

Family Ownership, Country Governance, and Foreign Portfolio Investment

Andriy Bodnaruk*, Massimo Massa, and Vijay Yadav*****

Abstract

We study how different dimensions of family ownership combine to make family firms around the world appealing to foreign investors. Family firms provide the benefits of political connections, but at the same time they are more prone to expropriate minority shareholders themselves. This cost-benefit trade-off depends on the quality of country governance: families are attractive investment opportunities in countries in which the value of political connections is high, but the majority shareholders have limited ability to expropriate, i.e., “useful” countries. Foreign investors – more sensitive both to the risk of expropriation by the government and to the risk of expropriation by majority shareholders – are particularly responsive to this trade-off. While on average foreign institutional investors are less likely to invest in family firms and such firms have lower value, these effects disappear when family ownership in a country is useful.

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* Finance Department, College of Business Administration, University of Illinois at Chicago, 2421 UH MC 168, Chicago, IL 60607, 1-312-996-2980, bodnaruk@uic.edu; ** Finance Department, INSEAD, Boulevard de Constance, 77300 Fontainebleau, France, Tel: +33160724481, Fax: +33160724045 Email: massimo.massa@insead.edu; *** Finance Department, ESSEC Business School, 5 Nepal Park, Singapore 139408 Email: yadav@essec.fr

"Despite the dramatic reduction in explicit barriers to international investment activity over the last 60 years, the impact of financial globalization has been surprisingly limited...country attributes are still critical to financial decision-making because of "twin agency problems" that arise because rulers of sovereign states and corporate insiders pursue their own interests at the expense of outside investors."

-- Stulz, *The Limits of Financial Globalization*

Over the last two decades we have seen giant strides in the abolition of formal barriers to international movement of capital. The ensuing exponential growth in cross-border capital flows has often been taken as evidence that markets have finally become fully integrated. However, this is hardly the case. One of the major remaining obstacles to international investment are the "implicit" barriers stemming from the host country governance problems. International portfolio investors refrain from investing in countries in which they can be expropriated by either the government or controlling shareholders ("twin agency" problem) (Stulz, 2005; Leuz, Lins, and Warnock, 2009).

In this context, forms of company control traditionally dubbed as "old-fashioned", such as family ownership, may play an important role as the solution to one of the twin agency problems – state expropriation. A longer horizon and a significant personal interest of family owners make family firms more likely to forge and maintain ties with the political establishment, which makes it easier to run business in countries plagued by bureaucratic corruption and the lack of clearly defined rules (La Porta, et al., 1999, Claessens, et al., 2000, Johnson and Mitton, 2003, Rajan and Zingales, 2003, Khwaja and Mian, 2005).¹ At the same time, family firms are also more exposed to the second agency problem: expropriation by majority shareholders (Johnson, et al., 2000, Bertrand, et al., 2002).

Prior literature has established that foreign investors have a relative information disadvantage about different risks of investing in a firm: cashflow risk, riskiness of business operations, the

¹ It is commonplace in the literature to describe the value of political connections enjoyed by family firms in terms of protection against expropriation by the state – i.e., avoidance of costs. This also makes for the easy relation to the expropriation by majority shareholders which is another concerns of minority investors. Yet, the focus of the literature is on the gains from such connections – i.e., extraction of rents (see Section 2 for a brief literature review).

extent of expropriation by majority shareholders etc – vis-à-vis domestic investors and thus are drawn to firms in which these risks are less severe (Brennan and Cao, 1997, Kang and Stulz, 1997, Choe, et al., 2005, Leuz, et al., 2009). We argue that foreigners should be also less informed / more sensitive to the potential of expropriation by the state. For example, foreign portfolio investors are less likely to forge strong ties with local politicians and government officials and, thus, to receive the information about state’s upcoming meddling with the firm’s affairs in advance. Foreign investors are also subject to additional risks related to the state intervention such as imposition of taxes on interest or other income, seizure or expropriation of foreign deposits, establishment of exchange controls etc (JP Morgan, 2012).²

Since foreign investors are most sensitive to both types of expropriation risk: state and majority owner – they should find family firms to be attractive opportunities for investment in countries in which state expropriation of all shareholders is pervasive, but the controlling owners’ ability to expropriate minority shareholders is limited (we call such countries “useful” from the perspective of family ownership).³ The benefits of political connections provided by family firms should be reflected in their firm values, particularly when the demand from more appreciative foreign investors is high. When the supply of foreign capital becomes smaller or the benefits of political connections decline foreigners do not bid up the price of family firms as aggressively so their company value should decline relative to the values of non-family firms.

