External Governance and Debt Agency Costs of Family Firms

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Abstract

We investigate the impact of the founding family on the firm's debt agency costs under different investor protection environments. On one hand, founding families - through their undiversified investments, inter-generation presence, and reputation concerns - can mitigate debt agency costs. On the other hand, families – through a unique power position that can lead to private benefits extraction – can end up exacerbating debt agency costs because such extraction increases bankruptcy risk. The actual impact can go either way and what matters is the investor protection environment that determines who monitors and disciplines the family. Using international bond issues from 1988 to 2002 for a sample of US firms and Level II and III ADR firms originating from 44 different countries, we find that family firms originating from low investor protection environments suffer from higher debt costs compared to non-family firms, while family firms originating from high investor protection environments benefit from lower debt costs compared to non-family firms. Furthermore, the impact of family blockholding is different than that of non-family blockholdings. These results are robust to endogeneity issues and confirmed by an out-of-sample test using East Asian firms.

Keywords: Family Firms; Ownership Structure; Corporate Governance; Agency Cost of Debt
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Introduction

Recent US and international evidence on ownership of publicly traded firms highlights the presence and importance of firms where the founding family has a significant stake. Only about 36% of the international large public traded firms are widely held, while 30% are owned by families and this figure rises to 45% when medium-sized firms are considered (La Porta et al., 1999)[1]. Family firms' presence in the US is also significant with almost one third of S&P500 firms and 37% of Fortune 500 being family-owned (Anderson and Reeb, 2003, and Villalonga and Amit, 2006). The question on whether, and how, family blockholdings could have an impact of agency costs has not yet been addressed. In this paper we investigate the impact of the founding family on the firm's debt agency costs and relate this to the level of investor protection in different countries.

Often, founding families are in a very uncommon power position in the firm obtained through the use of very complex ownership structures. In such cases, the family may use ownership pyramids and cross-shareholdings so that their control rights end up being significantly higher than their cash flow rights. The combination of family firms' presence around the world, and the mechanisms used by founding families to keep control make them a very important type of blockholder to investigate. With concentrated

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[1] See also Shleifer and Vishny (1986), Claessens et al. (2000), Faccio and Lang (2002).

ownership, the focal agency cost shifts from the traditional owner-manager conflict to the blockholder's incentives and abilities to consume private benefits at the expense of other minority shareholders and bondholders. The founding family's power position does not only raise questions on its ability to extract private benefits. More importantly, we have to address the question on how families are disciplined and monitored in order to avoid such consumption and understand how finance-providers protect themselves from such behavior.

In this paper, we investigate how families behave when they find themselves in such a power position and, in particular, the agency conflicts between this type of blockholder and bondholders. We ask two main questions. First, does a founding family exacerbate or mitigate the agency cost of debt? Second, does this behavior change in the presence of different investors' protection regimes?

While there may be various reasons to explain why we want to investigate family firms, we have to first address a number of questions to fully address the dynamics on how founding families influence debt agency costs. First, are family firms really different from others owned by non-family blockholders? It is reasonable to say that there is a difference between these firms. We argue that unlike widely-held financial institutions, a founding family (a) has a highly undiversified investment in the firm, leaving it open to significant idiosyncratic risk, (b) has a long-term commitment to the firm, often spanning different generations, and (c) faces a situation where its reputation (and, in some cases, its national and international prestige) is strictly related to the firm's performance. These characteristics cannot be easily replicated by other institutional investors which are likely to have diversified investments and their involvement with the firm is more of a short-term nature. For example, Tufano (1996) shows that institutional investors often have significant shareholdings in different companies, are not active in monitoring management and are more likely to have incentive structures similar to atomistic shareholders.

Secondly, if it is argued that the driving force behind the debt agency conflict is the blockholder's ability to extract private benefits, increasing in this way bankruptcy risk, then we have to address a second question: do different types of blockholders have

the same incentives and abilities to extract private benefits from small shareholders and bondholders? The answer is probably not. The main reason is the dilution of any private benefits extracted. In the case of a widely-held financial institution, any private benefits extracted are likely to be divided among several final owners, resulting in heavy dilution of such benefits. Dilution is not likely to be a problem when we consider a family and hence we expect families to have more pronounced incentives to extract private benefits at the expense of other stakeholders. This makes family-owned firms different compared to firms owned by other types of blockholders.

The theoretical literature has, so far, focused mostly on the agency conflict between a blockholder and minority shareholders. Following Shleifer and Vishny (1997), we know that when "large owners gain nearly full control of the corporation, they prefer to generate private benefits of control that are not shared by minority shareholders". Family-owned firms are similar in spirit to the firm modeled by Shleifer and Vishny (1986) where a large blockholder exists along with other small shareholders. We also know that blockholders can abuse their dominant position and extract private benefits at the expense of minority shareholders, especially when weak legal protection for minority shareholders exists (Bebchuk, 1994, Stiglitz, 1985). Differential voting or pyramids are two mechanisms that can be used to facilitate expropriation (Grossman and Hart, 1988, Harris and Raviv, 1988, La Porta et al., 1998).

Can we extend the same Shleifer-Vishny (1997) argument to analyze how large blockholders' preference for such private benefits may have *an impact on bondholders* as well? Can the extraction of private benefits damage bondholders as well? And, if yes, how significant are these debt agency costs?

The existing literature that considers firms with dispersed ownership perceives debt as one of the mechanisms that can be used to enforce discipline on professional managers (Jensen and Meckling, 1976, Jensen, 1986, and 1989, Lang et al., 1996, Titman and Wessels, 1988). But, as Faccio et al. (2004) argue, the role of debt as a discipline device really depends on the type of firm ownership, and the way governance is implemented.

There are many reasons that support such a view especially when we deal with closely-held, rather than widely-held, firms. First, a founding family often wants to keep control and not dilute its ownership. This means that a family is more likely to prefer debt rather than equity to finance new investments. For this reason, family firms could end up with higher debt-equity ratios compared to non-family firms. Indeed this paper finds preliminary evidence that supports this view. Using the Jensen and Meckling (1976) framework, one can conclude that debt agency costs should be significantly higher in family firms by virtue of the larger reliance on debt. Second, there is nothing that keeps a blockholder from using the same mechanisms used to expropriate minority shareholders, such as cross-holdings and pyramid structures, from using these same mechanisms against bondholders. Given these facts, we posit that debt agency costs are very important to investigate, especially in tightly controlled firms.

Existing theoretical literature has not yet fully articulated the impact of a blockholder on debt agency costs. Inderst and Mueller (2001) conjecture that firms with dispersed shareholders have lower debt agency costs compared to firms with concentrated ownership. Their argument is based on the relationship between the owners' choice of projects and the actions of management. While risk-seeking shareholders can appoint a risk-averse manager, a large blockholder is likely to control management, or appoint a manager with similar preferences. While in the former case, debt agency costs end up being alleviated because of the risk-averse manager, they are not in the latter and will be fully borne by the blockholder.

Having established that concentrated ownership – particularly a family blockholder - may exacerbate debt agency costs, we need to ask an additional question: can the external (country-level) governance environment influence the impact of a family blockholder? There is evidence that shows that the ultimate impact of a large shareholder is likely to depend on the type of internal and external governance that the firm faces. For example, Claessens et al. (2002), interpreting the results found on the impact of large blockholders on firm valuation in East Asian countries, state that "the degree to which certain ownership and control structures are associated with entrenchment discounts likely depends on economy-specific circumstances." Lins (2003) finds that the way blockholders impact firm valuation is significantly influenced by the type of shareholder

protection rules in different countries. Lins state that "one interpretation of these results is that external shareholder protection mechanisms play a role in restraining managerial agency costs and that large non-management blockholders can act as a partial substitute for missing institutional governance mechanisms."

The only previous empirical evidence on the relationship between family firms and debt agency costs is provided by Anderson et al. (2003) who use S&P 500 firms and find that family firms pay less (32 basis points) in debt costs compared to non-family firms. Their results are consistent with the long-term nature of founding family's investment that makes the family's presence valuable. Such long-term presence creates a structure that appears to be providing insurance to bondholders and protect their interests.

The results for family firms in the US, though interesting, labor under one limitation, namely that they are obtained for firms operating in a particular type of market environment characterized by transparency and a well-regulated financial system with high financial discipline. That is not the typical environment encountered internationally and hence we argue, similarly to La Porta et al. (1999), that the US results pose one significant question: What happens to debt agency costs in systems where, because of lack of proper financial discipline and weak legal protection, large shareholders can expropriate bondholders more easily?

We investigate the impact of the founding family on the debt agency costs by looking at bond issues made by Level II and Level III ADR firms from 44 different countries and US firms in the Fortune 500 list in the period from 1988 to 2002. The final dataset comprises 325 firms originating from different systems, giving us a whole spectrum in terms of legal protection, rule of law and financial transparency. This dataset allows us to analyze (a) the relationship between founding families and debt agency costs, and (b) how this relationship changes in different environments with varying levels of legal protection.

We use ADR firms, rather than any other sample of international firms, because our research question is focused exclusively on external (country-level) governance. It is reasonable to expect that debt agency costs are a function of both internal and external governance. The first advantage from this sample is driven from the "bonding"

hypotheses: international firms that have already decided to be present in the American market, through an ADR program, should have better corporate (internal) governance and better disclosure standards compared to other firms that remain exclusively listed on their local market (Coffee, 2002, La Porta et al., 2000, Miller and Puthenpurackal, 2002, and Stultz, 1999). This argument has been mostly applied to Level II and Level III ADRs but not to Level I ADRs. The latter have no obligation to adhere completely with the highest standards required by the New York Stock Exchange. This explains why we do not use Level I ADRs. Using Level II and Level III ADRs with a high level of internal governance, and comparable to that of US firms, allows us to be confident that any result we find is driven by external, not internal, governance.

This also means that if we find that family ownership matters for ADRs, then we can conclude that it should be more important for non-ADRs since internal governance is likely to be of lower quality for non-ADRs and any agency costs arising from the ownership structure is likely to be magnified.

The second advantage is that using ADRs allows us to minimize the well-known cross-country differences that can generate the usual problems inherent in this type of studies, particularly the spurious relationship that may exist between external financing and investors' protection (Rajan and Zingales, 1998). Obviously, any international comparison will labor under significant problems such as different disclosure regimes, different accounting standards and different investment cultures that are likely to impact information asymmetries, especially if bonds are marketed to foreign investors, and finally the cost of debt. Using ADRs allows us to analyze the cost of debt for family and non-family firms in an environment where the impact of such problems has been at least minimized, if not removed at all.

