We note that including these control variables likely makes it harder to find a relation between governance and foreign holdings because U.S. cross listing, MSCI index membership, and financial leverage are at least indirectly related to a firm's ownership and governance structure (e.g., Doidge, Karolyi, and Stulz, 2004; Doidge, Karolyi, Lins, Miller and Stulz, 2007; Harvey, Lins, and Roper, 2004). Thus, these variables may capture some of the governance effects on holdings.

We include two proxies for growth in our models: *Book-to-market*, calculated as the book value per share over the year-end market price; and *Dividend Yield,* calculated as dividends per share over the year-end market price. A preference for growth stocks could be reflected in a tendency to hold low book-to-market and dividend yield stocks. If U.S. investors prefer growth stocks and these two measures capture growth opportunities, we would expect to see a negative relation between each measure and U.S. holdings. However, low dividend payments could also reflect governance problems (LLSV, 2000; Kalcheva and Lins, 2007; Pinkowitz, Stulz, and Williamson, 2006). Because investors often favor certain industries, we include industry-fixed effects using the groupings in Campbell (1996). We include country-fixed effects in our models because singular country-level variables for disclosure, legal origin, etc., are unlikely to capture all relevant institutional differences across countries (e.g., both Hong Kong and the U.K. have English legal origin, yet their ownership structures are very different).

In selecting an appropriate modeling approach, we must recognize that U.S. investors do not invest in each and every foreign stock. That is, $USInvestment_i$ will be zero with positive probability (roughly 25 percent of the time in our sample) but can also take strictly positive values (the other 75

percent of our sample). The non-trivial proportion of firms with zero U.S. holdings is what Wooldridge (2002) describes as a corner solution outcome. Such data can be analyzed using a standard Tobit model. Specifically, for a foreign firm *i*, our statistical model is

$$y_i^* = x_i\beta + u_{i,} \qquad u_i \mid x_i \sim Normal(0, \sigma^2) \tag{2}$$

$$y_i = \max(0, y_i^*) \tag{3}$$

where, for ease of notation, y_i denotes U.S. investor holdings in firm *i* as a percentage of float (*USInvestment*$_i$). The vector of explanatory variables, x_i, contains the above-mentioned control variables (*XLIST*, *MSCI*, *Firm Size*, *Leverage*, *Book-to-Market*, *Dividend Yield*, Country and Industry Controls) and one of our control-based governance variables (described in Section 2.2). In all of our reported results, standard errors are adjusted to correct for heteroskedasticity and clustered to account for the correlation within country/industry groups.[17]

3.2 Foreign Holdings and Firm-level Corporate Governance: Results for the Full Sample

An important contribution of our paper is that we conduct tests on the relation between corporate governance and foreign portfolio investment that discriminate within country based on firm-level governance parameters and do so for a wide range of countries.

Table 2 reports the coefficients of Tobit models estimated on our full sample of 4409 firms from 29 countries. In Model 1, our nominal measure of Family/Management control is significantly negatively related to U.S. investment, after controlling for other factors. In Model 2, we test for a non-linear relation between U.S. investment and insider control by also including the square of Family/Management control (see McConnell and Servaes, 1990). The positive and negative coefficients on the stand-alone and squared terms, respectively, are consistent with both incentive alignment effects and entrenchment effects as levels of Family/Management control increase. The

inflection point is 31%, indicating that US investors hold more when Family/Management control is below 31% and less when Family/Management control exceeds that threshold level.[18]

In Models 3 through 5, we use progressively more stringent relative measures of whether the Family/Management group is likely to effectively control a firm. In each of these models, the coefficient on the Family/Management control measure remains negative but is insignificant. The sixth and seventh models show that the control held by all blockholder types other than the Family/Management group is not significantly related to U.S. investment. Our control variables exhibit coefficient signs that are consistent with our expectations. U.S. investment is higher in firms that are cross-listed on a U.S. exchange, in the MSCI World Index, and are larger. U.S. investment is lower in firms that have higher leverage and higher book to market ratios. The coefficient on dividend yield is generally not significantly different from zero.

Taken together, the results in Table 2 provide only moderate support for the hypothesis that higher levels of insider control dissuade equity investment by foreign investors. However, as noted before, the effect of opaque firm-level control structures on foreign holdings is likely to be muted in countries with strong investor protection and strict disclosure rules.

3.3 Foreign Holdings and Corporate Governance: Results Segmented by Country-level Parameters

We hypothesize that foreign investors face larger information problems relative to local investors in countries with weak disclosure and investor protection rules. To capture the interplay between firm- and country-level governance effects, we re-estimate our previous regressions, partitioning the sample based on our country-level governance and transparency proxies: Disclosure Requirements, Securities Regulation, Legal Origin, and Antidirector Rights. By estimating subsample models, we explicitly allow for differences in all coefficients across the two subsamples.[19] Meaningful cross-sectional variation in the effects of the control structure proxies also alleviates concerns that our findings are driven by correlated omitted variables.

Table 3 presents the association between our firm-level governance proxies and U.S. foreign investment using the Disclosure Requirements variable to segment the sample. Panel A reports results for our low Disclosure Requirements subsample comprised of countries whose score is below our sample median score of 0.75. Model 1 again shows that Family/Management group control is negatively related to U.S. investment, but the coefficient of -0.041 is larger in magnitude and significance than in the all-country model estimated in Table 2. To gauge economic significance, we compute the effect of Family/Management control over the inter-quartile range. The 25th percentile for Family/Management control in this subsample is zero and the 75th percentile is 49%. Evaluating the estimated model at these points and holding all other variables at their means, we find that U.S. investment (as a share of float) would be 2 percentage points lower for a firm in a low disclosure country for which Family/Management control changed from the 25th to the 75th percentile. This effect is economically significant considering that the average U.S. investment is 6.4%. In Model 2, we again see that the percentage of insider control has a non-linear effect, as predicted in Section 2.2. The coefficients on Family/Management control and its squared term imply an inflection point of 28%, beyond which entrenchment effects begin to dominate and foreigners shy away from firms with increasing Family/Management control. This inflection point is quite plausible as in many countries with weak institutions 28% of the control rights are sufficient for insiders to be effectively in control of the firm.

In Models 3 through 5 of the Low Disclosure Requirements subsample, we now find that relative measures of effective Family/Management control are negatively related to U.S. investment. Consistent with the construction of our proxies, the coefficient magnitudes on Family/Management control increase as the definition of control becomes progressively stricter. This pattern provides comfort as it is less likely to be generated by an omitted variable. In contrast, Models 6 and 7 illustrate that the control rights held by all other blockholder types are not

significantly related to U.S. investment. This contrast shows that our findings in Models 1 through 5 do not simply reflect large holdings or concentrated control rights, but are related to Family/Management control. We therefore interpret the low disclosure subsample results as consistent with the argument that foreign outside investors adjust their holdings when information problems and monitoring costs are likely to be most pronounced.

Panel B reports results for the high Disclosure Requirements subsample. We observe that none of the blockholder coefficients are negative and significant. As explained, one has to exercise care in interpreting positive coefficients because our holdings are scaled by float (see Section 3.1). In the bottom row of Panel B, we report the comparison between the blockholder coefficients in the low and high protection subsamples. We find that the managerial control coefficients in Models 1, 3, 4, and 5, as well as the squared coefficient on managerial control in Model 2, are all significantly different and more negative in the low Disclosure Requirements subsample.[20] These results are consistent with our hypotheses and support the notion that country-level disclosure rules have an important impact on whether foreign investors perceive insider control as a problem for them when making investment choices.

In Tables 4 through 6, we split the sample based on three proxies for a country's overall level of investor protection. Higher protection reduces the private benefits of control and thus reduces the importance of information regarding these benefits. That is, we expect that even if firms have ownership structures that, in principle, are conducive to expropriation, foreign investors who are not as informed as local investors about these governance problems suffer less because the level of investor protection in the country is relatively high. For those countries, we predict that insider control rights will have a weaker effect on holdings compared to countries where investor protection is relatively weak.

Table 4 features our Securities Regulation measure of shareholder protection. Panel A shows that the coefficients on our Family/Management control measures are always negative, exhibit a non-linear relation, and are highly significant in the low protection subsample. Again, the coefficients increase in magnitude as our control proxies become stricter and their economic significance is similar to that of the coefficients reported for the low disclosure subsample in Table 3. As before, the coefficients for Other Blockholders are insignificant. In Panel B, which reports results for the high Securities Regulation subsample, we observe that none of the blockholder coefficients are negative and significant. In fact, several coefficients are significantly positive, but as our float-normalized dependent variable mechanically induces a positive bias, it is not appropriate to read much into this finding.[21] Again, we find that the difference in the Family/Management control coefficients across subsamples is always significant.

In Table 5, we split the sample based on non-English and English legal origin. Panel A shows that the coefficients on Family/Management control behave as predicted and as in our previous tables. The Other Blockholder coefficients are again insignificant. The difference in the coefficients on the Family/Management control proxies between the non-English and English legal origin subsamples is always statistically significant. In Table 6, we split the sample based on a country's Antidirector Rights and find essentially the same results as before.