We use data on worldwide institutional and block ownership for the period 1999-2009 to study how family ownership helps to mitigate “twin agency” governance problems for foreign investors. We start by investigating the institutional ownership of family firms. We show that foreign institutional investors avoid investing in family firms in non-useful countries, but in useful countries they invest in family firms as much as in non-family firms. In contrast, domestic institutional ownership of family and non-family firms is similar across both useful and non-

² From Risk Factors of Foreign Investment Section of JP Morgan Income Funds prospectus.

³ Information disadvantage / higher sensitivity of foreign investors to the risk of state expropriation implies that there is a wedge in valuation of the political connections provided by family firms between foreign and domestic investors.

useful countries. This supports our view that foreign investors are the ones which particularly appreciate the value of political connections provided by family firms.

These firm-level effects also aggregate at the country level. In useful countries family firms attract 1.7% higher excess foreign investment than in countries where family ownership is not useful.⁴ This compares to the average excess foreign investment in family firms of -0.4%.

Since investors appreciate the protection from state expropriation provided by family firms in useful countries it should be reflected in firm value. Consistent with the prior literature's findings that family firms destroy value for minority shareholders because of lower efficiency and tunneling (Johnson, La Porta, Lopez-de-Silanes, and Shleifer, 2000, Bertrand, Mehta, and Mullainathan, 2002, Bae, Kang, and Kim, 2002) we find that in general the Tobin's Qs of family firms are lower than those of non-family firms. However, this effect is limited to non-useful countries. In useful countries family firms are valued neither statistically nor economically differently from non-family firms. This supports our view that in useful countries family firms offset expropriation of minority shareholders by providing large benefits of political connections.

We then provide a direct link from foreign institutional ownership to the value of family firms by focusing on shocks to foreign institutional capital: flow-induced sales of foreign institutional investors that need to meet redemption claims, i.e., "financial fire sales" (Coval and Stafford, 2007). If family firms in useful countries indeed provide valuable service to foreign investors, then we expect that their value should be hit particularly hard when the foreign institutional capital experiences an abrupt decline. We find that in useful countries the net flows to the foreign shareholders have between 134.74% and 191.60% larger impact on the value of the family firms than on the value of non-family firms. At the same time, there is no differential impact of net flows to foreign shareholders on the value of family and non-family firms in non-useful countries.

⁴ We define excess investment in family firms as the difference between the fraction of foreign investment that goes into family firms in the country and the fraction that family firms represent in total market capitalization of firms in the country. For details, see Section 4.2.

Lastly, we demonstrate that improvements in country governance which limit the ability of the state to expropriate investors reduce the value of family firms as providers of political connections to foreign investors. To do so, we consider quasi-exogenous shocks: improvements in anti-corruption practices experienced by some countries – and study their impact on institutional ownership, value, and profitability of family firms.

In countries where family ownership is useful, a drastic decline in government's ability to expropriate investors – measured as one time increase in the corruption perception index by Transparency International by at least 0.3) – is followed by a 0.6% (in terms of shares outstanding) larger reduction in foreign institutional ownership in family firms than in non-family firms. This should be compared to the average institutional ownership of 7.8% in our sample. At the same time, we do not observe a reduction in corruption to be associated with material changes in domestic institutional ownership. Also, we do not find any effect of improvement in anti-corruption practices on institutional ownership in countries in which family ownership is not perceived to be useful or in (either useful or non-useful) countries which did not experience improvement in the corruption perception index.

The reduced corruption in useful countries results in a 0.16 drop in value (Tobin's Q) of family owned firms relative to their non-family peers. This is in stark contrast to the average 0.03 increase in Tobin's Q of family firms (relative to non-family firms) over the same period in useful countries that do not experience a change in quality of anti-corruption practices. To put things into a perspective, the average value of Tobin's Q in our sample is 1.49. Again, no effect is observed in countries where family ownership is not useful.