We find that family ownership matters for debt agency costs and such an impact changes across the different investors' protection regimes. In particular, we find that family firms originating from countries with low investor protection face a higher cost of debt while those originating from countries with high investor protection benefit from lower cost of debt. We find that while in high investors' protection environments family-owned firms pay 32 basis points less than non-family firms, in low protection

environments family-owned firms pay 44 basis points more than non-family firms. This result, while being both statistically and economically significant, is robust to various specification and inclusion of various firm-level and bond-level variables. Furthermore, these results are robust to endogeneity issues and confirmed by an out-of-sample test using East Asian firms.

These results show that "who monitors the family" (La Porta et al., 1999, page 502) is a crucial issue and that founding families' can exacerbate or mitigate the agency cost of debt depending on the investor protection environment under which they operate in their home country.

We also show that there are significant differences between founding families and other types of large blockholders, such as institutional blockholders or other outside blockholders. In particular, we find no relationship between the other types of large blockholders, such as institutional blockholders, outside blockholders or non-family inside blockholders, and debt agency costs. This confirms our view that family blockholdings are different than non-family blockholdings.

It is reasonable to assume that endogeneity issues are potentially significant in these types of studies. For example, founding families may choose to invest in certain type of firms where expropriation of bondholders is easier, resulting in an outcome where family ownership and debt agency costs are endogeneously determined. It is also possible that external governance, ownership structures and resulting debt agency costs could all be endogenously determined. We control for these issues and find that the main result is robust to these types of endogeneity. One further robustness check that we do is an out-of-sample test using a dataset of 272 East Asian firms. This dataset contains ADR and non-ADR Asian firms and all bonds issued by these firms in both national and international markets. We find even stronger results using this dataset, and this is mainly due to the fact that having both ADRs and non-ADRs is likely to augment the impact of family ownership due to both external governance and internal governance problems (for non-ADRs).

We contribute to the literature in various ways. First, we contribute to the emerging literature that investigates the link between ownership structures and debt

agency costs rather than the traditional manager-shareholder agency costs. Up to now, only Barnea et al. (1981), Bagnani et al. (1994) and Anderson et al. (2003), have explicitly considered this area of research. Second, we provide one possible answer to the question of who bears these debt agency costs in different legal environments. Third, we contribute to the literature that investigates the impact of ownership structures on firm's valuation. While Lins (2003) finds in favor of a presence of a large blockholder, especially in the presence of management's control rights, we find a more complex story where a large blockholder – in the form of a family – is considered as a positive development in high investors' protection environments but judged as negative in low investors' protection regimes.

The rest of the paper is organized as follows. Section 2 presents the hypotheses to be tested. Section 3 reviews the data and the methodology we used. Section 4 presents and reviews the results. Section 5 concludes.

Section 2. Hypotheses

Existing theoretical literature does not provide significant prior indications about the family's behavior vis-à-vis bondholders. Nevertheless, we can look at indications offered by existing theoretical literature on the behavior of blockholders and some very recent empirical literature on family firms.

Shareholders can engage into two types of behavior to expropriate bondholders. They can either engage in asset substitution as observed by Jensen and Meckling (1976) or engage in stealing or tunneling of the firm's resources. Given these shareholders' incentives, bondholders would want to protect themselves through higher rents, resulting in higher cost of debt capital. The question then is whether a large, undiversified blockholder, such as a founding family, has the same incentives of expropriating bondholders, or whether its incentives are better aligned with those of bondholders.

In this paper we do not specify the exact nature of the agency costs that may arise within a family firm. The crucial issues are the magnitude and, more importantly, the likely impact that these agency costs may have on the firm. At the very basic level, what

matters most to bondholders is not where agency costs are coming from, but whether the blockholder's behavior could cause the firm to get closer, or into, bankruptcy.[2] Moreover, there is nothing precluding a family from engaging in both asset substitution and stealing/tunneling occurring at the same time.

The empirical literature on family firms has identified various positive aspects of having a family in the ownership structure. Families tend to have very long horizons for their investments, and are the classical type of long-term investors, unlike atomistic shareholders, or, for that matter, other types of blockholders. Their long-term presence in the firm, which often spans different generations, allows the building of strong relationships between the firm and the financial markets.

Another important factor is that families want to pass the firm to subsequent generations. This means that they value highly the survival of the firm, perhaps much more than the simple wealth maximization required from other firms. Once survival becomes a priority, taking on excessive risk should not be one of the founding family's objectives. This in itself should align the incentives of a founding family with those of bondholders who prefer to reduce risk. If one also adds the fact that the founding family is very often highly undiversified and thus may be affected adversely by the firm's idiosyncratic risk (Maug, 1998) – something that should also keep the firm from taking excessive risk – and that the family's reputation is very much linked with the firm's reputation and success then it is not unreasonable to argue that the family's incentives could be very much aligned with those of bondholders, resulting in lower possibilities of expropriation of bondholders. That is as far as the "sunny side" of the family is concerned[3], and these factors indicate that the founding family should mitigate debt agency costs.

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[2] It is also probably true, however, that risk shifting, by virtue of the negative effects generated on bondholders through the changing of the whole distribution of cash flows available to the different stakeholders (the well-documented mean preserving spread), may get the firm closer to bankruptcy more than stealing or tunneling that have the sole impact of shifting the mean rather than the entire distribution of cash flows.

[3] One may also add that a large blockholder, not having an position in the firm's management, may monitor the manager closely so as not to allow a poorly devised strategy, such as takeovers or diversification, to develop into poor performance that may end up in some kind of restructuring that will hurt bondholders (Gibbs, 1993, Hoskisson et al., 1994).

On the other hand, there is also what may be called the "dark side" of the founding family which, through its power position, could use various mechanisms and opaqueness in the firm's organization to expropriate cash flows from the firm and direct them into its own pockets or use them for "pet projects". This behavior should lead to an increase in debt agency costs. The classical example is Parmalat SpA where the family controlling this publicly-owned firm consistently diverted cash raised by Parmalat SpA to its other businesses and "pet projects"[4] leading to the firm's eventual bankruptcy. There are other examples of such behavior besides this single case of bankruptcy. Backman (1999), investigating Asian corporate groups, documents how controlling families used cross-holdings and pyramids to expropriate other minority shareholders.

We have no theoretical priors to indicate which side will emerge. It is not unreasonable to argue that the actual behavior of the founding family can go either way. It can be an excellent mechanism that, through the focus on firm's survival, trust and long-term relationships generated across generations, aligns the incentives of the large shareholder with those of bondholders. On the other hand, through its power position, it can actually have higher incentives and be in a position to expropriate bondholders (as well as minority shareholders).

These alternatives modes of behavior raise various questions on the way a founding family is disciplined and monitored in order to avoid such expropriation of cash flows at the expense of other stakeholders. The monitoring mechanism is a central part of this paper. Existing literature on corporate governance suggests that the legal environment and the financial market's structure should have an impact on agency conflicts (see Claessens et al., 2000, Durnev and Kim, 2005, Lins, 2003, Stulz, 2005, Weinstein and Yafeh, 1998, amongst many others). We argue that the role of a family in mitigating or exacerbating debt agency costs depends on how market discipline is exercised. This, in turn, will determine how much power a family can exert within the firm and to what extent is the family itself is monitored by the financial market.

Where capital market institutions are effective in their disciplinary role and minority shareholders' and bondholders' protection rules are in place and effective, one

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[4] The Tanzi family used part of the cash flows for its own travel company and its soccer club.

expects that having a family within the firm's capital structure leads to a mitigation of debt agency costs. This is mainly due to the long-term nature of family investments which allow the building of strong relationships between the firm and the bond markets and the promotion of solid reputations. These dynamics should control the "dark side" of the family, allowing the firm to enjoy lower cost of financing.

But what happens when capital market institutions are not effective, or when minority shareholders' and bondholders' protection rules are not enforced? In this case, it is reasonable to expect that it is easier for concentrated ownership to expropriate minority shareholders and bondholders, or to extract private benefits to the detriment of the other stakeholders. In this case, there may be nothing controlling the "dark side" of the family impact and the presence of a family may actually end up increasing debt agency costs. Expecting this situation to emerge, bondholders will ask for a higher return on bonds issued by family firms in order to compensate them for the risk of expropriation.

The only empirical evidence by Anderson et al. (2003) shows that, at least in the case of the US market, the family's "sunny side" emerges because a firm owned by a founding family pays 32 basis points less in debt costs. Arguably, the market discipline in the US model, based on transparency, a well-regulated financial system and high legal protection to bondholders, appears to reach blockholders as well. Accordingly, the founding family's ability to expropriate bondholders can be severely restricted in such a system. The same cannot be said for systems where financial discipline is lacking and where bondholders' protection is not adequate.

There are a series of questions that need to be addressed at this stage. First, what is so special about the founding family? Can another type of blockholder engage in similar behavior? And what differentiates the founding family from, say, a powerful CEO of a firm with dispersed shareholders? We first address the former case and then the latter. Financial institutions, which are the other type of blockholders typically found in firms around the world, are not usually long-term investors and as such can built very limited, if any, relationships between the firm they invest in and the financial markets. Moreover, the incentives of such blockholders to extract private benefits is, most probably, low because these private benefits have to then be divided among several final

owners, resulting in heavy dilution of such benefits. Dilution is not likely to be a problem for a founding family. This makes family-owned firms different compared to other firms owned by blockholders.

The case of a powerful CEO of a firm with dispersed owners is different. It is true that dilution of such private benefits is not a problem for such a manager and hence she may have similar incentives. The question then is whether a manager has the abilities to engage in systematic stealing/tunneling or risk shifting behavior for a very long time. To achieve such a goal, one would need to set-up a very opaque organizational structure and collude, systematically, with different layers of management. Such schemes involve significant costs, one example being legal maneuvering. We posit that it is very unlikely that such circumstances can occur, at least for a long period, in a widely held firm with a powerful manager. On the other hand, by virtue of its power position and its ability to stay in the firm's management, a founding family can more easily obtain such an objective. Perhaps the parallel examples of Enron and Parmalat can be helpful to illustrate the point. Although Enron had a powerful CEO managing a widely held corporation, the web of structures and off-balance sheet trusts were, at the very least, reported in financial statements and it has not been very difficult for prosecutors to link the channels and the operations going on in the different parts of the corporation. On the other hand, the web of offshore companies created by Parmalat were never fully reported in financial statements and the organizational structure was so obscure that until now, almost two years after its bankruptcy, prosecutors have not fully identified the exact operations that went on through the different entities.