We make one other country-level split but do not tabulate it for the sake of brevity. Because many emerging market liberalization studies make the point that attracting foreign capital is particularly important because these countries often have relatively weak institutions (see, for example, Henry, 2000; Bekaert, Harvey, and Lundblad, 2001, 2005), we segment countries based on whether they are classified as having emerging markets by *The Economist* magazine as of December, 1997. For the 1017 emerging market firms in our sample, we find that our Family/Management control proxies are not significantly related to U.S. holdings (and that other

blockholdings remain unrelated as well). While at first glance this result may seem surprising, the classification of countries as "emerging markets" based on per-capita GDP does not account for the substantial variation in countries' institutional structures. There are developed market countries, such as Italy, for which Zingales (1994) provides evidence that opaque reallocations of assets to favor connected insiders at the expense of minority shareholders are easily tolerated within the country's institutional and political framework. In contrast, there are emerging markets such as Hong Kong that have comprehensive and well-enforced disclosure requirements, such as those on related party transactions as documented by Cheung, Rau, and Stouraitis (2005).

The lack of emerging market results highlights the importance of variables that capture countries' information and governance regimes, which in turn supports our interpretation that foreign investors' information problems play an important role in our results. It also illustrates that our results are not simply driven by economic development or specific to emerging markets.

3.4 Foreign Holdings and Earnings Management: Evidence on the Role of Information Flow

To provide another test of whether information problems are at the core of our holdings results, we directly use proxies for poor information flows to outsiders. We view this analysis as an attempt to shed some light on the mechanism by which poor governance manifests in lower holdings by U.S. investors. Moreover, using an alternative variable that is a conceptually related to our control-based governance proxies but computed in a very different way mitigates concerns that our prior results are spurious.

We analyze whether higher levels of earnings management are associated with lower levels of U.S. holdings. The basic idea is that earnings management indicates opaque financial statements and poor information flows to outside investors. Financial reporting involves judgment and the underlying measurements are often based on private information. Insiders can use this discretion and their private information to make reported numbers more informative about true economic

performance, but they can also abuse it by managing earnings. Whether insiders do the former or the latter depends crucially on their reporting incentives and the forces that shape them, such as the quality of their governance structures. Supporting this notion, Leuz, Nanda, and Wysocki (2003) and Haw, Hu, Hwang, and Wu (2004) provide evidence that earnings management is more pervasive in countries with weak investor protection and in firms where ownership structures are more conducive to outsider expropriation. Similarly, Fan and Wong (2002) provide evidence that the informativeness of earnings is lower in East Asian firms with ownership structures where insiders have stronger incentives to expropriate. Thus, if information problems are at the core of the holdings effects, we expect to find a negative association between foreign holdings and the level of earnings management.[22]

Using the Worldscope universe of non-financial firms, we compute firm-level earnings management proxies from 1992 to 1997 for all firms that we can match to our foreign holdings database. We require that each firm has at least three years of relevant earnings and cash flow data. Cash flow from operations is calculated using the balance-sheet approach because U.S. style cash flow statements are generally not available for our sample companies.[23] If a firm does not report information on depreciation, taxes payable, or short-term debt, then the changes in these variables are assumed to be zero. We scale earnings, accruals, and operating cash flows by lagged total assets prior to further computations to ensure comparability across firms and truncate extreme observations at the top and bottom percentile.

We employ two proxies. First, following Haw et al. (2004) and Wysocki (2004), we compute the time-series median magnitude of accruals relative to the cash flow from operations. Second, following Leuz et al. (2003), we compute three different proxies capturing a wider range of earnings management activities: i.e., the magnitude of total accruals, the smoothness of earnings relative to cash flows, and the correlation of accounting accruals and operating cash flows.[24]

Specifically, the first variable is the time-series median of the absolute value of accruals scaled by the contemporaneous operating cash flow. The second variable is computed as the time-series standard deviation of operating income over the time-series standard deviation of operating cash flows. The third variable is the time-series correlation of changes in the accruals and operating cash flows. The scores are averaged for each firm and are ranked such that higher values indicate more earnings management.

We recognize that these proxies are not perfect and indicate earnings management only in a relative sense. But in their defense, the more extreme the realizations of the measures become, the less likely it is that reported earnings are informative about the firm's economic performance, especially when considering that we compute by-firm averages over several years. Moreover, the proxies are constructed relative to outcomes of firms' economic processes, such as the magnitude or smoothness of the operating cash flows, which makes it more likely that they capture insiders' reporting choices, rather than firms' operating characteristics. Finally, several recent studies show that these proxies yield country rankings that are consistent with widespread perceptions of earnings informativeness, and that the proxies behave in a plausible fashion around events such as U.S. cross listings (Lang, Raedy, and Yetman, 2003; Wysocki, 2004).

Panel A of Table 7 reports results from Tobit regressions replacing the control-based governance proxies with the earnings management variables. For the sake of brevity, we report only the findings splitting the sample by the level of Securities Regulation, which captures both the disclosure rules and the associated enforcement. The results are very similar using the other split variables (i.e., Antidirector Rights, Disclosure Requirements, and English legal origin) and are also present in the full sample of countries, albeit at a slightly weaker level (consistent with the results for the control-based governance variables). Panel A shows that both earnings management proxies are significantly and negatively associated with foreign holdings in the countries where securities

regulation is weak. These findings suggest that in these countries U.S. investors hold fewer shares in firms that are characterized by higher levels of earnings management, consistent with the hypothesis that information flows play an important role for foreigners' investment decisions. In contrast, the coefficients are insignificant in countries with strong securities regulation. As before, the coefficients are much larger in the low Securities Regulation subsample; the difference in the earnings management coefficients across subsamples is highly significant for our first proxy and reasonably close to conventional significance levels for our second proxy.

Next, given that prior research suggests that the quality of information flows to outsiders and the quality of corporate governance are closely related, we can interact earnings management with insider control as a way to partition the sample into cases where insider control is more likely to be a problem for outside investors as indicated by high levels of earnings management. Thus, the predicted sign for the interaction is negative: foreigners are expected to shy away the most from firms where insiders are effectively in control and earnings management is high.

In Panel B of Table 7, we partition the sample into firms with high and low earnings management (using the median for each measure) and report results for models that feature a high earnings management proxy, a Family/Management control proxy, and an interaction between high earnings management and Family/Management control. For low Securities Regulation countries, the main effect of earnings management on foreign holdings remains significantly negative, while the main effects of family/management control are still negative but are attenuated in magnitude and statistical significance (relative to Table 4, Panel A). The latter is expected given that our insider control proxies are ambiguous in their governance implications, as discussed in Section 2.2. The interaction effect is significantly negative, as predicted. For high protection countries, neither the main effects nor the interaction effects are significantly negative (not tabulated for brevity). These results indicate that foreign holding effects are strongest in countries with weak institutions when

insider control *and* earnings management are high. These findings lend further credence to our interpretation that information problems are at the core of our holdings results.

4. Robustness Checks

In this section, we perform and discuss several sensitivity analyses to address concerns about correlated omitted variables, scaling by free float, influential observations or countries, and the Tobit specification used in our main analyses.

4.1 Additional Explanatory Variables

The main concern about our analyses is that the results are driven by a correlated but omitted variable, rather than governance problems associated with insider control. Before we attempt to alleviate this concern for particular variables, we note that our models include an extensive set of controls, many of which are likely to make it harder for us to find any holdings effects. In addition, our main results obtain for two different (but conceptually related) variables and are stronger after partitioning by institutional characteristics, both of which make a simple correlated omitted variable explanation less likely.

That said, one might be concerned about the effects of liquidity and return momentum on the holdings of U.S. investors, as they are likely to also vary by countries' institutions. The concern is probably mitigated by the fact that our tests include a firm's equity market capitalization and its book-to-market ratio, which likely capture aspects of liquidity and return momentum, respectively. Nevertheless, as a robustness check, we re-estimate our models including two more direct measures for liquidity and momentum. Specifically, we follow Bekaert, Harvey, and Lundblad (2007) and Lesmond (2005) and proxy for liquidity with the percentage of trading days in the 1997 calendar year in which the stock had zero return for the day. We compute this measure only for firms with price data reported for at least 100 trading days in 1997. We compute a momentum variable defined

as the 12 month buy-and-hold stock return over the period January 1, 1997 to December 31, 1997, winsorized at the 1st and 99th percent levels. As with our controls for cross listings and MSCI index membership, including proxies for liquidity is conservative because liquidity measures are likely to reflect firms' ownership structures and hence may capture aspects of our ownership-based governance proxies.

In Panel A of Table 8, we report the main results of the re-estimation of our base case models with the inclusion of liquidity and momentum variables. For the sake of brevity, we report only the coefficients on two of our governance proxies, choosing the least and most restrictive measures of Family/Management control (i.e., managerial and family control rights percentage and an indicator variable corresponding to majority managerial and family control rights, respectively). We also report only two of our country-level sample splits (Disclosure Requirements and Security Regulation). Despite a slightly smaller sample size, Panel A shows that the inclusion of liquidity and momentum control variables does not change our inferences. U.S. holdings are significantly lower when managers are likely to have effective control of their firms and the firms are domiciled in countries with poor disclosure and governance requirements.[25]

In a final set of tests (untabulated), we include a proxy for stock return volatility. The concern is that U.S. investors may systematically shy away from foreign firms with higher return volatility and that our control proxies capture systematic differences in volatility. To check this possibility, we compute the standard deviation of weekly returns. We find that this proxy is not significantly related to U.S. investment and that its inclusion does not change our inferences. Also, in our models we control for the book-to-market ratio, which is a valuation measure similar to Tobin's Q. For robustness, we also verify that our insider control rights results obtain in magnitude and significance when we remove the book-to-market variable from all regressions.