Finally, the profitability of family owned firms in countries with useful family ownership declines (on average by 2.1%) relative to non-family owned firms when the country starts

fighting corruption.⁵ There is no similar effect for family firms in non-useful countries or in countries that do not improve their anti-corruption practices.

Overall, our results demonstrate that family firms represent vehicles that allow international investors to enter countries with high risk of expropriation by local government.

Our results are relevant for different strands of literature. First, it is an established fact that “foreigners invest less in firms ... in countries with poor outsider protection and disclosure *and* [that] have ownership structures that are conducive to governance problems” (Leuz et al., 2009). To our knowledge, however, we are the first to ask whether in the presence of high state expropriation, a specific type of ownership structure may actually be a part of *the solution* instead of being a part of *the problem*.

Also, there is a large literature on portfolio choice, both domestic and international (e.g., Kang and Stulz, 1997, Froot and Ramadorai, 2008, Choe et al., 2005, Dvorak, 2005). We contribute by showing how family ownership and governance affect investor demand. The fact that the majority of firms around the world, as well as one-third of the large publicly held firms in the US, are controlled by their founders or their descendants (e.g., La Porta et al., 1999, Morck, et al., 2000, Claessens, et al., 2002, Faccio and Lang, 2002, Anderson and Reeb, 2003) makes the analysis even more relevant.

Second, our work relates to the literature on family firms. While it is a sort of folk theorem that family firms are less efficient, overall the evidence is mixed. On the one hand, family firms seem to underperform (Morck, et al., 2000, Claessens et al, 2002, Cronqvist and Nilsson, 2003). This underperformance is related to the difficulties in intergenerational transfer of control (Morck et al., 2000, Perez-Gonzales, 2006, Villalonga and Amit, 2006, Bennedsen et. al, 2007, Bertrand, et al., 2011). On the other hand, families are believed to create value as they manage for the long term/patient capital and better manage human capital (Bertrand and Schoar, 2006). Anderson and Reeb (2003) find better performance for family firms in the U.S., Khanna and Palepu (2000) for

⁵ The average net profit margin in our sample is 3.8%.

family-controlled business groups in India, and Marman (2002) for family firms in South Korea and Israel. We contribute by focusing on one dimension that has been less explored: the appreciation of investors for the help that the family firm provides vis-à-vis a government.

Third, we add to the literature on governance. Formal governance by-laws of the firm, institutional ownership, and block ownership have all been identified as different mechanisms of governance, but one major type of ownership has not been fully investigated: family ownership. Most studies focus on the implication of concentrated or dispersed ownership on firm value (Claessens et al., 2000, La Porta et al., 2002, Lemmon and Lins, 2003, Lins, 2003, Claessens and Laeven, 2003, Laeven and Levine, 2008). We contribute by showing the role played by a concentrated owner – the family – in providing valuable services to minority shareholders.

Fourth, we also contribute to the literature on country governance. The idea is that bad legal protection – i.e., the inability to prevent insiders from expropriating corporate resources, makes concentrated ownership an important governance mechanism. As a country's legal system improves, this channel loses relevance (La Porta et al., 2002). We contribute by documenting the trade-off between the shield from state expropriation and expropriation by majority shareholders faced by international investors in dealing with concentrated ownership.

The closest research in spirit to ours is Stulz (2005). Stulz clearly shows that even with capital flow liberalization and the rise of international portfolio investors, local country-specific effects, especially those related to governance, play an important role. We provide evidence in support of this view, by showing that the “twin agency problems” affect international portfolio investment and that international investors adapt to, rather than change, specific country governance specificities.

2. Main Hypotheses

We start with three stylized facts that help to build our hypotheses. The first fact is that family firms are particularly well qualified to deal with weak state governance. They are especially well

positioned to benefit from transfers resulting from political connections since they often have extensive kinship networks that stretch across politics and business. “If family firms indeed have longer horizons than their nonfamily counterparts those firms will be less likely to renege on their implicit contracts with politicians” (Bertrand and Schoar, 2006). Powerful business families also can play an important role in sustaining a high level of political corruption within an economy to maximize the value of their political connections (Morck and Yeung, 2004).