There is, though, another important issue to consider when addressing different behavior in different legal environments. What if a firm's ownership structure is an equilibrium response to the legal environments in which a firm operates, or the particular operational characteristics of the firm (Demsetz and Lehn, 1985, Roe, 1990, and Demsetz and Villalonga, 2001)? There are some studies that show that the ownership stake of a controlling blockholder may mitigate, but not eliminate completely, the incentive of expropriating minority shareholders (Filatotchev et al., 2001, La Porta et al., 1999). In this case, one can argue that the institution of the family shareholding – by virtue of its long-term commitment to the firm – is one important mechanism through which some

form of trust can be built between the firm and financial markets. In particular, this trust that should be generated by this type long-term investor that values firm's survival should be particularly valuable to bondholders.

While the trust argument should apply to family firms in both high and low financial discipline environments, it can be marginally more important in the latter. Such environments are characterized by significant incomplete contracts situations where there are no proper mechanisms in place to resolve some of the most important and acute conflicts that may arise between different stakeholders of a firm. Building trust, an important characteristic of founding family, can be one of the most effective mechanisms to resolve these conflicts. With this argument, family firms should always enjoy lower cost of debt, whether they come from low or high financial discipline environments but the marginal benefit is greater for firms operating in the former.

This discussion leaves us with two competing hypotheses about the relationship between family firms and the way debt agency costs are resolved. The first one states that, if external governance matters, then founding families operating in high financial discipline environments – through effective control of the negative effects coming from the family's position and thus allowing the family's positive effects to emerge - should mitigate debt agency costs in high financial discipline environments but should exacerbate these agency costs in low financial discipline environments – by virtue of the absence of effective controls over the family's power. Hence, we would expect debt costs to be lower (higher) for family firms (compared to non-family firms) in high financial discipline environments (low financial discipline environments).

On the other hand, if external governance mechanisms do not matter, then family firms – through their ability to build long-term relationships with bondholders – should mitigate the agency costs of debt in both high and low financial discipline environments.

We test these hypotheses by looking at the different legal environments in which family firms operate in order to investigate the behavior of family firms and the impact on bondholders. We distinguish between systems based on financial transparency and where financial markets impose significant discipline (high legality countries and where creditor rights are adequately protected), and systems with opaque financial information

and financial markets that lack discipline (low legality countries and where creditor rights are not adequately protected).

Section 3. Data

We begin with all US firms in the Fortune 500 list as of 1988 and the ADRs listed on the NYSE in the period 1988 - 2002. We identify 743 firms (331 US firms and 412 ADRs) that are both in the Compustat Industrial tapes and have information about their ownership structure through either the 20-F forms or in proxy statements. From the latter we collect two different sets of information. First, we get information about the presence of a founding family, either directly or indirectly through a separate entity (such as a trust) owned by the founding family. Second, in the case of a family presence, we collect data on the family's ultimate ownership stake. We also obtain data on whether a family is present in the firm's management in a similar way, i.e. from 20-F forms and proxy statements we determine whether members of a family are present on the firm's Board of Directors. From the same sources we also obtain information about the presence and ownership stake of non-family blockholders and whether they are inside blockholders (where they have a presence in the firm's Board of Directors) or outside blockholders (where they have no presence in the firm's Board of Directors).

Next, we get all non-convertible and non-callable bond and note issues from the New Issues Database of the Securities Data Company (SDC). We find 409 firms from the initial set of 743 firms that issued bonds and notes between January 1988 and December 2002. We find that these 409 firms have issued a total of 18,188 bonds over the period under consideration. From this sample, we then delete observations for which Yield-to-Maturity is not reported in the SDC database. Additionally, we restrict our sample to bond issues that (a) are rated by Moody's, and (b) for which we can find at least the 3-month Government (Treasury) rate in the currency of the bond issue. After these deletions, we end up with a final sample of 11,834 bonds and notes issued by 325 US firms and ADR firms.

[Insert Table 1.]

Issue specific information such as bond yield, maturity, issues size and rating are obtained from the SDC database. Firm-specific balance sheet and income statement variables come from Compustat. Risk free rates are downloaded from Global Insight. Firm-level governance information is hand collected from 20-F forms and proxy statements while country-level governance and capital market measures are obtained from La Porta et al. (1998), Berkowitz, Pistor, and Richard (1999), and Demirguc-Kunt and Levine (1999).

3.1 Discussion of the Sample Selected

The reason for only using US firms and ADRs is consistent with our objective of analyzing the impact of external governance exclusively on the relationship between blockholders and bondholders. It is reasonable to assume that such a relationship is affected by the level of both internal and external governance. Using any international firm, notwithstanding the level of the firm's internal governance, will certainly compound the complexity of the issue because it would be virtually impossible to disentangle the exact impact of internal governance and external governance on debt agency costs.

We choose to be very conservative in our approach and use firms that should have achieved high levels of internal governance so that any impact on debt agency costs should only come from external governance. Existing literature shows that cross-listing of international firms in the US is one way to achieve a high level of governance by virtue of the listing requirements. These rules are seen as significantly improving a firm's internal governance, making it closer to US levels, and providing the necessary "certification". For example, Doidge et al. (2005) show that when private benefits are high, the controlling shareholders are found to be less likely to list the firm in the U.S. The reason they provide is that the higher levels of monitoring, as well as higher standards for transparency and disclosure can severely limit the controlling shareholders' ability to extract private benefits.

Furthermore, ADRs provide us with another advantage: evidence shows that cross-listing firms are different from non-ADR firms from the same country especially

because the former have higher growth opportunities and their shareholders are willing to sacrifice some private benefits of control in order to obtain equity financing. On the other hand, non-ADR firms have shareholders that are willing only to sell their ownership stake at a control premium which is then disproportionately captured (Coffee, 2002). This means that ADRs will suffer less from the problem of private benefit extraction and hence the agency problem between the large blockholder and the minority shareholders and bondholders can be of a lower magnitude.

For precisely these reasons we choose to use *only* Level II and Level III ADRs together with US firms.[5] We are aware that focusing on this sample can restrict our analysis in some dimensions. For example, it is not easy to find a family firm that decides to (a) first list in the U.S., and (b) then issue bonds. It can also be argued that the family firms that make it to our sample suffer from selection biases. For example, a family firm that lists in the U.S. may be different than a family firm that does not.

These restrictions, however, should make it more difficult for us to find any agency costs induced by the family blockholding. If anything, the family firms we consider should bias the coefficient of the debt agency cost variable towards zero. In this sense, the firms we use in our sample and the restrictions we impose in defining a family firm are likely to underestimate the actual impact that a family blockholding may cause on debt agency costs. If we really find that external governance matters for debt agency costs in the family firms present in our sample – by their virtue of having listed in the U.S. and abide by higher rules – should provide a high level of comfort that the relationship between blockholders and bondholders is indeed influenced by external governance. Any sample selection bias should be in our favor because we would be erring on the side of prudence.

3.2 Definition of Family Firm

We define a family firm as such when the founder or members of his/her family (either by blood or through marriage) is a blockholder – either individually or as a group. Our

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[5] We do not use Level I ADRs because these are not required to follow the same listing requirements as Levels II and III ADRs. The latter have more stringent listing rules.

major data sources are the 20-F forms and proxy statements filed by the firms in our sample. We supplement these sources by also looking at the firms' websites and finding information about its history and its founders. Consistent with existing literature, we need to clarify how we define family firms. First, we define a family firm as one that was founded by a family and where this family was responsible for its early growth. Hence, in line with this view of the "founding family", we do not define as family firms those where a person – either individually or through a group or trust - became the largest shareholder in through a management or a leveraged buy-out or through a spin-off. This definition, however, does not capture all the cases we encountered in our sample and hence we also applied other rules similar to those used by Villalonga and Amit (2006).

Having established the presence of a family in the ownership structure is only the first step in our exercise. There is still an on-going debate about what constitutes a family firm even if a family is a blockholder. It is not yet clear whether the sheer presence of a family blockholding – independently of its size – is enough to let us identify a firm as a "family firm". This issue is particularly important for this paper since our argument of how a family may influence debt agency costs depends on its ability to, on one hand, extract private benefits, and, on the other hand, its ability to build trust with financial markets.

We proceed as follows. First, we define a firm as being a family firm irrespective of the size of the family's ownership as long as the founding family or its descendants are present in the ownership structure. The most straightforward way to implement this definition is to use a dummy variable that takes the value of 1 if a member of the founding family (by blood or marriage) is present and 0 otherwise. This definition is consistent with both Anderson et al. (2003) and Villalonga and Amit (2006).

Although this definition has its own advantages, it suffers from one significant disadvantage in that the incentives and abilities of a family to extract private benefits may be a function of its power inside the firm and this, in turn, is a function of its ownership stake. A dummy variable approach that does not discriminate between large and small presence of the founding family may introduce important biases.

Given these potential problems, we use the family's exact ownership stake (in percentage) to define its size and its influence. This definition should allow for a more precise test of the impact of a blockholder's behavior on bondholders because, presumably, the bigger is the family's stakes the clearer are its incentives. A different, more conservative, approach that we use is to apply cut-off points for the family ownership stakes in order to define a family firm. Hence, using this approach, we first define a family firm if the family's ownership stake is at least 10%, then if it is at least 15%, and finally if it is at least 20%.

Defining a family firm based on the family's ownership is not, however, without potential problems. For example, the percentage of family ownership is typically decreasing in firm size and this may suggest a potential size effect is being captured, even if appropriate control variables are applied. To address this issue, we also look at the log of the market value of the families equity stake in the firm, since this might capture the importance of the family's power position but moves away from the ownership percentage concerns. We also calculate the divergence between control rights and cash flow rights (the so-called wedge).

Finally, one different way through which a family can exercise its power position is through its presence in the firm's management, irrespective of the actual stake of its ownership. Consistent with this view, we also collect information from 20-F forms and proxy statements, on whether a family member (by blood or marriage) occupies any role in the active management of the firm (occupying the CEO post, or has a presence in the Board of Directors). To implement this approach, we use a dummy variable that will take the value of 1 if a family member is in active management, and 0 otherwise.

3.3 Sample Characteristics

Table 2 provides the descriptive statistics for firm-level characteristics of the 325 firms used in this paper and the yields and maturity of bonds issued by these firms.

[Insert Table 2.]