4.2 Scaling by Market Capitalization

Throughout this paper we have scaled U.S. investment by float, for the reasons described in Section 3.1. By making this choice, we mechanically bias against finding that any type of blockholding is negatively related to U.S. investment. In contrast, scaling by market capitalization – even when controlling for float on the right hand side – likely biases the results in favor of finding that large blockholdings are related to lower foreign holdings. To illustrate this issue and gauge the robustness of our findings, we re-estimate our regressions scaling U.S. holdings by market capitalization (and controlling for float on the right-hand side). We do so for our base case models and for models which include liquidity and momentum control variables. For brevity, we again report only the main coefficients of interest.

Panel B of Table 8 shows that, as expected, our results hold and are even stronger in significance when we scale U.S. holdings by equity market capitalization and control for float on the right hand side. The t-statistics on our Family/Management control variables are higher in our low disclosure/protection subsamples relative to the float-scaled measure used thus far in the paper. We find the same results for the other managerial control variables and country-level sample splits that are not tabulated. Further, when scaling U.S. investment by market capitalization, we find that Other Blockholder control is never significant in any of the high or low subsample splits or overall and that Family/Management control is never positively related to U.S. holdings in high disclosure/protection subsamples. These findings show that scaling U.S. investment by float does not unduly affect our results and, if anything, biases against our hypothesis. Furthermore, the different results for Family/Management control and Other Blockholders again illustrate that our findings are not simply a manifestation of ownership concentration.

4.3 Influential Observations

As many of our observations are from Japan and the U.K., it is possible that the results are dominated by one or two countries. For Japan, Lins and Servaes (1999) find that strong keiretsu

membership is an indicator of governance problems, whereas ownership structure is not. Claessens, Djankov, Fan, and Lang (2002) exclude Japan from their analysis of ownership structure in East Asia because the keiretsu system influences governance in ways that cannot be captured by ownership data. The country dummies included in our analysis control for unique country parameters, but as a robustness check we re-estimate our firm-level regressions without Japan, the U.K., or both. We find that all of our main results continue to hold.[26]

Ammer, Holland, Smith, and Warnock (2006), Bradshaw, Bushee, and Miller (2004), Edison and Warnock (2004) and Aggarwal, Klapper, and Wysocki (2005) show that U.S. cross listing is associated with a substantial increase in U.S. investment, which is consistent with our findings.[27] Cross listing in the U.S. necessitates many substantive changes (e.g., SEC registration and filings), which can act as signaling or bonding devices to attract foreign investment. However, cross-listed firms are unlikely to be representative of a country's population of publicly traded firms (Lang, Raedy, and Yetman, 2003; Doidge, Karolyi and Stulz, 2004). For these reasons, we control for U.S. listing in all models. However, to confirm that cross-listed firms do not unduly influence the results, we also re-estimate our regressions limiting the samples to non-cross-listed firms. Eliminating the 140 cross-listed firms from our sample has no effect on the results.

4.4 Alternative Specifications

While Tobit estimation is appropriate for censored data such as ours, it has two potential limitations. First, Tobit is more susceptible to misspecification than ordinary least squares. For corner solution models, OLS estimates are generally inconsistent but can still be informative of the direction and significance of a variable's impact (Wooldridge, 2002; p. 525). We therefore check and find that OLS estimates (not shown) are very similar to our Tobit estimates in that Management/Family control is negatively related to U.S. investment in low protection countries but not in high protection countries.

Another potential drawback is that Tobit forces one parameter to determine the effect of governance on both the decision to invest and the decision regarding the amount to invest. Heckman's (1979) selection model and hurdle models are estimation techniques that allow the two decisions to be separately modeled using a two-step procedure (Mullahy, 1986; Cameron and Trivedi, 1998; Wooldridge, 2002). In addition, as hurdle models are based on different distributional assumptions than the Tobit model, they are a way to gauge the sensitivity of our findings with respect to the normality assumptions imposed by the Tobit model.

We therefore implement our holdings model using either a two-stage Heckman or a two-stage hurdle estimation model. The results and inferences from these models (not tabulated) are very similar to those from Tobit estimation reported in the tables. We find that Family/Management control has a particularly strong effect on the decision whether to invest in a firm at all, suggesting that in some cases foreign investors simply stay from firms with problematic governance structures. This finding is consistent with the main idea of this paper and again highlights that the association with U.S. investment in Tables 2 to 6 does not reflect a mechanical relation with the concentration of ownership or control rights. Taken together, the results in this section alleviate concerns that the findings are specific to or driven by the choice of a Tobit model.

5. Conclusion

This paper examines the relation between foreign investment and corporate governance. Foreign investors can play an important role in funding corporations, especially in countries in which domestic sources of outside finance are limited. However, institutional investors and regulators frequently claim that poor corporate governance is a substantial deterrent. As outside investors who fear governance problems can protect themselves by lowering the price they are willing to pay for a firm with poor expected governance, it is not obvious that governance concerns manifest themselves in fewer holdings. However, we argue that firms with problematic governance

structures, particularly those with high levels of insider control and from countries with weak institutions, are likely to be more taxing to foreign investors in terms of their information and monitoring costs, which in turn could explain why foreigners shy away from these firms.

We conduct tests on the relation between foreign investment and insider control for a sample of 4,409 firms from 29 countries. Using U.S. holdings as a proxy for foreign investment, we show that foreigners invest less in firms with higher (absolute and relative) levels of insider control, consistent with our main argument. We show that this finding is not simply a matter of a country's economic development but appears to be directly related to a country's legal institutions and disclosure and investor protection rules. Taken together, these findings are consistent with the explanation that information problems faced by foreign investors play an important role in the decision of foreign investors to hold less of firms with high levels of insider control. Supporting this explanation, we show that, in countries with poor disclosure rules and weak investor protection, foreign investment is lower for firms that appear to engage in more earnings management. The holdings effects are strongest when both information flows are poor and insider control is high.

Our paper is the first to provide evidence for a large sample across many countries that foreigners do indeed invest less in poorly governed firms and to shed some light on the mechanism through which this relation occurs. The findings imply that improvements in disclosure and governance practices are potential levers to attract more foreign investment. However, regulators and governments aiming to substantially and lastingly increase investments by foreigners will likely have to alter the institutional elements that give rise to insider control and opaqueness in the first place, such as weak property and investor rights.

Finally, a caveat is in order. While our paper shows that foreigners invest less in firms with ownership structures conducive to governance problems and weak firm-level information flows, we cannot definitively determine whether the relation is a demand issue (foreigners shy away from

these firms) or a supply issue (these firms do not need foreign capital). Consistent with the supply argument, there is evidence that firms with high levels of insider control have higher cash levels (Kalcheva and Lins, 2007) and also higher aggregate debt levels (Harvey, Lins and Roper, 2004). In addition, there is evidence that firms with good political connections obtain capital from banks and private placements but are reluctant to raise capital from arm's length sources that require more transparency (Leuz and Oberholzer-Gee, 2006). While these papers suggest that supply effects are real, they are likely to play a larger role when analyzing securities offerings or cross listings. Supply effects should be less prevalent in a cross-sectional analysis of holdings at a random point in time, such as ours, because even when a firm issues securities abroad in order to place them with foreigners, it is not clear that foreigners will buy or continue to hold these securities. Whether foreigners do so is a function of the demand effects that we describe in the paper. Thus, as our analysis is based on a snapshot of holdings, it seems more likely that the results reflect demand effects and hence we favor the demand interpretation of our findings.

References

Aggarwal, Reena, Leora Klapper, and Peter D. Wysocki, 2005, Portfolio Preferences of Foreign Institutional Investors, *Journal of Banking and Finance* 29, 2919-2946.

Akerlof, George, 1970. The Market for 'Lemons': Quality Uncertainty and the Market Mechanism, *Quarterly Journal of Economics*, 488-500.

Ammer, John, Sara Holland, David Smith, and Francis E. Warnock, 2006, Look at Me Now: What Attracts U.S. Shareholders?, NBER Working Paper 12500.

Ahearne, Alan G., William L. Griever, and Francis E. Warnock, 2004, Information Costs and Home Bias: An Analysis of U.S. Holdings of Foreign Equities, *Journal of International Economics* 62, 313-336.

Bekaert, Geert, Campbell R. Harvey, and Robin Lumsdaine, 2002, Dating the Integration of World Capital Markets, *Journal of Financial Economics* 65, 203-249.

Bekaert, Geert, Campbell R. Harvey, and Christian Lundblad, 2001, Emerging Equity Markets and Economic Development, *Journal of Development Economics* 66, 465-504.

Bekaert, Geert, Campbell R. Harvey, and Christian Lundblad, 2005, Does Financial Liberalization Spur Growth?, *Journal of Financial Economics* 77, 3-55.

Bekaert, Geert, Campbell R. Harvey, and Christian Lundblad, 2007, Liquidity and Expected Returns: Lessons from Emerging Markets, *Review of Financial Studies* 20, 1783-1831.

Benos, Evangelos, and Michael Weisbach, 2004, Private Benefits and Cross Listings in the United States, *Emerging Markets Review* 5, 217-240.

Bradshaw, Mark, Brian Bushee, and Gregory Miller, 2004, Accounting Choices, Home Bias, and U.S. Investment in non-U.S. Firms, *Journal of Accounting Research*, 42, 795-841.

Brealey, Richard, Ian Cooper, and Evi Kaplanis, 1999, What is the International Dimension of International Finance?, *European Finance Review* 3, 103-119.