Political connections can take the form of links to the Suharto’s family in Indonesia (Leuz and Oberholzer-Gee, 2006), to political parties in Canada (Morck, Strangeland, and Yeung, 2000), to communist party members in China (Li, Meng, Wang, and Zhou, 2008), to top politicians/officials (Faccio, 2006, Faccio et. al, 2006, Burkart, Panunzi, and Shleifer, 2003). The benefits are even higher when a larger shareholder – a family member – enters politics (Faccio, 2006, Bunkanwanicha and Wiwattanakantang, 2009).⁶

Political connections lead to cheaper/easier access to financing (Khwaja and Mian, 2005, Leuz and Oberholzer-Gee, 2006, Faccio and Parsley, 2009, Li et al. 2008, Dinc, 2005, Faccio, 2006, Johnson and Mitton, 2003, Khwaja and Mian, 2004, Cull and Xu, 2005), judiciary protection (Khwaja and Mian, 2005), granting of important licenses and contracts (Leuz and Oberholzer-Gee, 2006, Goldman, Rocholl, and So, 2009), tax discounts (De Soto, 1989, Faccio, 2006), regulatory benefits (Stigler, 1971, De Soto, 1989, Kroszner and Stratmann, 1998, Bunkanwanicha and Wiwattanakantang, 2009), subsidies and direct state support in distress (Faccio, Masulis, and McConnell, 2006), creation of barriers for non-family affiliated entrepreneurs (Morck, Stangeland, and Yeung, 2000), stronger market power (Faccio, 2006, Peng and Luo, 2000), better protection of property rights (Hellman, Jones, and Kaufman, 2003). Better

⁶ The drop in value of the stocks of a firm following the sudden death of a politician or rumors about his health are stronger for family firms (Roberts, 1990, Fisman, 2001, Faccio and Parsley, 2009). The decline in value is followed by a drop in the rate of growth in sales and access to credit (Li et. al, 2008). Johnson and Mitton (2002) show that politically connected firms suffer more when a macroeconomic shock reduces the government ability to provide privileges (i.e. cheaper financing, lower stock performance) and benefit more when the imposition of capital controls allows a higher level of subsidies. Ferguson and Voth (2008) show that firms with pre-established ties with Nazi party had their market value increase by 5-8% when Nazis “seized the power” in 1933. Goldman, Rocholl, and So (2009) find positive abnormal return following the announcement of appointment of politically connected individual to the board.

access to government resources helps politically connected firms create more cross-border strategic alliances, but the opposite is true for the firms tied to the political enemies of the regime (Siegel, 2007).

The second stylized fact is that political connections are more important in weak state governance (more corrupt) countries (Faccio, 2006, Leuz and Oberholzer-Gee, 2006, Faccio and Parsley, 2009, Bertrand, Kramarz, Schoar, and Thesmar, 2009, Siegel, 2007).

These two facts suggest that families are particularly beneficial in countries with weak state governance thanks to their ability to use their political connections. However, for a minority shareholder these benefits have to be traded-off against the possibility of expropriation by controlling family (e.g., Burkart et.al, 2003). This suggests that minority shareholders will appreciate family firms more in the cases in which state expropriation makes the umbrella of family protection more important.

The third stylized fact is that foreign investors are generally believed to face information disadvantage about investing in a country vis-à-vis domestic investors (Brennan and Cao, 1997, Kang and Stulz, 1997, Choe, et al., 2005, Leuz, et al., 2009) and thus should be less capable to overcome the agency constraints of worse governance. This makes foreign investors more appreciative of political connections provided by family ownership, as well as more sensitive to the possibility of being expropriated by majority shareholders. Therefore, foreign investors should invest more in family firms when these provide valuable protection against state expropriation and when families are less likely to expropriate themselves.

H1: Foreign institutional investors prefer to invest in family firms rather than in non-family firms in countries with significant risk of state expropriation and low risk of expropriation by majority shareholders.