Our measure of debt agency costs is obtained using the Yield Spread, calculated as the difference between each bond issue's yield-to-maturity and the 3-month Government (Treasury) bond rate in the currency in which the bond is issued. Ideally, in calculating the Yield Spread we should have the same maturity length for each bond and the risk free rate proxy. However, for several currencies long-term Government bond rates are not available, hence we choose the 3-month Government bond rate as the proxy for the risk free rate. Panel A in Table 2 shows that the mean Yield Spread is 1.34% with a standard deviation of 1.60%. The Yield to Maturity has a mean value of 6.57% and the mean risk-free rate is 4.64%. The mean maturity of the bonds issued is 6.44 years and the mean value of each bond issue is $139.1 millions.

One issue that we want to highlight at this stage is the fact that we have instances where the Yield Spread is negative. Table 2 Panel A shows that the minimum value of the yield spreads is -2.93%. We have analyzed the cases where we end up with a negative Yield Spread and found that this can happen for two main reasons. First, there are instances where a national firm that has an ADR, and therefore has a high certification quality, has better credit ratings than the national government of the same country. For example, FIAT SpA's bonds in 1993 issued in Italy had better ratings than those issued by the Italian Government. This situation leads to negative Yield Spreads. Second, another example present in our dataset refers to the case when a branch of a multinational operating in a particular country (especially in an emerging market) issues a bond in that country whose government's rating is lower than that of the multinational. In this case, the Yield Spread will also be negative.

Turning to Panel B, we find a number of very interesting differences between family-owned and non-family owned firms. First, the average family-owned firm has a larger leverage (28.5%) compared to the average non-family firm (23.9%). This provides some preliminary indication that, since families would want to keep control of their firm, they would prefer to finance investments through debt rather than diluting their part through the issue of new equity. In itself, this can potentially make debt agency costs more severe in family firms. Second, family firms on average pay less dividends than non-family firms (dividend payout is 8.1% for family firms, versus 38.1% for non-family firms). There are at least two alternative ways to interpret these two statistics on debt and

dividends in family firms. One interpretation would be that, in order for families to keep control, they prefer to finance new investments either by internal finance – and hence pay themselves less dividends in order to leave more cash flows in the firm – or through debt rather than new equity. A second interpretation would be the way family firms try to tackle the free cash flow problem. Dividends and leverage are two alternatives that can be used to solve such problem. It appears that family firms do not use dividends as a solution and may be using leverage instead.

We also find that family firms are smaller than non-family firms ($8.2 billion of market capitalization for family firms, versus $16 billion for non-family firms). More importantly the Market to Book Ratio of family firms is greater than that of non-family firms (3.037 for family firms, versus 2.355 for non-family firms). This shows that family firms are perceived to have higher growth potential than non-family firms and is consistent with recent empirical evidence for the US (Villalonga and Amit, 2006). We find that 15% out of the final sample firms have a founding family in their ownership structure and that the average family ownership in these firms amounts to 27%. Finally, the founding family is present in the management of almost 55% of our sample family firms.

3.4 Measuring the Investor Protection Environment

The level of investors' protection in the firm's country of origin can be captured through several indices/measures, namely (a) Legal Environment, (b) Creditors' Rights, (c) Creditors' Rights interacted with the Legal Environment, (d) Judicial Efficiency, (e) Rule of Law, (f) type of financial system (Bank Based versus Market Based), and (g) GNP per capita.

Legal Environment is derived from a principal components analysis of the covariance matrix from the efficiency of the judiciary system, rule of law, corruption, risk of expropriation, and the risk of contract repudiation. This measure is obtained from Berkowitz, Pistor, and Richard (1999). The Creditors' Rights Index is an aggregate measure of creditor rights and measures how well creditor rights are protected under bankruptcy and reorganization laws. The Index is obtained from La Porta et al. (1998).

Since it is the enforcement of laws, rather than laws in themselves, which appears to matter most, we have decided to interact the Creditors' Rights Index with the Legal Environment as well. The Judicial Efficiency variable is measured as the assessment of the efficiency and the level of integrity of the legal environment and the way such characteristics influence business. This index is produced by the country risk rating agency International Country Risk (ICR) and obtained from La Porta et al. (1998). High scores represent higher efficiency levels. Rule of Law is the law and order tradition in the country. High values refer to stronger tradition for law and this variable is obtained from La Porta et al. (1998). The type of financial system equals one if the financial system is Bank-Based, and zero if it is Market-Based. This variable is obtained from Demirguc-Kunt and Levine (1999). Finally, GNP per capita is obtained from La Porta et al. (1998).

As expected, the correlation between these various measures of investors' protection is high. We use the Legal Environment measure for the base case analysis since it provides a more comprehensive picture of all the factors that contribute to investor protection, especially the enforcement of laws (rather than the presence of the laws themselves), the risk of expropriation and the risk of contract repudiation. However, we are aware that a cleaner test in our case will be obtained using the Creditor Rights Index or the Creditor Rights Index interacted with the Legal Environment to capture not just the presence of creditors' rights but also how well-enforced they are. We also use these two indices, together with the other measures, to assess the robustness of our results obtained with the Legal Environment measure.

3.5 Variables Used and Econometric Methodology

We next discuss the variables that may influence corporate bond yields beside ownership and for which we will be controlling. Table 3 describes the independent variables used in this study. We divide these variables into four main groups: (a) bond-level characteristics, (b) firm-level characteristics, (c) firm-level governance measures, and (d) country-level governance measures.

[Insert Table 3.]

Our dependent variable is the Yield Spread calculated as the difference between each bond issue's yield-to-maturity and the 3-month Government (Treasury) bond rate in the currency in which the bond is issued. Ideally, in calculating the Yield Spread we should have the same maturity length for each bond and the risk free rate proxy. However, as stated in Section 3.3, for several currencies long-term Government bond rates are not available, hence we choose the 3-month Government bond rate as the proxy for the risk free rate. As a result, the yield spread we measure is upward biased and includes a term premium. This term premium increases with maturity and varies cross-sectionally for different currencies. We explicitly control for this bias in our regressions by using (a) each bond's maturity as one of the independent control variables, and (b) employing a country fixed effects methodology. One advantage of using the bond's yield to maturity at the time of issue rather than yields to maturity from the secondary market is that we can measure the yield spread free from liquidity premium concerns.

In order to investigate the ownership's impact on debt agency costs, we have to first control for a number of factors that have already been found to explain the cross-sectional and time-series variation in yield spread.

Credit Rating is a major determinant of the credit risk of the issuer. We transform the issuer's Rating into a cardinal value, following values to the ordinal Moody's rating categories in the following way: Aaa=1, Aa=2, A=3, Baa=4, Ba=5, B=6, and below B=7. A higher numerical value for rating implies lower credit quality, so we expect a negative relation between the credit rating and yield spreads. We also use both the log of the Ratings and the squared term of the Ratings to control for non-linearities in the credit ratings.

We use the natural logarithm of the bond's Maturity as a proxy for both credit risk and interest rate risk. Longer Maturity issues have higher default probability and also carry a higher term premium according to our Yield Spread definition. Issue Size is defined as the natural logarithm of the dollar proceeds of the bond issue. More public information is generated with bigger size issues and there is less asymmetric information in such issues and they are also expected to have more liquidity in the secondary market. Hence we expect a negative relation between the Yield Spread and Issue Size. Long-

Term Debt Ratio measures leverage and controls for default risk in addition to credit rating. Firm Size is defined as the natural logarithm of total assets. Larger firms should have better access to capital markets and might borrow at more favorable terms with respect to small firms. Market-to-Book ratio proxies for the borrower's growth opportunities. Faster growing firms may be better able to meet the future debt payments, but they are also associated with more risk. Alternatively, Firm Size and Market-to-Book ratio can be interpreted as risk proxies in the spirit of Fama and French (1996). Operating Margin measures firm performance. Firms with higher operating income are associated with lower future default risk. Finally, we also use Industry Dummies, to control for industry-specific factors that may influence the cost of debt, and Year Dummies, to control for any time-series movements that may have occurred in the Yield Spreads.

We analyze the impact of the family presence through (a) a dummy variable that takes the value of 1 if a founding family is present and 0 otherwise, and (b) the family ownership stake (in percentage) actually owned directly by the family (or a trust owned by a family). The advantage of using actual family ownership, rather than the family dummy variable, is that any impact of the family ownership on debt agency costs is clearer when the family has a significant position. We expect that a family with a small ownership presence will not be able to extract significant private benefits. Using the family ownership as the main measure of the family's presence will capture this important relationship. A dummy variable – that is essentially insensitive to the exact magnitude of the family's presence - is unlikely to capture such a relationship unless an arbitrary large ownership stake is used as a cut-off point. We will first use both measures to estimate more precisely the family's impact. Once we establish the basic result, we shift to using ownership measures and using family dummy variables (determined at the 10%, 15% and 20% cut-off points) for robustness checks. We also expect that the family's ability to influence debt agency costs depends not just on its presence in the ownership structure but also on its presence in the firm's management. Consistent with this argument, we use a dummy variable to indicate whether the family occupies any active management role.

We use the 11,834 firm-issues observations in a panel regression using a country fixed effects method that will control for various country-specific factors, such as cross-

sectional differences in issuing methods. We also control for the clustering problem that is generated from having a subset of firms issuing bonds repeatedly and could hence bias our results.[6]

Section 4. Results

In this Section we discuss the main results found from the various fixed-effects models we use. The base case model considers both the family's ownership stake and a dummy variable that takes the value of 1 if a family is a blockholder and 0 otherwise. In particular, we use (a) the Family Ownership (Family Dummy) variable, (b) the interactive variable between the Family Ownership (Family Dummy) variable and the Legality measure in order to analyze the relationship between the family's presence and the investors' protection environment, and (c) the Family Dominance, which is a dummy variable to capture the family's presence in the management. We first run the country-fixed effects model for all firms in our sample. Subsequently, we run the model for (a) firms from the low Legality countries, (b) firms from high Legality countries, and (c) US firms.

[Insert Table 4.]

The base case results are shown in Table 4. We look at the impact generated by the two sets of variables together: (a) Family Ownership (Family Dummy), and (b) Family Ownership x Legality (Family Dummy x Legality). In this way we can analyze how, if at all, the family's impact on debt agency costs changes through different legal environments. When we analyze the two variables individually, we find that the presence of a family in itself increases the debt agency costs. However, the interaction term between the family presence and Legality is negative, meaning that the better the investors' protection regime the more will the family's presence decrease the debt agency costs. In order to find the exact impact of the family blockholding across the different investor protection environments we need to get the net effect of these two individual

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[6] We also run a simple pooled OLS methodology and the results are very similar to those obtained from the country fixed-effects method that controls for clustering. Since the simple OLS should be less robust to various issues, we only show the results from the panel regression.

variables. Doing so, we find strong evidence that the presence of a founding family in low protection environment is associated with higher cost of debt while in higher protection environments having a family in the ownership structure leads to lower debt costs.