Cameron, A., and P. Trivedi, 1998, Econometric Models Based on Count Data: Comparisons and Applications of Some Estimators and Tests, *Journal of Applied Econometrics* 1: 29-53.

Campbell, John, 1996, Understanding Risk and Return, *Journal of Political Economy* 104, 298-345.

Chan, Kalok, Vicentiu M. Covrig, and Lilian K. Ng, 2005. What Determines the Domestic Bias and Foreign Bias? Evidence from Mutual Fund Equity Allocations Worldwide, *Journal of Finance*, 60, 1495-1534.

Choe, Hyuk, Bong-Chan Kho, and René M. Stulz, 2005, Do Domestic Investors Have an Edge? The Trading Experience of Foreign Investors in Korea. *The Review of Financial Studies* 18, 795-829.

Claessens, Stijn, Simeon Djankov, and Larry H.P. Lang, 2000, The Separation of Ownership and Control in East Asian Corporations, *Journal of Financial Economics* 58, 81-112.

Claessens, Stijn, Simeon Djankov, J.P.H. Fan, and Larry H.P. Lang, 2002, Disentangling the Incentive and Entrenchment Effects of Large Shareholdings, *Journal of Finance*, 57, 2741-2771.

Cooper, Ian, and Evi Kaplanis, 1986, Costs to Crossborder Investment and International Equity Market Equilibrium, in J. Edwards, J. Franks, C. Mayer, and S. Schaefer, eds.: *Recent Developments in Corporate Finance* (Cambridge University Press).

Cooper, Ian, and Evi Kaplanis, 2000, Partially Segmented International Capital Markets and International Capital Budgeting, *Journal of International Money and Finance* 19, 309-329.

Coval, Josh, and Tobias Moskowitz, 1999, Home Bias at Home: Local Equity Preference in Domestic Portfolios, *Journal of Finance* 54(6), 1-39.

Dahlquist, Magnus, and Goran Robertsson, 2001, Direct Foreign Ownership, Institutional Investors, and Firm Characteristics, *Journal of Financial Economics* 59, 413-440.

Dahlquist, Magnus, Pinkowitz, Lee, René Stulz, and Rohan Williamson, 2003, Corporate Governance and the Home Bias, *Journal of Financial and Quantitative Analysis* 38, 87-110.

Dechow, Patricia, Richard Sloan, and Amy Sweeney, 1995, Detecting Earnings Management, *The Accounting Review* 70, 193-225.

Doidge, Craig, 2004, U.S. Cross-listings and the Private Benefits of Control: Evidence from Dual-Class Shares, *Journal of Financial Economics*, 72, 519-553.

Doidge, Craig, G. Andrew Karolyi, Karl V. Lins, Darius P. Miller, and René Stulz, 2007, Private Benefits of Control, Ownership, and the Cross-Listing Decision, forthcoming, *Journal of Finance*.

Doidge, Craig, G. Andrew Karolyi, and René Stulz, 2004, Why are foreign firms listed in the U.S. worth more?, Journal of Financial Economics 71, 205-238.

Dyck, A., and L. Zingales, 2004, Private Benefits of Control: An International Comparison, *Journal of Finance* 59, 537-600.

Edison, Hali J., and Francis E. Warnock, 2004, U.S. Investors' Emerging Market Equity Portfolios: A Security-Level Analysis, *Review of Economics and Statistics* 84(3), 691-704.

Faccio, Mara, and Larry H.P. Lang, 2002, The Ultimate Ownership of Western European Corporations, *Journal of Financial Economics,* 65, 365-395.

Fan, Joseph P.H., and T.J. Wong, 2002, Corporate Ownership Structure and the Informativeness of Accounting Earnings in East Asia, *Journal of Accounting and Economics* 33, 401-425.

Gelos, Gaston, and Shang-jin Wei, 2005, Transparency and International Portfolio Holdings, *Journal of Finance* 60, 2987-3020.

Ferreira, Miguel A., and Pedro P. Matos, 2007, The Color of Investors' Money: The Role of Institutional Investors Around the World, forthcoming, *Journal of Financial Economics*.

Giannetti, Mariassunta, and Yrjo Koskinen, 2007, Investor Protection. Equity Returns, and Financial Globalization, SSRN Working Paper # 942513.

Giannetti, Mariassunta, and Andrei Simonov, 2006, Which Investors Fear Expropriation? Evidence from Investors' Portfolio Choices, *Journal of Finance* 61, 1507-1547.

Giannetti, Mariassunta, and Xiaoyun Yu, 2007, Favoritism in Capital Allocation, Working Paper, Stockholm School of Economics.

Glosten Lawrence, and Paul Milgrom, 1985, Bid, Ask and Transaction Prices in a Specialized Market with Heterogeneously Informed Traders, *Journal of Financial Economics* 13, 71-100.

Griever, William L., Gary A. Lee, and Francis E. Warnock, 2001, The U.S. System for Measuring Cross-Border Investment in Securities: A Primer with a Discussion of Recent Developments, *Federal Reserve Bulletin* 87(10), 633-650.

Hail, Luzi, and Christian Leuz, 2006, International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter? *Journal of Accounting Research* 44(3), 485-531.

Harvey, Campbell R., Karl V. Lins, and Andrew H. Roper, 2004, The Effect of Capital Structure when Expected Agency Costs are Extreme, *Journal of Financial Economics* 74, 3-30.

Haw, In-Mu, Bingbing Hu, Lee-Seok Hwang, and Woody Wu, 2004, Ultimate Ownership, Income Management, and Legal and Extra-Legal Institutions, *Journal of Accounting Research* 42(2), 423-462.

Henry, Peter Blair, 2000, Stock Market Liberalization, Economic Reform, and Emerging Market Equity Prices, *Journal of Finance* 55, 529-564.

Hermalin, Benjamin, and Michael Weisbach, 2007, Transparency and Corporate Governance, NBER Working Paper 12875.

Kalcheva, Ivalina, and Karl V. Lins, 2007, International Evidence on Cash Holdings and Expected Managerial Agency Problems, *Review of Financial Studies* 20*,* 1087-1112.

Kang, Jun-Koo, and Rene Stulz, 1997, Why is There a Home Bias? An Analysis of Foreign Portfolio Equity Ownership in Japan, *Journal of Financial Economics* 46, 3-28.

Klapper, Leora F., and Inessa Love, 2004, Corporate Governance, Investor Protection, and Performance in Emerging Markets, *Journal of Corporate Finance* 10, 703-728.

Kyle, Albert, 1985, Continuous Auctions and Insider Trading, *Econometrica* 53, 1315-1355.

La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer, 1999, Corporate Ownership Around the World, *Journal of Finance* 54, 471-517.

La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer, 2006, What Works in Securities Laws?, *Journal of Finance* 61, 1-32.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1997, Legal Determinants of External Finance, *Journal of Finance* 52(3), 1131-1150.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 1998, Law and Finance, *Journal of Political Economy* 106, 1113-1155.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 2000, Agency Problems and Dividend Policies Around the World, *Journal of Finance* 55, 1-33.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert W. Vishny, 2002, Investor Protection and Corporate Valuation, *Journal of Finance* 57, 1147-1170.

Lang, Mark H., Karl V. Lins, and Darius P. Miller, 2003, ADRs, Analysts, and Accuracy: Does Cross-Listing in the U.S. Improve a Firm's Information Environment and Increase Market Value? *Journal of Accounting Research* 41, 317-345.

Lang, Mark H., Karl V. Lins, and Darius P. Miller, 2004, Concentrated Control, Analyst Following and Valuation: Do Analysts Matter Most When Investors are Protected Least?, *Journal of Accounting Research* 42, 581-623.

Lang, Mark H., Jana Raedy, and Michelle Yetman, 2003, How Representative are Firms that are Cross Listed in the United States? An Analysis of Accounting Quality, *Journal of Accounting Research* 41.

Lemmon, Michael L., and Karl V. Lins, 2003, Ownership Structure, Corporate Governance, and Firm Value: Evidence from the East Asian Financial Crisis, *Journal of Finance* 58(4), 1445-1468.

Lesmond, David A., 2005, Liquidity of Emerging Markets, *Journal of Financial Economics* 77, 411-452.

Leuz, Christian, Dhananjay Nanda, and Peter Wysocki, 2003, Investor Protection and Earnings Management: An International Comparison, *Journal of Financial Economics* 69, 505-527.

Leuz, Christian, and Felix Oberholzer-Gee, 2006, Political Relationships, Global Financing, and Corporate Transparency: Evidence from Indonesia, *Journal of Financial Economics* 81, 411-39.

Lins, Karl V., 2003, Equity Ownership and Firm Value in Emerging Markets, *Journal of Financial and Quantitative Analysis* 38, 159-184.

Lins, Karl, and Henri Servaes, International Evidence on the Value of Corporate Diversification, *Journal of Finance* 54, 2215-2239.

Lins, Karl V., Deon Strickland, and Marc Zenner, 2005, Do Non-U.S. Firms Issue Equity on U.S. Stock Exchanges to Relax Capital Constraints?, *Journal of Financial and Quantitative Analysis* 40, 109-133.

McConnell, John J., and Henri Servaes, 1990, Additional Evidence on Equity Ownership and Corporate Value, *Journal of Financial Economics* 27, 595-612.

McKinsey and Company, 2002, Global Investor Opinion Survey, July.

Milgrom, Paul, 1981, Rational Expectations, Information Acquisition, and Competitive Bidding, *Econometrica* 49, 921-943.