Since the protection against state expropriation and liability to expropriation by majority shareholders are valued in the market, we expect the value of family owned firms to be related to the two types of governance. This pricing effect is reinforced if it is related to the replacement of

domestic (less risk sensitive) investors with foreign ones. These considerations suggest a link between firm value, governance and family ownership.

H2: Family firms are worth more in countries with significant risk of state expropriation and low risk of expropriation by majority shareholders.

3. Data

We first describe the data sources we use and the main variables we consider. Then, we describe the way we construct our proxy for family ownership and define countries where family ownership is “useful”.

3.1 Data Sources and Main Variables

The data on ownership come from the Bureau van Dijk databases.⁷ For the period of 2006-2009, we use Orbis database, while for the period 1999-2005, we combine Amadeus and Osiris databases. Orbis contains ownership, financial, and corporate governance data for over 16 million firms across the globe (as of July 2008). Amadeus is a subset of Orbis for both listed and non-listed European firms, while Osiris is a subset of Orbis for all global listed firms.

The data on ownership by institutional investors (“institutions”) come from FactSet/LionShares. FactSet/LionShares compiles institutional ownership from public filings by investors (such as 13-F filings in the U.S.), company annual reports, stock exchanges, and regulatory agencies around the world. Institutions are defined as professional money managers, including mutual fund companies, pension funds, bank trusts, and insurance companies. We

⁷ Bureau van Dijk describes its collection of ownership data as follows: “For US listed companies, ownership information is systematically collected from the Free Edgar File which includes all companies filing proxy statements. These links cover all known shareholders (corporations or individuals) with an ownership percentage of 5% or more, as well as the ownership of directors and executive officers (with no lower ownership percentage limitation). Data is gathered tracking lower levels percentages owned by corporations. This is done by querying the NASDAQ web-site under the entry “Beneficial Owner” which is associated to the display of a company. (This covers all companies listed in the US stock exchanges, not only those listed on the NASDAQ).” For non-US firms and US private firms Bureau van Dijk collects data from annual reports, stock exchanges, information providers, company web-sites, press news, and private correspondence (with a 25% response rate). This implies that the data are collected in a similar manner as in other related studies. We confirm this by comparing summary statistics. Our summary statistics are comparable to those in Dlugosz et al. (2006), Villalonga and Amit (2006) and other studies on blockownership in US public firms. We attribute the fact that the mean blockholding in our sample is slightly higher than in other studies to our larger sample and thus higher proportion of small firms.

consider all types of stock holdings: common shares, preferred shares, American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and dual listings. FactSet/LionShares provides holdings data by over 5,300 institutions, with positions totaling US\$17 trillion as of December 2007. Ferreira and Matos (2008) provide a more detailed description of this database.

A majority (63.33%) of institutional investors report stock ownership semiannually, 30.04% report on the quarterly basis, 6.08% do it yearly and 0.55% report monthly. Hence, we execute our cross-sectional analysis on the semiannual basis. We focus on publicly listed corporations worldwide for which we are able to obtain financial data and accounting data, stock market information from Datastream/WorldScope and country level measures of governance. We exclude US based companies from our analysis.

The final sample consists of 10,923 firms in 29 countries. The frequency distribution of firms across the countries is presented in Table 1, Panel A. Larger economies lead the way with the number of firms represented; there are 3139 Japanese firms and 1027 UK firms. At the same time, even for countries with the smallest number of firms in the sample (Portugal with 33, Argentina with 42, and Ireland with 44) there is a large enough sample to execute within-country analysis.

Data on accounting variables come from Datastream/Worldscope. Appendix provides a description of both the data sources and the main variables. We match Bureau van Dijk data and Datastream/Worldscope with data on institutional investor stock holdings from FactSet/LionShares over 1999-2009. The descriptive statistics of the main variables are in Table 1, Panel B. The firms in our sample have a median level of profitability (ROE), cash, tangibility and dividend yield (scaled up by 100) respectively equal to 0.083, 0.153, 0.257, and 1.953. The descriptive statistics of our variables matches very closely that of Ferreira and Matos (2008) who use the same data, but over a shorter time period.