Analyzing the first column in Table 4 we can notice that if we take two firms with the same mean level of Family Ownership (at 27.2%) but one originating from a country with low Legality measure (one standard deviation away from the mean, at 17.79) while the other hails from a country with high Legality measure (one standard deviation away from the mean, at 22.32) we find that the latter will pay 27 basis points less than the former.[7] In the same way, if we take a firm in a country with a low Legality measure and we increase the ownership stake of the family by one standard deviation (an increase of 12.7%) we find that the cost of debt increases by 14 basis points. These results show that the family's ownership stake is an important factor in the mechanism through which the family can influence the agency costs.

Analyzing the results when family dummy, rather than family ownership stake, is used leads to a similar conclusion. These are shown in the third and fourth columns of Table 4. For example, a family-owned firm originating from a high Legality country (with a Legality Index measure of 22.32 representing the mean of the Legality Index (20.055) plus one standard deviation (2.265)) will pay 32 basis points less than a non-family firm.[8] On the other hand, if we take a family-owned firm from a country with a low Legality measure (a country with a Legality Index measure of 17.79 representing the mean of the Legality Index (20.055) less one standard deviation (2.265)) will pay 44 basis points more on its debt compared to a non-family firm.[9] Besides having both variables significant at the 5% confidence level, we also find that the presence of founding families has an economically significant impact.

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[7] The calculation is done in the following way. The cost of debt for a family-owned firm, where the family's ownership stake is 27.2%, operating in a country with a low Legality measure (17.79) is [(0.082 x 27.2) + (-0.004 x 27.2 x 17.79)] = 0.294. The cost of debt for a family-owned firm, where the family's ownership stake is 3.4%, operating in a country with a high Legality measure (22.32) is [(0.082 x 3.4) + (-0.004 x 3.4 x 22.32)] = -0.025.
[8] The calculation is obtained as follows: [3.410 + (22.32 x -0.167)]
[9] The calculation is obtained as follows: [8.410 + (17.79 x -0.167)]

We conjectured that one crucial aspect of the relationship between the presence of the founding family and the cost of debt is not just the mere presence of a family but rather the magnitude of the shareholding. An important insight from Table 4 is that the family's presence in both low and high investors' protection environment has no impact when the ownership stake is very low, say less than one percent. This result suggests that the actual ownership stake level is an important aspect of the relationship and the impact on agency costs is monotonically increasing with family ownership.

Related to our robustness analysis, we also run the specification using the family dummy variable with a cut-off family ownership point at 10%, 15% and 20%. In this case, we wanted to apply a very conservative approach in defining a family firm since we will not consider as such all firms where family ownership is less than the cut-off point. We found a monotonically increasing effect of the family presence on debt costs as we used higher cut-off points in the family's ownership stake.

A major issue that has rightly received substantial attention is whether the family has any managerial role. Such a role can have two possible implications. It can either reduce the classic owner-manager agency conflict or, as in Burkart, Panunzi and Shleifer (2003) it can harm the firm since hired managers could have better skills and produce better performance than the founding family or its heir/s. The evidence so far is mixed. Palia and Ravid (2002), Adams, Almeida and Ferreira (2004) and Fahlenbrach (2004) show that firms with a founder-CEO trade at a premium, indicating that this type of CEO decreases agency conflicts inside the firm. On the other hand, Smith and Amoako-Adu (1999) and Perez-Gonzalez (2001) find a negative stock market reaction when family heirs are appointed as managers. Villalonga and Amit (2006) find a more complex story where (a) founding-CEOs create value when no control-enhancing mechanisms are in place, and (b) the impact of family heirs is non-monotonic where value is destroyed when second-generation family heirs are appointed but third-generation family heirs do add value.

The results, shown in the second and fourth columns of Table 4, indicate that having a family member in the firm's management leads to more severe debt agency costs in both low and high legal environments. The impact of the family ownership, and

its interaction with the investors' protection environment, does not disappear. What seems to be happening is that any family's managerial role increases debt agency costs over and above that implied by the ownership presence.

We also wanted to test whether the results hold when we define a family firm not through the family's presence in the ownership structure but rather its presence in the firm's management. We use the variable Family Dominance (dummy variable) to test the robustness of the results. In this case, we replace the two variables - (a) Family Ownership (Family Dummy), and (b) Family Ownership x Legality (Family Dummy x Legality) - in Table 4 with two new variables: (a) Family Dominance, and (b) Family Dominance x Legality. We find that the results hold also when we specify a family firm in this way[10] and analyzing the net effect of the two variables together gives us a very similar result to the one we obtained when we used family ownership. For example, a family-owned firm originating from a high Legality country (with a Legality Index measure of 22.32) will pay 14 basis points less than a non-family firm.[11] On the other hand, if we take a family-owned firm from a country with a low Legality measure (a country with a Legality Index measure of 17.79) will pay 35 basis points more on its debt compared to a non-family firm.[12]

Finally, a potentially important variable is the wedge of family ownership. Wedge measures the difference between the ownership rights and the cash flow rights of the blockholder. One of the objectives of using a pyramidal structure is to achieve the widest possible wedge because a blockholder can control a firm without actually having the majority of the cash flow rights. The larger the difference between these two different rights the more likely is expropriation to take place by the blockholder. We expect that the higher the wedge, the more protection would be required by bondholders, especially when lending money in low legal environments. When we include wedge in our specification we find that it is never statistically significant, and the results shown in Table 4 never change.

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[10] The coefficient estimate of the Family Dominance variable is 2.267 while the coefficient estimate of the Family Dominance interacted with Legality is -0.108. Both coefficients are statistically significant at the 5% level.
[11] The calculation is obtained as follows: [2.267 + (22.32 x -0.108)]
[12] The calculation is obtained as follows: [2.267 + (17.79 x -0.108)]

The signs of the control variables are as expected, with some of them being statistically significant. We want to highlight both the results for Rating and the Log Maturity, both of which are statistically significant, for various reasons. Our results show that, as expected, lower ratings lead to higher cost of debt. Our main results are robust to different specifications of the Rating variable. In fact, results do not change when we use the log of bond ratings or the squared term of ratings. The fact that the family variables are significant even after the inclusion of the Rating variable means that the impact of the ownership structure is not completely reflected in analysts' reports on bond ratings. One can argue that while bonds' ratings mainly capture the risk of default, they either do not fully capture the risk of expropriation that can lead to bankruptcy if unchecked or they do so imperfectly.

The Log Maturity variable has the expected sign and is also statistically significant. The latter result is interesting in view of the fact that for some existing papers the Log Maturity is not found to be significant (Miller, 2002, Anderson et al., 2003). We suspect that this variable is significant in our case mainly because it is accounting for the fact that our bonds' maturities are not perfectly matched with the maturity of the risk free rate as explained above. Finally, the riskier the firm, as captured by the Long-Term Debt Ratio, the higher the cost of debt while the higher profitability, as captured by the Operating Income/Total Assets, the lower the cost of debt.

While using the interaction terms, as in Table 4, allow us several insights, we recognize that a simpler test would be dividing the sample of firms into two sub-samples, where firms from the high (low) legality environment are put together and then analyzing the impact of just the family ownership, rather than the family ownership and its interaction with the legal environment together.

We investigate the robustness of our basic result by looking at three different sub-samples: (a) firms originating from a weak legal environment (where the value of the Legal Index is less than its mean value of 20), (b) firms originating from a strong legality environment (where the value of the Legal Index is higher than its mean value of 20), and (c) US firms.

[Insert Table 5.]

For this specification we only use the Family Ownership and drop the interactive variable since we have firms from similar legal environments in each sub-sample. The results shown in Table 5 confirm the basic finding: family firms with an average family ownership of 27.2% originating from a low legal environment have to pay 49 basis points more than non-family firms while such firms from a high legal environment pay 14 basis points less than non-family firms. Likewise, US family firms – themselves originating from a high legal environment – are found to pay 16 basis points less than non-family firms, which is similar result, but of a lower magnitude, to that found by Anderson et al. (2003).

Although we chose the Legal Environment measure for our base case scenario, we are aware that there are other measures to capture investors' protection. We want to test the robustness of the results obtained in Table 4 by using the other measures, namely Judicial Efficiency, Rule of Law, and Log of the GNP per Capita. The interesting feature of using such measures is that they give us a better insight in the dynamics of family ownership because we can analyze the cost of debt over different investors' protection environments and different levels of family ownership. This can only enrich our investigation of the economic significance of our results.

[Insert Table 6.]

The results are shown in Table 6 where we have two main variables of interest, namely the Family Ownership and the interactive variable between the Family Ownership and each of the investors' protection measures. The spirit of our results do not change in the sense that we find that the (a) higher the Judicial Efficiency, Rule of Law and the GNP per Capita the lower the debt costs paid by family firms.

Finally, we want to address the question on whether family blockholding has a different impact on debt agency costs than other types of blockholdings, namely institutional and outside blockholders. We have already argued that the founding family's main characteristics – namely the undiversification nature of its investments and the association between its reputation and the firm's reputation – make this particular blockholder different than both institutional and outside blockholders.

Furthermore, we also want to extend our analysis on debt agency costs to other measures of internal governance. In view of this, we also use an Internal Governance Index that is a ranking of the strength of the firm's internal firm-level governance system. It ranges from zero to five, with five being the strongest system. This index is comprised of five governance measures. One extra point is added for each of the following: (a) the absence of an inside blockholder, (b) the presence of an outside blockholder, (c) the presence of institutional blockholder, (d) no state ownership in the firm, and (e) no dual CEOs.

[Insert Table 7]

Table 7 shows the results of different specifications where we consider both the Family Ownership and the Family Ownership interacted with the Legality measure together with (a) the presence of an institutional blockholder, (b) the presence of an outside blockholder, and (c) the internal governance index. First, we find that the family's impact on debt agency costs is robust to the inclusion of other types of blockholders inside the firm's ownership base. Second, we find that, contrary to our findings on the family's impact, both institutional blockholders and outside blockholders have no statistically significant impact on the firm's agency costs. On the other hand, a non-family inside blockholder increases the debt agency costs but the impact is not strong.