Morck, Randall, Andrei Shleifer, and Robert W. Vishny, 1988, Management Ownership and Market valuation: An Empirical Analysis, *Journal of Financial Economics* 20, 293-315.

Morck, Randall and Bernard Yeung, 2004, Family Firms and the Rent Seeking Society. *Entrepreneurship, Theory and Practice*, Summer Issue, 391-409.

Mullahy, J., 1986, Specification and Testing of Some Modified Count Data Models, *Journal of Econometrics* 33: 341-365.

Nenova, Tatiana, 2003, The Value of Corporate Votes and Control Benefits: A Cross Country Analysis, *Journal of Financial Economics* 68, 325-351.

Pinkowitz, Lee, René Stulz, and Rohan Williamson, 2006, Does the Contribution of Corporate Cash Holdings and Dividends to Firm Value Depend on Governance? A Cross-Country Analysis, *The Journal of Finance* 61, 2725-2751.

Reese, William, and Michael Weisbach, 2002, Protection of Minority Shareholder Interests, Cross Listings in the United States, and Subsequent Equity Offerings, *Journal of Financial Economics* 66, 65-104.

Stulz, Rene, 1981, On the Effects of Barriers to International Investment, *Journal of Finance* 36, 923-934.

Wooldridge, Jeffrey, 2002, *Econometric Analysis of Cross Section and Panel Data*, MIT Press, Cambridge, MA.

Wysocki, Peter, 2004, Earnings Management, Tax Compliance, and Institutional Factors: A Discussion of Haw et al. [2004], *Journal of Accounting Research* 42, p. 463.

Zingales, Luigi, 1994, The Value of the Voting Right: A Study of the Milan Stock Exchange Experience, *Review of Financial Studies* 7, 125-148.

Footnotes

[1] A 2002 McKinsey and Company global investor survey shows that corporate governance considerations dominate decisions about which firms in Latin American and East Asia receive investment whereas for North American firms financial statement considerations dominate. The survey also reports that "more than 60% of investors state that governance considerations might lead them to avoid individual companies with poor governance."

[2] The fundamental problem is very similar to the one that motivates bid-ask spreads and price impact of trades in the market microstructure literature. See, for example, Glosten and Milgrom (1985) and Kyle (1985).

[3] Giannetti and Yu (2007) show that when information is unreliable and costly to obtain investors do not have incentives to investigate distant investment opportunities and instead favor close entrepreneurs. Thus, this model also yields the prediction that foreigners shy away from firms and countries with poor information flows.

[4] We verify that similar valuation results obtain in our sample using these insider-control-based proxies.

[5] We verify that the earnings management proxies and our insider control variables are significantly positively related in our sample, which further motivates the choice of our control-based governance proxies. The recent model by Hermalin and Weisbach (2007) also supports a link between governance and firm disclosure.

[6] Supporting this argument, prior work shows that strong country-level governance lessens the impact of firm-level governance problems. See, e.g., Lins (2003) and Klapper and Love (2004).

[7] Publicly available country-level data—formed by aggregating the confidential security-level data used here—have been analyzed in Ahearne, Griever, and Warnock (2004) and DPSW. The security-level data are also studied by Ammer et al. (2006) and, using a more limited sample, Edison and Warnock (2004).

[8] Of the $2.6 trillion in international equity positions reported to the IMF-led 1997 Coordinated Portfolio Investment Survey, U.S. investors held $1.2 trillion. We also note that foreigners generally do not hold all of a firm's float. Estimates based on data contained in Ahearne, Griever, and Warnock (2004), DPSW (2003),

and the International Monetary Fund 1997 Coordinated Portfolio Investment Survey suggest that about 30% of the world float is held by foreigners. Thus, while we cannot directly test this, the fact that collective float is predominantly held by domestic investors indicates that underweighting by U.S. investors is likely to reflect increased domestic investment rather than increased non-U.S. foreign investment.

[9] Morck and Yeung (2004, p. 392) also highlight the ambiguous nature of family control: "Every large family-controlled firm […] is probably not primarily engaged in political rent seeking. Some entrenched […] families might be enlightened and benevolent." If there are observables that allow both well-connected locals and distant foreigners to easily understand firms' governance structures, we do not expect our main prediction to prevail in the data.

[10] Ownership-structure-based governance measures have been used extensively in other studies to capture agency problems in firms around the world (e.g., LLSV, 2002; Claessens et al., 2002; Harvey, Lins, and Roper, 2004; Lang, Lins, and Miller, 2004). There are more recent governance indices for non-U.S. firms such as those put forth by S&P and ISS. However, these indices are not available for our time period and they cover far fewer firms (i.e., S&P covers about 1500 firms beginning in 2001 and ISS covers about 1000 firms beginning in 2002).

[11] While we do not have data to separate the effect of managerial cash flow rights from control rights in our full sample, the analysis in Faccio and Lang (2002) and Lins (2003) suggests that, for our sample, ultimate managerial control rights often exceed cash flow rights because of pyramid ownership structures and superior voting shares.

[12] Consistent with this conjecture, we find (in untabulated tests) that the ratio of control to cash flow rights for the largest blockholder from Faccio and Lang (Western Europe) and Claessens et al. (East Asia) is insignificant when we include it in our models in addition to our managerial and family control proxies.

[13] When calculating a firm's float, we adjust Worldscope data in two ways. First, we correct the closely-held variable by subtracting the amount that Worldscope erroneously attributes to depository banks. Second, so that float is measured at the same time as U.S. holdings, we utilize price data from Datastream to convert Worldscope's fiscal year-end data to calendar year-end. See Ammer et al. (2006) for details.

[14] Argentina's mean holdings are high because most of its firms in our sample are cross-listed. Removing all cross-listed firms would change summary statistics but would not alter our results.

[15] For 127 firms, we are unable to unambiguously identify the largest blockholder. We drop these firms from tests using this indicator variable.

[16] A firm's foreign sales, another measure of international presence, has poor coverage in Worldscope, so we follow Dahlquist and Robertsson (2001) and utilize a cross-listing variable.

[17] Clustering standard errors at the country/industry level is rather conservative as, for the purpose of computing standard errors, we are left with roughly 140 groups in most of our regressions.

[18] Computed by taking the derivative such that 0.088 = Mgmt/Family x (2 x 0.0014).

[19] While our focus is on differences in managerial control rights proxies across subsamples, we also test for differences between other variables across the low/high protection subsamples. We find that leverage is significantly more negative in three low protection subsamples, indicating that US investors avoid highly levered firms in countries with poor institutions. We also find that MSCI membership is significantly less positive in two low protection subsamples, however MSCI inclusion has a large effect regardless of whether the firm is in a high or low protection country, thus it is difficult to draw economic conclusions from this finding. No other variables are different across more than one subsample split.

[20] The significance level is based on (untabulated) combined regressions in which all variables are interacted with an indicator variable set equal to one when a country belongs to the low protection subsample. Again, standard errors are clustered at the industry/country level.

[21] Consistent with this claim, we show in subsequent robustness tests (Section 5.2) that scaling U.S. investment by total equity market capitalization, instead of float, results in insignificant coefficients for all ownership structure variables in countries with *strong* governance or securities regulation. The coefficients on Family/Management control remain significantly negative in countries with weak institutions.

[22] In a similar vein, Aggarwal, Klapper, and Wysocki (2005) show that an indicator variable for U.S. mutual fund investment in emerging market firms is positively associated with a firm's accounting transparency

measure (though the result is not significant for MSCI-benchmarked holdings). Across emerging and developed economies, Bradshaw, Bushee, and Miller (2004) show that U.S. institutional investment is positively related to a firm's U.S. GAAP conformity.

[23] Following Dechow, Sloan, and Sweeney (1995), we compute the accrual component of earnings as (Δ total current assets – Δ cash) – (Δ total current liabilities – Δ short-term debt) – depreciation expense, where Δ denotes the change over the last fiscal year.

[24] We do not compute a proxy for loss aversion as in Leuz, Nanda, and Wysocki (2003) because it cannot be reasonably computed at the firm level.

[25] Results for the other effective managerial control variables and other splits by institutional variables are similar.

[26] For the sake of brevity, we do not tabulate the results in this subsection.

[27] Indeed, an effort to enhance the shareholder base is often cited as an explanation for why non-U.S. firms undertake costly information-providing efforts such as listing on U.S. stock exchanges (Reese and Weisbach, 2002; Lang, Lins, and Miller, 2003; Benos and Weisbach, 2004; Lins, Strickland, and Zenner, 2005).

Table 1

Basic Summary Statistics by Country

U.S. Investment, obtained from Ammer et al. (2006), is the percent of the firm's float that was held by U.S. portfolio investors as of end-1997, where float is the percentage of shares not held by large blockholders (as given by Worldscope's Closely Held variable) multiplied by the market value of equity in billions of U.S. dollars. Size is the value of FY1997 total assets in millions of U.S. dollars. Ownership data list the median value of total direct and indirect control rights held by blockholder type. Family/Management (Mgmt) refers to total control rights held by family groups and the top management group. Other Blockholders (BH) refers to total control rights held by blockholders other than Family/Management. Ownership structure data are obtained from Claessens, Djankov, and Lang (2000), Faccio and Lang (2002), and Lins (2003). N is the number of firms that have data on ownership structure, end-1997 market capitalization from Datastream, and basic balance sheet variables from Worldscope. Numbers in parentheses indicate the smaller sample sizes for data on the frequency that Family/Mgmt control is greater than control by any other type of BH.