We construct three measures of institutional ownership: total institutional ownership (the fraction of shares outstanding held by all institutions); foreign institutional ownership (the fraction of shares held by all the institutions domiciled in a country different from the one in

which the company is incorporated); and domestic institutional ownership (the fraction of shares held by all the institutions domiciled in the same country in which the company is incorporated). Following Gompers and Metrick (2001), we set institutional ownership to zero if a stock is not held by any institution according to FactSet/LionShares.

The mean (median) institutional ownership is 7.8% (3.5%), which is comparable to findings in Ferreira and Matos (2008). Like them, we find that most of institutional ownership outside the US comes from foreign investors.

3.2 Definition of Family Ownership

In order to define family ownership we proceed as follows. First, for each firm, we identify the firm's largest ultimate owner as well as its power of control. The fact that Orbis reports actual voting rights, controlling for different classes of shares, allows us to identify the controlling entity. We use the weakest link principle (see La Porta et. al, 1999).

We proceed as follows. For each firm, we identify each shareholder. Then, for each shareholder, we trace up its immediate shareholders; this procedure is repeated until we reach the top of the ownership pyramid. This allows us to identify ultimate shareholders, i.e., the shareholders that directly or via other shareholders have an equity interest in the firm, and determine the aggregate size of their stake. As Orbis reports ownership for all public and private firms, we are able to identify the ultimate owners of each public firm.

Second, once the ownership structure of the firm has been determined, we identify and verify the type of ultimate controlling shareholders using comprehensive web search. In this respect, our handling of data is similar to Masulis, Pham, and Zein (2011); the descriptive statistics of family ownership is also very comparable across their paper and ours.

We define a "family owned" firm as a firm for which at least 25% of its voting rights belong to an individual, a group of individuals related by blood, or a legally unrelated group of individuals that made its equity investments in the firm through a jointly owned investment vehicle whose sole purpose is to exercise control over the firm. The procedure is similar to Faccio

and Lang (2002). In the analysis, we will consider a family control dummy, which takes a value of one if a firm is family owned, and zero otherwise.

Overall, about 18.4% of the firms in our sample qualify as family-owned (Table 1, Panel A). On the other hand, there's a lot of variability in family ownership across countries. It may be argued that the negative relation between family ownership and institutional ownership is to some degree mechanical. That is higher family ownership means a lower proportion of shares available for other investors. Given that our main findings focus on the behavior of the foreign institutions, we define a measure of standardized foreign institutional ownership. This is the ratio between foreign institutional ownership and the sum of both foreign institutional ownership and domestic institutional ownership. The (untabulated) results do not differ from those that we report.

3.3 Definition of “useful” and “non-useful” countries for family ownership

To identify countries in which benefits of investing in family owned firms outweigh the costs we distinguish between two dimensions of country governance: “horizontal” (state) and “vertical” (corporate) (Acemoglu and Johnson, 2005). “Horizontal governance” (or “contracting institutions”) refers to a set of rules that regulates transactions between private parties, such as company and shareholders. “Vertical governance” (or “property rights institutions”) describes institutions constraining government and elite expropriation and regulates transactions between the state (elites) and citizens. Good horizontal governance protects the shareholders from expropriation from the managers or the majority shareholders. Good vertical governance protects all the shareholders from expropriation from the government.

We use two measures of “horizontal governance”: a “revised anti-directorship index” (horizontal, H1) of La Porta et al. (1997), and an “anti-self-dealing index” (H2) of Djankov et al. (2008).⁸ These are intended to measure the degree of legal protection of minority shareholders against expropriation by corporate insiders.

⁸ We also used firm-level corporate governance variables to measure the severity of minority shareholder expropriation. While the results qualitatively are very similar we do not include them here for two reasons. First, our sample becomes

We use three measures of “vertical governance”: “constraint on executive power” (vertical, V1) from the Polity IV dataset (Gurr, 1997); “protection against expropriation by government” (V2) from Political Risk Services (Knack and Keefer, 1995); and “quality of institutions” (V3) from the International Country Risk Guide (Bekaert, et al., 2011). We provide a detailed description of all governance measures in the Appendix.

The correlations between measures of vertical and horizontal governance are low: on average they are 19.6%; suggesting that these two dimension of governance indeed refer to different agency problems. At the same time the correlations between the measures of vertical governance are 53.4% and between the measures of horizontal governance 85.5%.