4.1. Robustness of Results

Although the results obtained are in line with our hypothesis and have statistical as well as economic significance, we want to investigate whether the results hold in an out-of-sample test using a sample of East Asian firms. Such firms have been the focus of recent research investigating the dynamics of ownership structure and corporate performance in cross-country samples (Claessens et al. 2000, 2002, Lemmon and Lins 2003, and Johnson et al 2000). The sample is made up of corporate bonds issued by Asian ADRs and non-ADRs on national and international markets. One attractive feature of this sample is that it allows us to study the relation between family presence and cost of debt around the Asian crisis, an unexpected external shock that affected Asian firms all at the same time. Such an external shock makes it more appropriate to uncover the

potential adverse effects of external governance structures on firms' financial policies and firm performance.

The data comes from Claessens et al (2000)[13] and includes 2,980 publicly traded corporations from nine East Asian countries (Hong Kong, Indonesia, Japan, South Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand). Both immediate and ultimate ownership data is collected for all owners that hold more than 5% of a company's stock from numerous sources.[14] Matching this sample with the bond data from SDC and corporate financial data from Worldscope leaves us with 272 firms and 918 bond issues from January 1993 to December 1997.

Of particular interest to us is the data on family presence within Asian firms. Family presence in Claessens et al. (2000) is available in three forms.[15]

[Insert Table 8.]

The results, using the indicator variable to show whether a family is present within firms' ownership or control structure, are shown in Table 8. Analyzing the coefficient estimates in the full sample (first column), we find that the results found previously do not change, specifically the Family Dummy variable carries a positive coefficient while the interaction variable between Family Dummy x Legal Environment (Family Dummy x Judicial Efficiency, and Family Dummy x Rule of Law) has a negative coefficient. Hence, East Asian family firms in high (low) investor protection environments face lower (higher) debt agency costs. When we divide the sample into "Weak Legal Environments", comprising bonds issued by firms from Malaysia, South Korea, Taiwan, and Thailand, and "Strong Legal Environments", comprising bonds issued by firms from Hong Kong, Singapore, and Japan, we find a confirmation of this

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[13] The data is publicly available at http://jfe.rochester.edu/data.htm.

[14] Please see Claessens et al. (2000) for a more detailed discussion of the dataset.

[15] First variable is an indicator variable measuring whether a family is present within firms' ownership or control structure. The second variable is the cash flow rights held by the family. The third variable is the voting rights held by the family. In defining family presence in a firm, Claessens *et al.* (2000) do not differentiate between whether it is a founding family or not. This definition is different from our definition, as the family presence in our dataset is defined by the presence of a "founder" family in a firm's ownership structure or management.

result. An interesting result is that East Asian firms with a presence on the US market through an ADR enjoy lower cost of debt.

The other major concern stems from the endogeneity of the family presence. It can be argued that founding families may choose to be owners of particular types of firms where it is easier for them to extract and consume private benefits, resulting in the expropriation of bondholders. In this case, family ownership and debt agency costs may be endogenously determined and this could be driving our results. Alternatively, families may choose less risky firms as a counteracting measure for the undiversified nature of the family's holdings.

We address these concerns by a two step estimation procedure on the original sample of US firms and ADRs explained in Section 3. We first predict the family presence in each firm in our sample and then use these predicted values (and the predicted family presence interacted with the Legal Environment) to determine the impact of families on debt agency costs. In particular, the predicted family presence is obtained from a probit model where the explanatory variables are (a) sales growth rate, (b) dividend payout ratio, and (c) tangible assets ratio. Following this step, we repeat the baseline credit spread regressions reported in Table 4 (column 1) with the predicted, rather than the actual, family presence. Both the statistical and economic significance of our baseline results do not change. The family presence has a positive coefficient (statistically significant at the 1% confidence level) and the family presence interacted with the Legal Environment carries a negative coefficient (statistically significant at the 1% confidence level). This shows that the results in our baseline regressions are robust to the issues of endogeneity discussed above. For the sake of brevity, we do not report the results but they are available upon request.

Section 5. Conclusion

In this paper we investigate whether the presence of a founding family mitigates or exacerbates debt agency costs under different investor protection environments. Often, founding families are in a very uncommon position of power where, through the complex mechanisms of pyramids and cross-holdings, their control rights are significantly higher

than their cash flow rights. This position of power raises questions – so far not addressed by the literature – on how families are disciplined and monitored. We wanted to investigate how families behave when they find themselves in such power position. Do founding families behave differently in different investors' protection environments?

There are two competing hypotheses about the relationship between family firms and debt agency costs. The first one states that, if external governance matters, then founding families operating in high financial discipline environments – through effective control of the negative effects coming from the family's position and thus allowing the family's positive effects to emerge - should mitigate debt agency costs in high financial discipline environments but should exacerbate these agency costs in low financial discipline environments – by virtue of the absence of effective controls over the family's power. Hence, we would expect debt costs to be lower (higher) for family firms (compared to non-family firms) in high financial discipline environments (low financial discipline environments).

On the other hand, if external governance mechanisms do not matter, then family firms – through their ability to build long-term relationships with bondholders – should mitigate the agency costs of debt in both high and low financial discipline environments.

Using international bond issues from 1988 to 2002 for US and Levels II and III ADR corporations originating from 44 different countries we find evidence that family firms' debt costs vary with investors' protection. We found that family firms suffer from higher debt costs when investors' protection is low but benefit from lower debt costs when investors' protection is high. These results are robust to (a) different measures of the founding family's presence, and (b) the inclusion of various measures of internal and external governance mechanisms. Moreover, these results are confirmed by an out-of-sample test that uses East Asian firms, are robust to endogeneity issues, and robust to the inclusion of various measures of internal and external governance mechanisms. Finally, we also find that family blockholding has a different impact on debt agency costs than that of institutional or outside blockholders. In fact, we find no debt agency costs induced by the presence of non-family blockholding, confirming the view that the way non-family blockholders behave is different than that of family blockholders.

These results show that "who monitors the family" (La Porta et al., 1999, page 502) is a crucial issue and that founding families' can exacerbate or mitigate the agency cost of debt depending on the investor protection environment under which they operate in their home country. This evidence shows that the firm's ownership and the investors' protection rules under which a firm operates are factors in the pricing of corporate bonds.

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Table 1. Classification of Bonds Issues

This table classifies 11,834 noncallable nonconvertible international bond issues between January 1988 and December 2002 identified in the New Issues Database of Securities Data Company. Panel A through Panel C report the number of issues by issue year, country of origin, and the currency respectively.

Panel A. Number of bonds by year

Issue Year	Number of Bonds	Issue Year	Number of Bonds
1988	158	1996	1,183
1989	212	1997	1,498
1990	221	1998	1,550
1991	544	1999	1,228
1992	391	2000	1,093
1993	505	2001	1,019
1994	549	2002	889
1995	794	Total	11,834

Panel B. Number of bonds by country

Country of the Issuer	Number of Bonds	Country of the Issuer	Number of Bonds
Argentina	41	Mexico	29
Australia	42	Netherlands	59
Brazil	12	New Zealand	1
Chile	34	Norway	17
Denmark	2	Philippines	10
Finland	11	Portugal	8
France	118	South Africa	2
Germany	120	South Korea	31
Greece	3	Spain	21
Indonesia	1	Sweden	55
Ireland	2	Switzerland	1
Italy	92	USA	10,278
Japan	555	United Kingdom	289
		Total	11,834

Panel C. Number of bonds by currency

Currency of the Issue	Number of Bonds	Currency of the Issue	Number of Bonds
Australian Dollar	43	Mexican Peso	17
Brazilian Real	3	Norwegian Krone	12
Canadian Dollar	113	New Zealand Dollar	23
Czech Koruna	17	Portuguese Escudo	14
Dutch Florin	19	Swiss Franc	165
Deutsche Mark	90	Singapore Dollar	20
Greek Drahma	5	Swedish Krona	15
Euro	346	British Pound	240
French Franc	74	US Dollar	9,854
Hong Kong Dollar	29	Japanese Yen	600
Italian Lira	49	Total	11,834

Table 2. Descriptive Statistics of Bond Issues and Issuing Firms

Panel A reports summary statistics for 5345 nonconvertible and noncallable international bond issues listed in the New Issues Database of Securities Data Company, and offered between January 1988 to December 2002 for which Compustat and firm-level corporate governance data are available. Panel B reports issue characteristics for 240 issuing firms. Firm level statistics for family firms only are reported separately in Panel B. We define all variables in Table 2.

Panel A. Bond-level statistics

Variable	Mean	Median	StDev	Min	Max
Yield Spread (%)	1.34	1.05	1.60	-2.93	7.52
Yield-to-Maturity (%)	6.57	6.58	2.25	0.05	39.95
Coupon (%)	6.57	6.50	2.05	0.003	18.00
Risk free rate (%)	4.64	5.08	1.89	0.01	17.37
Maturity (years)	6.44	4.06	7.18	0.01	50.79
Rating	2.63	3.00	0.94	1.00	6.00
Principal Amount (mm$)	139.1	86.5	159.8	0.10	996.5

Panel B. Firm-level statistics

Variable	Mean	Median	Stdev	Min	Max
Firm Characteristics					
Family-owned/(Non-Family owned)					
Long Term Debt Ratio (%)	28.50	26.61	14.10	1.93	71.56
	(23.9)	(23.01)	(13.82)	(1.94)	(67.54)
Total Assets (mm$)	21,767	8,219	46,267	1,087	262,867
	(37,461)	(16,049)	(66,985)	(2,408)	(632,574)
Operating Income / Total Assets	0.117	0.127	0.067	0.002	0.270
	(0.105)	(0.107)	(0.064)	(0.002)	(0.270)
Market to Book Ratio	3.037	2.388	2.377	0.547	10.035
	(2.355)	(1.901)	(1.937)	(-1.791)	(12.151)
Dividend Payout Ratio	0.081	0.125	0.679	-3.633	0.975
	(0.381)	(0.330)	(0.907)	(-4.462)	(10.559)
Dividend Dummy	0.743	1.000	0.443	0.000	1.000
	(0.864)	(1.000)	(0.343)	(0.000)	(1.000)
Governance Measures					
Family-owned/(Non-Family owned)					
Family Ownership (%)	27.168	23.000	24.810	0.120	86.580
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Family Dominance	0.543	1.000	0.505	0.000	1.000
	(0.000)	(0.000)	(0.000)	(0.000)	(1.000)
Non-family Outside Blockholder (%)	15.196	5.118	21.792	0.000	78.000
	(18.361)	(12.315)	(19.481)	(0.000)	(63.800)
Non-family Inside Blockholder (%)	4.516	0.000	10.509	0.000	45.750
	(6.228)	(2.815)	(15.620)	(0.000)	(82.01)
Legality Index	18.451	20.850	3.489	12.340	20.850
	(20.179)	(20.850)	(2.052)	(8.510)	(21.910)
Judicial Efficiency	8.736	10.000	1.755	6.000	10.000
	(9.559)	(10.000)	(1.200)	(2.500)	(10.000)
Rule of Law	8.603	10.000	2.006	5.350	10.000
	(9.387)	(10.000)	(1.218)	(2.730)	(10.000)
GDP per Capita ($)	20,633	26,211	10,341	3,251	31,891
	(26,486)	(27,334)	(7,364)	(1,113)	(46,895)

Table 3. Variable Definitions

This table defines the variables we use in our analysis. We obtain issue characteristics from the new issues database of Securities Data Company and firm-specific information from Compustat. Country-level governance measures are obtained from LLSV (1998). Firm-level governance measures are collected from 20-F forms and proxy statements.