Country	N	U.S. Investment as a % of float (mean)	Size (Total assets in $millions) (mean)	Family/Mgmt Control % (median)	Other BH Control % (median)	Frequency (%) that Family/Mgmt Control is: Greater than any other BH	Frequency (%) that Family/Mgmt Control is: Greater than 50%
Argentina	6	54.0	4595	0	57	17	0
Austria	23	12.7	1429	38	0	52	43
Belgium	57	3.5	2275	45	0	72	42
Brazil	16	27.0	6408	0	22	25 (8)	13
Chile	39	11.7	1323	0	0	89 (19)	21
Czech Republic	6	13.9	169	0	5	67 (3)	17
Finland	60	9.9	913	23	0	58	25
France	359	7.5	2205	51	0	83	55
Germany	375	4.9	2383	56	0	82	60
Hong Kong	183	11.2	1035	42	0	80 (169)	40
Indonesia	19	10.5	217	0	7	64 (11)	32
Ireland	38	10.6	410	0	12	29	8
Israel	7	19.9	1647	50	0	71	57
Italy	53	9.0	4063	45	0	72	43
Japan	978	3.5	3014	0	10	14	0
Korea (South)	165	4.5	1996	14	5	75 (150)	1
Malaysia	250	4.6	586	30	16	71 (236)	18
Norway	90	9.4	799	25	0	61	16
Philippines	20	13.7	324	3	0	67 (9)	15
Portugal	32	11.2	744	49	0	84 (31)	50
Singapore	133	7.1	611	29	21	65 (126)	33
South Africa	101	8.0	781	14	10	57 (82)	42
Spain	63	8.4	2083	27	0	59	30
Sweden	136	9.2	1328	22	0	59	21
Switzerland	84	9.8	1390	50	0	73	50
Taiwan	9	1.8	659	0	0	100 (4)	0
Thailand	14	13.3	372	25	10	69 (13)	14
Turkey	16	32.8	211	19	48	44	38
UK	1077	5.7	1010	11	0	47	11
Total	4409	6.4	1755	13	5	53 (4283)	22

Table 2
U.S. Investment and Blockholder Control – Full Sample of Countries

Tobit regression estimates of U.S. Investment at the end of 1997 as a proportion of a firm's free float, where free float refers to shares not held by 5% or greater blockholders (obtained using Worldscope's Closely Held variable). Family/Mgmt refers to a firm's management group and their families. BH refers to blockholder. Other BH refers to blocks held by entities other than Family/Mgmt. GT med refers to greater-than-median. GT 50% refers to greater-than-50%. XLIST and MSCI are indicator variables that take on the value one if the firm's equity is listed on a U.S. exchange or in the MSCI World Index, respectively. Ln(Size) is the log of total assets in millions of U.S. dollars. Leverage is the ratio of total liabilities to total assets. Book-to-market is book equity value over market equity value. Dividend yield is the preceding twelve months dividends paid over price. Financial variables are from Worldscope and are for fiscal year 1997. Indicator variables for countries and industry groups (based on the classification of Campbell, 1996) are included but not reported. For each coefficient, the p-value (computed using standard errors corrected for heteroskedasticity and clustered at the industry/country group level) of the two-tailed t-test of equality with zero is reported in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family/Mgmt control percentage (%)	-0.018	0.088					
	(0.084)	(0.000)					
Family/Mgmt control % squared		-0.0014					
		(0.000)					
Family/Mgmt control GT med			-0.040				
			(0.924)				
Family/Mgmt GT med & largest BH				-0.276			
				(0.530)			
Family/Mgmt control GT 50%					-0.828		
					(0.234)		
Other BH control percentage						0.007	
						(0.538)	
Other BH control GT 50%							0.359
							(0.673)
XLIST	9.953	10.008	9.981	9.421	9.983	9.983	9.984
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MSCI Membership	3.547	3.377	3.631	3.457	3.566	3.643	3.637
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ln(Size)	3.115	3.191	3.154	3.137	3.138	3.150	3.153
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.103	-0.104	-0.103	-0.103	-0.103	-0.103	-0.103
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Book-to-market	-1.024	-1.048	-1.023	-1.063	-1.036	-1.019	-1.021
	(0.005)	(0.004)	(0.005)	(0.005)	(0.004)	(0.006)	(0.005)
Dividend Yield	-0.105	-0.080	-0.103	-0.092	-0.101	-0.106	-0.104
	(0.473)	(0.584)	(0.478)	(0.536)	(0.488)	(0.465)	(0.474)
Industry Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	4409	4409	4409	4283	4409	4409	4409
Pseudo R^2	0.07	0.07	0.07	0.07	0.07	0.07	0.07

Table 3
U.S. Investment, Blockholder Control, and Disclosure Requirements

Tobit regression estimates of U.S. Investment scaled by float on blockholder control variables of interest and controls estimated on subsamples of countries with low and high disclosure requirements. Float, blockholder control variables, and other variables are described previously in Table 2. "Disclosure Requirement" values potentially range from 0 to 1 and are obtained from Table 2 of La Porta, Lopez-de-Silanes, and Shleifer (2006). The "High Disclosure Requirements" subsample contains countries that score above our sample median of 0.75 on the Disclosure Requirement measure. U.S. Investment is described in greater detail in Table 1. Indicator variables for countries and industry groups (based on the classification of Campbell, 1996) are included but not reported. For each coefficient, the p-value (computed using standard errors corrected for heteroskedasticity and clustered at the industry/country group level) of the two-tailed t-test of equality with zero is reported in parentheses. At the bottom of Panel B, we report the p-value of the difference in coefficients on the blockholder variable of interest in the low and high disclosure requirement subsamples.

Panel A: Low Disclosure Requirements

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family/Mgmt control percentage (%)	-0.041	0.094					
	(0.001)	(0.003)					
Family/Mgmt control % squared		-0.0017					
		(0.000)					
Family/Mgmt control GT med			-1.234				
			(0.054)				
Family/Mgmt GT med & largest BH				-1.258			
				(0.036)			
Family/Mgmt control GT 50%					-2.296		
					(0.011)		
Other BH control percentage						-0.008	
						(0.602)	
Other BH control GT 50%							-0.470
							(0.698)
XLIST	9.949	10.011	10.097	8.953	10.032	10.108	10.105
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MSCI Membership	2.107	1.936	2.222	2.215	2.157	2.251	2.259
	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ln(Size)	3.133	3.233	3.182	3.176	3.168	3.257	3.253
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.132	-0.132	-0.133	-0.134	-0.131	-0.133	-0.133
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Book-to-market	-0.854	-0.849	-0.848	-0.670	-0.868	-0.848	-0.845
	(0.005)	(0.004)	(0.005)	(0.016)	(0.004)	(0.005)	(0.005)
Dividend Yield	-0.165	-0.152	-0.165	-0.118	-0.158	-0.174	-0.175
	(0.212)	(0.258)	(0.217)	(0.398)	(0.231)	(0.190)	(0.186)
Industry Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2625	2625	2625	2568	2625	2625	2625
Pseudo R^2	0.08	0.08	0.08	0.08	0.08	0.08	0.08

Panel B: High Disclosure Requirements

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family/Mgmt control percentage (%)	0.006	0.031					
	(0.682)	(0.323)					
Family/Mgmt control % squared		-0.0004					
		(0.416)					
Family/Mgmt control GT med			1.031				
			(0.082)				
Family/Mgmt GT med & largest BH				0.726			
				(0.255)			
Family/Mgmt control GT 50%					0.9115		
					(0.318)		
Other BH control percentage						0.025	
						(0.159)	
Other BH control GT 50%							1.244
							(0.276)
XLIST	9.448	9.473	9.534	9.575	9.427	9.446	9.451
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
MSCI Membership	6.177	6.124	6.175	5.898	6.260	6.101	6.101
	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
Ln(Size)	2.935	2.956	2.969	2.924	2.930	2.932	2.930
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.049	-0.050	-0.050	-0.045	-0.049	-0.047	-0.047
	(0.004)	(0.003)	(0.003)	(0.006)	(0.003)	(0.004)	(0.004)
Book-to-market	-1.280	-1.292	-1.288	-1.637	-1.259	-1.275	-1.277
	(0.060)	(0.058)	(0.058)	(0.018)	(0.062)	(0.062)	(0.060)
Dividend Yield	-0.103	-0.096	-0.092	-0.085	-0.104	-0.127	-0.117
	(0.666)	(0.684)	(0.696)	(0.721)	(0.662)	(0.599)	(0.628)
Industry Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1778	1778	1778	1712	1778	1778	1778
Pseudo R^2	0.05	0.05	0.05	0.05	0.05	0.05	0.05
P-value on blockholder coefficient	0.013	0.136	0.008	0.021	0.010	0.361	0.308
difference between subsamples		0.020					

Table 4
U.S. Investment, Blockholder Control, and Securities Regulation

Tobit regression estimates of U.S. Investment scaled by float estimated on subsamples of countries with low and high scores on "Securities Regulation". Float, blockholder control variables, and other variables are described previously in Table 2. Securities Regulation values potentially range from 0 to 1 and are defined as in Hail and Leuz (2006) as the average of the Disclosure Requirements, Liability Standards, and Public Enforcement indexes, which are obtained from Table 2 of La Porta, Lopez-de-Silanes, and Shleifer (2006). The "High Securities Regulation" subsample contains countries that score above our sample median of 0.58 on the Securities Regulation measure. U.S. Investment is described in greater detail in Table 1. Other model variables are described previously in Table 2. Indicator variables for countries and industry groups (based on the classification of Campbell, 1996) are included but not reported. For each coefficient, the p-value (computed using standard errors corrected for heteroskedasticity and clustered at the industry/country group level) of the two-tailed t-test of equality with zero is reported in parentheses. At the bottom of Panel B, we report the p-value of the difference in coefficients on the blockholder variable of interest in the low and high Securities Regulation subsamples.