We identify countries as “useful” from the perspective of minority shareholder investment in family firms as those which quality of vertical governance is poor (below median) and quality of horizontal governance is good (above median). These are the countries where families help to protect against expropriation by the government and, at the same time, expropriate minority shareholders relatively little. This procedure provides six partitions of countries.

Countries where family control is useful according to vertical governance measure V1 and horizontal governance measure H1 are Brazil, Korea, Russia, Singapore, and Thailand. Similarly, Korea, Singapore, Taiwan, and Thailand are the countries with useful family ownership if we use measures V1 and H2; Australia, Brazil, Korea, Russia, Singapore, South Africa, and Thailand according to V2 and H1; Australia, Korea, Singapore, South Africa, Taiwan, and Thailand according to V2 and H2; Brazil, Hong Kong, Ireland, Japan, Korea, Russia, Singapore, Spain, South Africa, and Thailand according to V3 and H1; and Belgium, Hong Kong, Ireland, Japan, Korea, Singapore, South Africa, Taiwan, and Thailand according to V3 and H2. We plot vertical (V1) and horizontal (H1) governance measures for our sample of countries on Figure 1.

We can see that the subset of countries with useful family ownership varies significantly across partitions. Korea, Singapore, and Thailand are the only three countries with useful family

significantly smaller which undermines credibility of the results. Second, firm-level governance is likely to be more endogenous to firm-specific characteristics than country-level measures of horizontal governance.

ownership regardless of the combination of governance measures. South Africa is a country where family ownership is useful in four partitions of six, followed by Brazil, Russia, and Taiwan with three, Hong Kong, Ireland, and Japan, with two, and Belgium and Spain with one. It is worth pointing out that our results remain unaffected if we remove three ever-present countries (Korea, Singapore, and Thailand) from the group of useful countries and re-estimate our analysis on the subsample. We use six combinations of measures of horizontal and vertical governance and ensure that our results are not due to data snooping.

One element we need to control for is that family-controlled economies are less developed. For example, Landes (1949) argues that the generally poor performance of the French economy compared to the German, Great Britain, and the United State economies throughout the 19th century was caused by the predominance of family firms in France. French family firms were more interested in survival and succession than in growth and innovation. This made them reluctant both to go public and to undertake high-risk ventures. According to Landes, this profound conservatism retarded the performance of the overall economy because family businesses lobbied for protectionism and bailouts, and regarded the state as “a sort of father in whose arms [they] could always find shelter and consolation” (Morck and Yeung, 2003). Therefore, throughout our analysis, we control for country fixed effects.

Finally, it is interesting to see how usefulness affects institutional investment. In Table 2, we report descriptive statistics on the level of institutional ownership for countries with useful and non-useful family ownership. We report both the equal-weighted average foreign ownership and the value-weighted foreign ownership weighed by stock market capitalization. We can see that foreign institutional ownership is generally lower in useful countries; this relationship is unsurprising given that the risk of expropriation by state in useful countries is large.

Also, as Dahlquist, et al., (2003) note, the percentage ownership underrepresents the true impact of foreign ownership as a significant fraction of the capital of a firm is tied down in the controlling stake, e.g., state, families. Given that this part is not likely to affect the daily price of

the stock, it is important to focus on the percentage of ownership that floats. Therefore, we also report floating adjusted value-weighted foreign ownership. This is calculated by rescaling market capitalization to adjust for the percentage of not closely held shares, as reported in Table 1 of Dahlquist et al. (2003). Foreign ownership is again lower in useful countries according to this adjusted measure. Use of the adjusted measure provides similar results (untabulated) than the results based on the unadjusted measure.

4. Family Ownership and Institutional Ownership

We start by investigating institutional ownership of family firms. We carry out both a firm-level analysis and a country-level analysis.

4.1 Firm Level Analysis

We relate family control to institutional ownership, both overall and broken down into foreign and domestic ownership. We estimate Tobit specifications in which the dependent variable is institutional ownership measured on a semi-annual basis. The main explanatory variable is family control interacted with useful and non-useful country dummies as defined above.