Name of the Variable	Definition
Bond-Level Characteristics	
Yield Spread	Offer yield to maturity of the issue minus the three-month risk free rate.
Risk-free Rate	The yield on the three-month Treasury bonds in the currency bond is issued.
Rating	The ordinal Moody's rating (Aaa=1, Aa=2, A=3, Baa=4 , Ba=5, B or below=6).
Log Maturity	Natural logarithm of the issue maturity.
Log Proceeds	Natural logarithm of the dollar proceeds of bond issue.
Firm-Level Characteristics	
Long-Term Debt Ratio	Long-term debt (Compustat item # 9) divided by total assets (Compustat item # 6).
Log Total Assets	Natural logarithm of total assets (Compustat item # 6)
Operating Income / Total Assets	Operating income before depreciation (Compustat item # 13) divided by total assets (Compustat item # 6).
Market-to-Book Ratio	Market value of equity (Compustat item # 25 times item # 24) divided by common equity (Compustat item # 60).
Internal governance index	A ranking of the strength of an internal firm-level governance system. It ranges from 0 to 5, 5 being the strongest system. This index is comprised of five governance measures. One extra point is added for each of the following: The absence of an inside blockholder; the presence of an outside blockholder; the presence of institutional blockholder; no state ownership in the firm; no dual CEOs.
Firm Ownership Measures	
Family Ownership	Percentage ownership of the founding family in the firm. It is the ratio of the shares held by family members to the total number of outstanding shares. Collected from 20-F forms and proxy statements.
Family Dummy	Equals one if the founding family owns shares in the company, zero otherwise.
Family Dominance	Equals one if family is in the active management of the company, zero otherwise. Collected from 20-F forms and proxy statements.

Family Wedge	The difference between the family's cash flow rights and its voting rights. It is calculated as the difference between the percentage of the votes held by the founding family members and the percentage of outstanding shares held by the family members. Collected from 20-F forms and proxy statements.
Outside Blockholder	Equals one if a blockholder, defined as a firm/person that owns at least 10% of the outstanding shares, is not in the firm management and not part of the founding family, zero otherwise, constructed as in Lins (2003). Collected from 20-F forms and proxy statements.
Country-Level Governance Measures	
Legal Environment	Legal Environment is derived from a principal components analysis of the covariance matrix from the efficiency of the judiciary system, rule of law, corruption, risk of expropriation, and the risk of contract repudiation. Obtained from Berkowitz, Pistor, and Richard (1999).
Judicial Efficiency	The assessment of the "efficiency and integrity of the legal environment as it affects business, particularly foreign firms" produced by the country risk rating agency International Country Risk (ICR) and obtained from LLSV (1998). High scores represent higher efficiency levels.
Rule of Law	The assessment of the law and order tradition in the country. High values refer to stronger tradition for law. Obtained from LLSV (1998).
Creditor Rights Index	Creditor Rights Index is an aggregate measure of creditor rights. It measures how well creditor rights are protected under bankruptcy and reorganization laws. This Index is obtained from LLSV (1998). Higher values refer to stronger creditor protection.
Capital Market Measures	
GNP per capita	The GNP per capita. Obtained from LLSV (1998).

Table 4. Family Presence and Cost of Debt in Different Investor Protection Regimes

This table provides the estimates of a linear regression model with fixed effects for issue year, country of origin, and industries. The model controls for the clustering of several issues around the same issuer. The dependent variable is the yield spread of the bond issue defined as the offer yield-to-maturity minus the yield on the 3-month yield Treasury bond. We define the independent variables in Table 2. The sample consists of all nonconvertible international bond issues offered between January 1988 and December 2002 obtained from the New Issues database of Securities Data Company. The slope coefficients of the year, country, and industry dummies are not reported. Standard errors are corrected for serial correlation and heteroscedasticity. The t-statistics appear in parentheses below parameter estimates. ***, **, and * indicate significance at 1%, 5%, and 10% level respectively.

	Family Ownership Percentage		Family Ownership Dummy	
	(1)	(2)	(3)	(4)
Family Ownership (%)	0.082***	0.059***	-	-
	(4.34)	(2.96)		
Family Ownership x Legality	-0.004***	-0.003***	-	-
	(-4.39)	(-3.23)		
Family Dummy	-	-	3.410***	1.932*
			(3.28)	(1.80)
Family Dummy x Legality	-	-	-0.167***	-0.109*
			(-3.28)	(-1.92)
Family Dominance		0.541***	-	0.538***
		(4.39)		(4.10)
Log GDP per Capita	-2.581	-0.835	-2.543	-0.793
	(-0.77)	(-0.25)	(-0.76)	(-0.23)
Rating	0.319***	0.335***	0.316***	0.332***
	(7.45)	(8.02)	(7.30)	(7.81)
Callable bond issue	0.317***	0.313***	0.321***	0.318***
	(3.61)	(3.59)	(3.67)	(3.65)
Subordinated bond issue	0.471***	0.465***	0.472***	0.466***
	(3.92)	(3.90)	(3.92)	(3.89)
Log Maturity	0.763***	0.765***	0.762***	0.764***
	(20.36)	(20.47)	(20.29)	(20.35)
Log Principal	-0.049**	-0.052**	-0.050**	-0.053***
	(-2.37)	(-2.53)	(-2.42)	(-2.59)
Long Term Debt Ratio	0.391	0.448	0.318	0.354
	(1.14)	(1.29)	(0.93)	(1.04)
Log of Total Assets	-0.003	0.007	-0.013	-0.006
	(-0.08)	(0.17)	(-0.32)	(-0.14)
Operating Income / Total Assets	-0.566	-0.582	-0.694	-0.745
	(-0.80)	(-0.83)	(-0.98)	(-1.06)
Market-to-Book Ratio	0.027**	0.028**	0.028**	0.030**
	(2.00)	(2.04)	(2.08)	(2.18)
Intercept	28.353	9.601	28.076	9.336
	(0.82)	(0.27)	(0.81)	(0.27)
Industry Dummies	YES	YES	YES	YES
Time Dummies	YES	YES	YES	YES
Number of Observations	11,834	11,834	11,834	11,834
Adjusted R^2	0.534	0.536	0.533	0.535

Table 5. Family and the Effect of External Governance

This table provides the estimates of a linear regression model with fixed effects for issue year, country of origin, and industries. The model controls for the clustering of several issues around the same issuer. The dependent variable is the yield spread of the bond issue defined as the offer yield-to-maturity minus the yield on the 3-month yield Treasury bond. We define the independent variables in Table 2. The sample consists of all nonconvertible international bond issues offered between January 1988 and December 2002 obtained from the New Issues database of Securities Data Company. The slope coefficients of the year, country, and industry dummies are not reported. Standard errors are corrected for serial correlation and heteroscedasticity. The t-statistics appear in parentheses below parameter estimates. ***, **, and * indicate significance at 1%, 5%, and 10% level respectively.

	US Firms Only	Weak Legality	Strong Legality
	(1)	(2)	(3)
Family Ownership (%)	-0.006***	0.018***	-0.005**
	(-2.57)	(2.90)	(-2.13)
Log GDP per Capita	-	-9.767**	-4.064
		(-2.03)	(-1.47)
Rating	0.318***	0.452***	0.315***
	(7.46)	(4.51)	(7.43)
Callable bond issue	0.300***	-0.067	0.321***
	(3.32)	(-0.16)	(3.67)
Subordinated bond issue	0.479***	(dropped)	0.470***
	(3.87)		(3.91)
Log Maturity	0.764***	0.664***	0.765***
	(19.68)	(5.63)	(20.26)
Log Principal	-0.062***	0.135	-0.051**
	(-3.15)	(1.24)	(-2.51)
Long Term Debt Ratio	0.342	2.147**	0.414
	(1.03)	(1.98)	(1.23)
Log of Total Assets	0.024	-0.130	0.009
	(0.60)	(-0.87)	(0.23)
Operating Income / Total Assets	-0.421	-1.604	-0.530
	(-0.52)	(-0.76)	(-0.73)
Market-to-Book Ratio	0.029*	-0.043	0.026*
	(1.86)	(-0.70)	(1.92)
Intercept	1.589***	96.095**	43.691
	(3.80)	(2.10)	(1.52)
Industry Dummies	YES	YES	YES
Time Dummies	YES	YES	YES
Number of Observations	10,278	518	11,316
Adjusted R^2	0.559	0.698	0.535

Table 6. Family and the Effect of Different Measures of External Governance

This table provides the estimates of a linear regression model with fixed effects for issue year, country of origin, and industries. The model controls for the clustering of several issues around the same issuer. The dependent variable is the yield spread of the bond issue defined as the offer yield-to-maturity minus the yield on the 3-month yield Treasury bond. We define the independent variables in Table 2. The sample consists of all nonconvertible international bond issues offered between January 1988 and December 2002 obtained from the New Issues database of Securities Data Company. The slope coefficients of the year, country, and industry dummies are not reported. Standard errors are corrected for serial correlation and heteroscedasticity. The t-statistics appear in parentheses below parameter estimates. ***, **, and * indicate significance at 1%, 5%, and 10% level respectively.