Panel A: Low Securities Regulation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family/Mgmt control percentage (%)	-0.044	0.080					
	(0.000)	(0.017)					
Family/Mgmt control % squared		-0.0016					
		(0.000)					
Family/Mgmt control GT med			-1.351				
			(0.027)				
Family/Mgmt GT med & largest BH				-1.505			
				(0.017)			
Family/Mgmt control GT 50%					-2.457		
					(0.005)		
Other BH control percentage						0.002	
						(0.885)	
Other BH control GT 50%							0.116
							(0.923)
XLIST	9.463	9.536	9.646	8.466	9.565	9.656	9.660
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MSCI Membership	2.403	2.237	2.534	2.603	2.467	2.609	2.607
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ln(Size)	3.117	3.202	3.159	3.141	3.153	3.226	3.228
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.132	-0.133	-0.134	-0.135	-0.132	-0.133	-0.134
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Book-to-market	-0.660	-0.645	-0.652	-0.497	-0.670	-0.634	-0.635
	(0.041)	(0.046)	(0.046)	(0.105)	(0.037)	(0.056)	(0.054)
Dividend Yield	-0.146	-0.138	-0.150	-0.127	-0.140	-0.164	-0.164
	(0.256)	(0.288)	(0.246)	(0.351)	(0.275)	(0.200)	(0.200)
Industry Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2691	2691	2691	2628	2691	2691	2691
Pseudo R^2	0.08	0.08	0.08	0.08	0.08	0.08	0.08

Panel B: High Securities Regulation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family/Mgmt control percentage (%)	0.016	0.053					
	(0.299)	(0.059)					
Family/Mgmt control % squared		-0.0006					
		(0.200)					
Family/Mgmt control GT med			1.473				
			(0.005)				
Family/Mgmt GT med & largest BH				1.142			
				(0.050)			
Family/Mgmt control GT 50%					1.397		
					(0.117)		
Other BH control percentage						0.013	
						(0.439)	
Other BH control GT 50%							0.553
							(0.634)
XLIST	10.073	10.112	10.211	10.292	10.038	10.123	10.104
	(0.005)	(0.005)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
MSCI Membership	5.822	5.755	5.776	5.285	5.917	5.705	5.699
	(0.002)	(0.002)	(0.002)	(0.006)	(0.002)	(0.002)	(0.002)
Ln(Size)	2.967	3.000	3.008	2.979	2.948	2.944	2.942
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.048	-0.049	-0.049	-0.043	-0.047	-0.047	-0.047
	(0.005)	(0.004)	(0.004)	(0.010)	(0.005)	(0.005)	(0.006)
Book-to-market	-1.606	-1.627	-1.629	-1.933	-1.573	-1.592	-1.593
	(0.016)	(0.014)	(0.013)	(0.004)	(0.018)	(0.017)	(0.017)
Dividend Yield	-0.080	-0.070	-0.066	-0.059	-0.082	-0.101	-0.095
	(0.747)	(0.776)	(0.787)	(0.811)	(0.738)	(0.685)	(0.706)
Industry Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1712	1712	1712	1652	1712	1712	1712
Pseudo R^2	0.05	0.05	0.05	0.06	0.05	0.05	0.05
P-value on blockholder coefficient	0.002	0.414	0.000	0.002	0.002	0.651	0.700
difference between subsamples		0.054					

Table 5
U.S. Investment, Blockholder Control, and Legal Origin

Tobit regression estimates of U.S. Investment scaled by float on blockholder control variables of interest and controls estimated on subsamples of countries without and with an English Common Law legal origin as indicated in Table 2 of LLSV (1998). Float, blockholder control variables, and other variables are described previously in Table 2. Indicator variables for countries and industry groups (based on the classification of Campbell, 1996) are included but not reported. For each coefficient, the p-value of the two-tailed t-test of equality with zero is reported in parentheses. At the bottom of Panel B, we report the p-value (computed using standard errors corrected for heteroskedasticity and clustered at the industry/country group level) of the difference in coefficients on the blockholder variable of interest in the non-English and English legal origin subsamples.

Panel A: Not English Common Law

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family/Mgmt control percentage (%)	-0.040	0.094					
	(0.001)	(0.003)					
Family/Mgmt control % squared		-0.0017					
		(0.000)					
Family/Mgmt control GT med			-1.031				
			(0.081)				
Family/Mgmt GT med & largest BH				-1.357			
				(0.026)			
Family/Mgmt control GT 50%					-2.377		
					(0.007)		
Other BH control percentage						-0.002	
						(0.882)	
Other BH control GT 50%							-0.186
							(0.879)
XLIST	8.560	8.668	8.734	7.511	8.657	8.759	8.758
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MSCI Membership	2.756	2.589	2.867	2.604	2.802	2.906	2.907
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ln(Size)	3.095	3.190	3.147	3.121	3.124	3.205	3.205
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.131	-0.132	-0.133	-0.130	-0.131	-0.133	-0.133
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Book-to-market	-0.632	-0.630	-0.624	-0.627	-0.646	-0.621	-0.621
	(0.040)	(0.038)	(0.043)	(0.021)	(0.034)	(0.043)	(0.043)
Dividend Yield	-0.132	-0.121	-0.138	-0.047	-0.127	-0.149	-0.149
	(0.356)	(0.401)	(0.336)	(0.746)	(0.370)	(0.294)	(0.292)
Industry Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2606	2606	2606	2535	2606	2606	2606
Pseudo R^2	0.08	0.08	0.08	0.08	0.08	0.08	0.08

Panel B: English Common Law

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family/Mgmt control percentage (%)	0.009	0.030					
	(0.558)	(0.336)					
Family/Mgmt control % squared		-0.0003					
		(0.482)					
Family/Mgmt control GT med			0.987				
			(0.091)				
Family/Mgmt GT med & largest BH				0.788			
				(0.215)			
Family/Mgmt control GT 50%					1.093		
					(0.233)		
Other BH control percentage						0.019	
						(0.291)	
Other BH control GT 50%							0.916
							(0.432)
XLIST	10.871	10.888	10.942	10.899	10.847	10.901	10.898
	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
MSCI Membership	5.127	5.079	5.103	5.162	5.219	5.039	5.044
	(0.003)	(0.003)	(0.003)	(0.004)	(0.002)	(0.003)	(0.003)
Ln(Size)	3.012	3.031	3.040	3.022	3.002	3.000	2.998
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.051	-0.052	-0.053	-0.055	-0.051	-0.050	-0.050
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)
Book-to-market	-1.641	-1.651	-1.649	-1.739	-1.614	-1.638	-1.638
	(0.017)	(0.016)	(0.016)	(0.013)	(0.018)	(0.017)	(0.017)
Dividend Yield	-0.062	-0.056	-0.053	-0.099	-0.064	-0.083	-0.075
	(0.793)	(0.810)	(0.822)	(0.677)	(0.785)	(0.730)	(0.755)
Industry Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1803	1803	1803	1748	1803	1803	1803
Pseudo R^2	0.05	0.05	0.05	0.05	0.05	0.05	0.05
P-value on blockholder coefficient	0.008	0.128	0.011	0.010	0.004	0.657	0.533
difference between subsamples		0.016					

Table 6
U.S. Investment, Blockholder Control, and Antidirector Rights

Tobit regression estimates of U.S. Investment scaled by float estimated on subsamples of countries with low and high shareholder rights as measured by Antidirector Rights. Float, blockholder control variables, and other variables are described previously in Table 2. "Antidirector Rights" values range from 0 to 5 and are obtained from LLS (2006). The "Low Antidirector Rights" subsample contains countries that score below 4 on the Antidirector Rights measure. Indicator variables for countries and industry groups (based on the classification of Campbell, 1996) are included but not reported. For each coefficient, the p-value (computed using standard errors corrected for heteroskedasticity and clustered at the industry/country group level) of the two-tailed t-test of equality with zero is reported in parentheses. At the bottom of Panel B, we report the p-value of the difference in coefficients on the blockholder variable of interest in the low and high Antidirector Rights subsamples.