	(1)	(2)	(3)
Family Ownership (%)	0.073***	0.067***	0.184***
	(4.36)	(4.25)	(3.92)
Family Ownership x Judicial Efficiency	-0.008***	-	-
	(-4.41)		
Family Ownership x Rule of Law	-	-0.007***	-
		(-4.32)	
Family Ownership x log GDP per Capita	-	-	-0.018***
			(-3.94)
Log GDP per Capita	-2.546	0.319***	0.319***
	(-0.76)	(7.45)	(7.45)
Rating	0.319***	0.317***	0.317***
	(7.45)	(3.62)	(3.61)
Callable bond issue	0.317***	0.471***	0.475***
	(3.61)	(3.92)	(3.98)
Subordinated bond issue	0.471***	-2.582	-2.458
	(3.92)	(-0.77)	(-0.73)
Log Maturity	0.763***	0.763***	0.762***
	(20.37)	(20.36)	(20.42)
Log Principal	-0.049**	-0.049**	-0.049**
	(-2.36)	(-2.37)	(-2.39)
Long Term Debt Ratio	0.394	0.390	0.400
	(1.14)	(1.13)	(1.16)
Log of Total Assets	-0.003	-0.004	-0.004
	(-0.08)	(-0.09)	(-0.10)
Operating Income / Total Assets	-0.565	-0.572	-0.555
	(-0.80)	(-0.81)	(-0.79)
Market-to-Book Ratio	0.027**	0.027**	0.027**
	(2.00)	(2.00)	(2.01)
Intercept	27.979	28.364	27.076
	(0.80)	(0.82)	(0.78)
Industry Dummies	YES	YES	YES
Time Dummies	YES	YES	YES
Number of Observations	11,834	11,834	11,834
Adjusted R^2	0.534	0.534	0.536

Table 7. Family and the Effect of Firm-level Internal Governance Mechanisms

This table provides the estimates of a linear regression model with fixed effects for issue year, country of origin, and industries. The model controls for the clustering of several issues around the same issuer. The dependent variable is the yield spread of the bond issue defined as the offer yield-to-maturity minus the yield on the 3-month yield Treasury bond. We define the independent variables in Table 2. The sample consists of all nonconvertible international bond issues offered between January 1988 and December 2002 obtained from the New Issues database of Securities Data Company. The slope coefficients of the year, country, and industry dummies are not reported. Standard errors are corrected for serial correlation and heteroscedasticity. The t-statistics appear in parentheses below parameter estimates. ***, **, and * indicate significance at 1%, 5%, and 10% level respectively.

	(1)	(2)	(3)
Family Ownership (%)	0.062***	0.060***	0.059***
	(3.05)	(3.01)	(2.92)
Family Dominance	0.551***	0.546***	0.547***
	(4.49)	(4.41)	(4.42)
Institutional Blockholder	-0.261	-	-
	(-0.70)		
Outside Blockholder	-	-0.058	-
		(-0.82)	
Non-family Inside Blockholder	-	-	0.105*
			(1.90)
Family Ownership x Legality	-0.003***	-0.003***	-0.003***
	(-3.31)	(-3.31)	(-3.16)
Log GDP per Capita	-0.761	-0.836	-0.919
	(-0.22)	(-0.25)	(-0.27)
Rating	0.335***	0.339***	0.338***
	(8.01)	(7.90)	(7.95)
Callable bond issue	0.315***	0.308***	0.316***
	(3.60)	(3.61)	(3.65)
Subordinated bond issue	0.463***	0.469***	0.467***
	(3.88)	(3.98)	(3.97)
Log Maturity	0.766***	0.766***	0.766***
	(20.53)	(20.16)	(20.68)
Log Principal	-0.052**	-0.050***	-0.054***
	(-2.53)	(-2.58)	(-2.67)
Long Term Debt Ratio	0.463	0.490	0.450
	(1.33)	(1.47)	(1.31)
Log of Total Assets	0.006	0.004	0.005
	(0.14)	(0.10)	(0.12)
Operating Income / Total Assets	-0.619	-0.616	-0.608
	(-0.89)	(-0.89)	(-0.87)
Market-to-Book Ratio	0.028**	0.025*	0.031**
	(2.08)	(1.93)	(2.21)
Intercept	8.833	9.610	10.463
	(0.25)	(0.27)	(0.30)
Industry Dummies	YES	YES	YES
Time Dummies	YES	YES	YES
Number of Observations	11,834	11,834	11,834
Adjusted R^2	0.536	0.536	0.536

Table 8. Endogenously-determined Family Ownership and Yield Spreads

This table provides the estimates of a 2SLS linear regression model with fixed effects for issue year, country of origin, and industries for which family presence is endogenously determined. The model controls for the clustering of several issues around the same issuer. The dependent variable is the yield spread of the bond issue defined as the offer yield-to-maturity minus the yield on the 3-month yield Treasury bond. Family ownership is estimated by a linear regression and Family dummy is estimated by a probit regression. The estimates of the first stage regressions are not reported for the sake of brevity. The details of the estimation and the instruments are described in detail in section 4. We define the independent variables in Table 2. The sample consists of all nonconvertible international bond issues offered between January 1988 and December 2002 obtained from the New Issues database of Securities Data Company. The slope coefficients of the year, country, and industry dummies are not reported. Standard errors are corrected for serial correlation and heteroscedasticity. The *t*-statistics appear in parentheses. ***, **, and * indicate significance at 1%, 5%, and 10% level respectively.

	(1)	(2)	(3)	(4)
Predicted Family Ownership	0.468***	0.434***	-	-
	(7.03)	(6.10)		
Predicted Family Ownership x Legality	-0.024***	-0.023***	-	-
	(-5.56)	(-5.12)		
Predicted Family Dummy	-	-	22.058***	19.523***
			(5.07)	(4.07)
Predicted Family Dummy x Legality	-	-	-1.060***	-0.944***
			(-4.55)	(-3.76)
Family Dominance	-	0.389***	-	0.376***
		(3.47)		(3.28)
Log GDP per Capita	-5.518**	-3.989	-4.739*	-3.263
	(2.11)	(1.38)	(1.89)	(1.18)
Rating	0.303***	0.314***	0.299***	0.310***
	(7.13)	(7.71)	(6.81)	(7.26)
Callable bond issue	0.247***	0.244***	0.252***	0.250***
	(3.17)	(3.14)	(3.23)	(3.21)
Subordinated bond issue	0.714**	0.707**	0.708**	0.698**
	(2.24)	(2.22)	(2.20)	(2.16)
Log Maturity	0.769***	0.770***	0.769***	0.771***
	(15.66)	(15.69)	(15.49)	(15.51)
Log Principal	-0.008	-0.011	-0.008	-0.011
	(0.37)	(0.55)	(0.40)	(0.57)
Long Term Debt Ratio	0.091	0.084	0.163	0.162
	(0.21)	(0.19)	(0.36)	(0.36)
Log of Total Assets	-0.109**	-0.109**	-0.081*	-0.080*
	(2.47)	(2.45)	(1.81)	(1.78)
Operating Income / Total Assets	-1.595**	-1.679**	-1.334	-1.401
	(1.98)	(2.06)	(1.53)	(1.59)
Market-to-Book Ratio	0.028**	0.030**	0.029**	0.031**
	(2.30)	(2.38)	(2.32)	(2.43)
Intercept	59.592**	43.369	51.141**	35.462
	(2.20)	(1.44)	(1.97)	(1.24)
Industry Dummies	YES	YES	YES	YES
Time Dummies	YES	YES	YES	YES
Number of Observations	9,119	9,119	9,119	9,119
Adjusted R^2	0.536	0.537	0.535	0.536

Table 9. Family Ownership and East Asian Firms

This table provides the estimates of a linear regression model with fixed effects for issue year, country of origin, and industries. The model controls for the clustering of several issues around the same issuer. The dependent variable is the yield spread of the bond issue defined as the offer yield-to-maturity minus the yield on the 3-month yield Treasury bond. We define the independent variables in Table 3. The sample covers all nonconvertible bond issues offered by the East Asian firms in Claessens, Djankov, Fan, and Lang (2003) issued between January 1993 and December 1997 and obtained from the New Issues database of Securities Data Company. "Weak Legality" countries are Malaysia, South Korea, Taiwan, and Thailand and "Strong Legality" countries are Hong Kong, Singapore, and Japan. The slope coefficients of the year, country, and industry dummies are not reported. Standard errors are corrected for serial correlation and heteroscedasticity. The t-statistics appear in parentheses below parameter estimates. ***, **, and * indicate significance at 1%, 5%, and 10% level respectively.

	Full Sample			Strong Legality	Weak Legality
	(1)	(2)	(3)	(4)	(5)
Family Dummy	5.096***	3.394***	3.898***	-0.227*	0.931**
	(4.03)	(4.92)	(3.35)	(-1.91)	(2.54)
Family Dummy x Legality	-0.255***				
	(-3.98)	-	-	-	-
Family Dummy x Judicial Efficiency		-0.347***			
	-	(-4.80)	-	-	-
Family Dummy x Rule of Law			-0.444***		
	-	-	(-3.32)	-	-
Callable bond issue	-0.480**	-0.482**	-0.480**	-0.478**	1.189**
	(-2.54)	(-2.54)	(-2.54)	(-2.54)	(2.51)
Log Maturity	1.547***	1.555***	1.539***	1.610***	0.219
	(12.73)	(12.94)	(12.58)	(12.71)	(0.91)
Log Principal	-0.209**	-0.212***	-0.205**	-0.224***	0.312
	(-2.56)	(-2.59)	(-2.50)	(-2.63)	(0.66)
ADR Dummy	-0.339**	-0.340**	-0.340**	-0.419**	-1.225
	(-1.97)	(-1.98)	(-1.96)	(-2.35)	(-1.35)
Long Term Debt Ratio	0.002	0.004	-0.000	-0.805	0.029**
	(0.33)	(0.61)	(0.04)	(-1.16)	(2.66)
Log of Total Assets	0.443***	0.440***	0.444***	0.465***	0.458**
	(9.01)	(8.97)	(9.00)	(8.71)	(2.14)
Operating Income / Total Assets	-5.550*	-5.292	-5.609*	-8.324**	45.120***
	(-1.69)	(-1.61)	(-1.71)	(-2.41)	(4.46)
Market-to-Book Ratio	-0.001**	-0.001**	-0.001**	-0.001**	-0.001
	(-2.11)	(-2.10)	(-2.06)	(-2.20)	(-0.72)
Intercept	-6.191***	-6.208***	-6.202***	-7.172***	-10.222***
	(-8.27)	(-8.31)	(-8.26)	(-8.66)	(-4.55)
Industry Dummies	YES	YES	YES	YES	YES
Time Dummies	YES	YES	YES	YES	YES
Number of Observations	918	918	918	757	161
Adjusted R^2	0.520	0.521	0.518	0.506	0.844