Panel A: Low Antidirector Rights

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family/Mgmt control percentage (%)	-0.040	0.150					
	(0.007)	(0.001)					
Family/Mgmt control % squared		-0.0023					
		(0.000)					
Family/Mgmt control GT med			-1.406				
			(0.089)				
Family/Mgmt GT med & largest BH				-1.700			
				(0.042)			
Family/Mgmt control GT 50%					-2.326		
					(0.028)		
Other BH control percentage						-0.030	
						(0.121)	
Other BH control GT 50%							-1.202
							(0.414)
XLIST	6.487	6.742	6.595	7.174	6.610	6.656	6.677
	(0.027)	(0.018)	(0.025)	(0.013)	(0.023)	(0.024)	(0.023)
MSCI Membership	3.198	3.004	3.398	2.936	3.249	3.500	3.530
	(0.001)	(0.002)	(0.000)	(0.002)	(0.001)	(0.000)	(0.000)
Ln(Size)	3.814	3.952	3.877	3.822	3.848	4.023	3.978
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.133	-0.139	-0.135	-0.129	-0.134	-0.137	-0.136
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Book-to-market	-0.301	-0.269	-0.300	-0.404	-0.316	-0.327	-0.308
	(0.581)	(0.619)	(0.583)	(0.476)	(0.558)	(0.545)	(0.569)
Dividend Yield	-0.245	-0.243	-0.247	-0.165	-0.246	-0.266	-0.266
	(0.167)	(0.174)	(0.169)	(0.368)	(0.163)	(0.132)	(0.133)
Industry Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1445	1445	1445	1396	1445	1445	1445
Pseudo R^2	0.07	0.07	0.07	0.07	0.07	0.07	0.07

Panel B: High Antidirector Rights

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Family/Mgmt control percentage (%)	-0.002	0.036					
	(0.865)	(0.166)					
Family/Mgmt control % squared		-0.0006					
		(0.116)					
Family/Mgmt control GT med			0.609				
			(0.178)				
Family/Mgmt GT med & largest BH				0.481			
				(0.345)			
Family/Mgmt control GT 50%					0.409		
					(0.629)		
Other BH control percentage						0.026	
						(0.076)	
Other BH control GT 50%							1.139
							(0.254)
XLIST	11.510	11.512	11.530	10.540	11.516	11.474	11.503
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
MSCI Membership	3.576	3.499	3.589	3.639	3.612	3.598	3.584
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
Ln(Size)	2.689	2.722	2.721	2.725	2.694	2.693	2.687
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.088	-0.088	-0.088	-0.091	-0.088	-0.087	-0.087
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Book-to-market	-1.587	-1.604	-1.591	-1.562	-1.579	-1.573	-1.578
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Dividend Yield	-0.029	-0.019	-0.020	-0.037	-0.027	-0.050	-0.036
	(0.886)	(0.923)	(0.919)	(0.854)	(0.893)	(0.804)	(0.856)
Industry Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2958	2958	2958	2884	2958	2958	2958
Pseudo R^2	0.06	0.06	0.06	0.06	0.06	0.06	0.06
P-value on blockholder coefficient	0.090	0.038	0.045	0.036	0.057	0.258	0.212
difference between subsamples		0.015					

Table 7
U.S. Investment, Earnings Management, and Securities Regulation

The table presents Tobit regression estimates of U.S. Investment scaled by float estimated on Earnings Management (EM), Family/Mgmt control variables, and controls. In Panel A, we split the sample into countries with low and high scores on "Securities Regulation," where high scores are those above our sample median of 0.58. Panel B models feature Family/Mgmt control variables, earnings management measures and the interaction between each earnings management and Family/Mgmt control measure, and are estimated in the low Securities Regulation subsample. Securities Regulation values potentially range from 0 to 1 and are defined as in Hail and Leuz (2006) as the average of the Disclosure Requirements, Liability Standards, and Public Enforcement indexes, which are obtained from Table 2 of La Porta, Lopez-de-Silanes, and Shleifer (2006). The first proxy for earnings management is computed as the median magnitude of accruals relative to the cash flow from operations. The second proxy is an aggregate earnings management score based on three scores: (1) the magnitude of accruals relative to the operating cash flow, (2) the standard deviation of operating earnings over the standard deviation of operating cash flows, and (3) the correlation of changes in accruals and changes in operating cash flows. The scores are averaged for each firm and are ranked such that higher values indicate more earnings management. All variables are computed by firm from 1992 to 1997 for the universe of dead and active non-financial firms in the Worldscope database as of 2006 (with sufficient data). Other model variables are described previously in Table 2. Indicator variables for countries and industry groups (based on the classification of Campbell, 1996) are included but not reported. For each coefficient, the p-value (computed using standard errors corrected for heteroskedasticity and clustered at the industry/country group level) of the two-tailed t-test of equality with zero is reported in parentheses. At the bottom of Panel A, we report the p-value of the difference in coefficients on the earnings management variable across the low and high Securities Regulation subsamples.

Panel A:	*Low Securities Regulation*		*High Securities Regulation*	
	(1)	(2)	(3)	(4)
Magnitude of Accruals	-3.707		-0.049	
	(0.000)		(0.941)	
Aggregate EM Score		-0.105		-0.051
		(0.000)		(0.195)
XLIST	9.895	9.929	10.501	11.099
	(0.001)	(0.001)	(0.024)	(0.026)
MSCI Membership	2.347	2.325	4.128	3.924
	(0.001)	(0.001)	(0.056)	(0.069)
Ln(Size)	3.240	3.411	2.978	2.995
	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.118	-0.120	-0.010	-0.002
	(0.000)	(0.000)	(0.577)	(0.917)
Book-to-market	-0.058	0.010	-1.913	-1.740
	(0.851)	(0.975)	(0.001)	(0.002)
Dividend Yield	-0.354	-0.133	0.023	0.084
	(0.016)	(0.389)	(0.929)	(0.749)
Industry Controls?	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes
N	2214	2151	1084	1037
Pseudo R^2	0.09	0.09	0.07	0.07
P-value on EM coefficient difference between low and high subsamples			0.001	0.207

Panel B:	*Low Securities Regulation*		*Low Securities Regulation*	
	(1)	(2)	(3)	(4)
Magnitude of Accruals GT med	-1.522	-1.676		
	(0.002)	(0.000)		
Aggregate EM Score GT med			-1.104	-1.157
			(0.018)	(0.009)
Family/Mgmt control percentage (%)	-0.026		-0.027	
	(0.117)		(0.088)	
Family/Mgmt control GT 50%		-1.371		-1.147
		(0.273)		(0.351)
Interaction between EM measure and Family/Mgmt measure	-0.036	-3.038	-0.031	-3.021
	(0.034)	(0.014)	(0.033)	(0.003)
XLIST	9.815	9.924	10.056	10.196
	(0.001)	(0.001)	(0.000)	(0.000)
MSCI Membership	2.131	2.168	2.214	2.245
	(0.002)	(0.002)	(0.001)	(0.001)
Ln(Size)	3.181	3.207	3.226	3.249
	(0.000)	(0.000)	(0.000)	(0.000)
Leverage	-0.117	-0.116	-0.122	-0.121
	(0.000)	(0.000)	(0.000)	(0.000)
Book-to-market	-0.062	-0.068	-0.111	-0.131
	(0.839)	(0.822)	(0.727)	(0.677)
Dividend Yield	-0.304	-0.298	-0.119	-0.107
	(0.035)	(0.038)	(0.441)	(0.488)
Industry Controls?	Yes	Yes	Yes	Yes
Country Controls?	Yes	Yes	Yes	Yes
N	2214	2214	2151	2151
Pseudo R^2	0.09	0.09	0.07	0.07

Table 8
Robustness Tests

The table reports coefficients on Family/Management (F/M) control percentage and on an indicator variable for F/M control percentage greater than 50% for a series of regression models that contain all control variables found in the base case models estimated in Tables 2 through 6, and feature one or more additional variables for robustness. Liquidity refers to the percentage of trading days in the 1997 calendar year in which the stock had zero return for the day – this measure is computed only for firms with price data reported for at least 100 trading days in 1997. Momentum refers to the 12 month buy-and-hold stock return over the period January 1, 1997 to December 31, 1997, winsorized at the 1st and 99th percent levels. In Panel A, the dependent variable is U.S. Investment scaled by float, consistent with all prior reported regressions. In Panel B, the dependent variable is U.S. Investment scaled by total market capitalization, and float in U.S. dollars is included as an additional right hand side variable. The models are separately estimated for subsamples of countries with low and high scores on Disclosure Requirements and on Securities Regulation as described in Tables 3 and 4. In each case, the difference between the coefficients in the low and high protections groups (not tabulated) is significant at the 5% level or better. For each coefficient, the p-value (computed using standard errors corrected for heteroskedasticity and clustered at the industry/country group level) of the two-tailed t-test of equality with zero is reported in parentheses.

Panel A: Dependent variable is U.S. Investment as a percentage of float

	Low Disclosure Requirements		*Low Securities Regulation*		*High Disclosure Requirements*		*High Securities Regulation*	
	F/M control	F/M control > 50%	F/M control	F/M control > 50%	F/M control	F/M control > 50%	F/M control	F/M control > 50%
Includes liquidity and momentum variables	-0.025	-1.835	-0.027	-1.941	0.011	1.131	0.018	1.522
	(0.045)	(0.045)	(0.024)	(0.028)	(0.438)	(0.186)	(0.177)	(0.072)
Number of observations	2465	2465	2526	2526	1655	1655	1594	1594

Panel B: Dependent variable is U.S. Investment as a percentage of equity market capitalization

	Low Disclosure Requirements		*Low Securities Regulation*		*High Disclosure Requirements*		*High Securities Regulation*	
	F/M control	F/M control > 50%	F/M control	F/M control > 50%	F/M control	F/M control > 50%	F/M control	F/M control > 50%
Base case model	-0.030	-1.856	-0.032	-1.899	-0.005	-0.093	-0.001	0.119
	(0.000)	(0.000)	(0.000)	(0.000)	(0.423)	(0.821)	(0.842)	(0.766)
Number of observations	2625	2625	2691	2691	1778	1778	1712	1712
Includes liquidity and momentum variables	-0.026	-1.713	-0.027	-1.723	-0.002	0.063	0.001	0.211
	(0.000)	(0.000)	(0.000)	(0.000)	(0.693)	(0.871)	(0.923)	(0.590)
Number of observations	2465	2465	2526	2526	1655	1655	1594	1594

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