The control variables include company size, book-to-market, cash, investment opportunities (two-year geometric average of annual growth rate of sales), return on equity, asset tangibility, leverage, dividend yield, and momentum (return over the prior six month period).⁹ All the control variables are measured at the end of the previous year. We also include industry, time, and country fixed effects. The use of country fixed effects eliminates the need to include the useful dummy itself. We cluster the standard errors at the country level. F-statistics of tests of the difference in coefficients between families in useful and non-useful countries with corresponding p-values are reported.

⁹ We also used more extensive set of controls variables including past year trading volume, market float, MSCI index inclusion etc. The (untabulated) results are unchanged.

We report the results in Table 3. In Panels A, B, and C, we consider ownership by all the institutional investors (both domestic and foreign), by foreign institutional investors, and by domestic institutional investors respectively. The results show a strong negative relation between institutional investor ownership and family control. On average, institutional ownership of family firms is 1.4% lower than that of non-family firms. This difference represents 17.8% of the average total institutional ownership. Family firms may be perceived as underperforming, too conservative, or plagued by agency problems. Most of the difference in institutional ownership is due to foreign investors, in line with the foreigners being more sensitive to local risks.

The results are different when we consider governance. Consistent with our predictions, in countries where family ownership is perceived to be useful, the demand for family firms is higher. In fact, in such countries we do not find any discernible difference between institutional ownership of family and non-family firms. In contrast, in non-useful countries the ownership of institutional investors in family firms is 1.6% lower (in terms of shares outstanding) than in non-family firms. This corresponds to 20.51% of the unconditional mean total ownership. This result is driven by international investors; their ownership in family firms is on average 1.0% lower than in non-family firms (or 19.23% relative to unconditional mean). Domestic investors do not seem to be affected by the link between quality of governance and family ownership. The F-tests display a statistically significant difference in coefficients between families in useful and non-useful countries.

These findings suggest that when families provide political connections and are limited in their expropriation of minority shareholders, they represent more attractive investment opportunities for institutional investors, especially the foreign ones.

4.2 Country Level Analysis

The previous findings suggest that international investors – and not the domestic ones – value family ownership in relation to the quality of governance of the country. We now investigate this issue in more detail, directly focusing on international investors.

For each country, we construct the excess foreign institutional ownership of family firms (*EFIOF*); it is defined as the difference between (a) the ratio of foreign investment in family-owned firms in country *i* by institutional investors from country *j* to total foreign investment in country *i* by country *j* and (b) the ratio of market capitalization of family-controlled firms in country *i* to the total market capitalization of firms in country *i*:

$$EFIOF_{ij} = \frac{\text{investment in family firms}_{ji}}{\text{total investment}_{ji}} - \frac{\text{market capitalization of family firms}_i}{\text{market capitalization of all firms}_i}$$

EFIOF is estimated on a semi-annual basis. This measure is a proxy for the degree of overinvestment (with respect to the average market weight as suggested by a simple portfolio model) by firms from country *j* in family firms in country *i*. Every observation, thus, represents a country pair.

Importantly, for some country pairs, we do not observe any investment by investors from some donor countries to some recipient countries (i.e., from Brazil to Norway). This can happen for several complementary reasons including poor development of donor country financial sector, significant information barriers for (especially small) foreign investors to invest in recipient country, cultural and language differences etc. As a result, the excess investment measure would be undefined for such country pairs. To address this potential bias, we estimate the selection model in which the dependent variables takes the value of 1 if we observe any investment from country *j* to country *i*; and 0 if none. We use the dummy variable for the same geographic area as the instrument. Large literature on proximity investment shows that investors prefer to invest in companies located nearby (e.g., French and Poterba, 1991, Cooper and Kaplanis, 1994). At the same time, there is no reason to expect that more proximate investors prefer family firms so the exclusion restriction is satisfied. We utilize Heckman's lambda from this regression (untabulated) as one of control variables in the second stage regressions.

We regress excess investment in family owned firms by foreign investors on the “usefulness” of family control in that country. All control variables are aggregated at the country level and are measured at the end of the previous year. We estimate robust regressions with time fixed effects.

We report the results in Table 4. They show that in countries in which family ownership is useful, there is a relative overinvestment in family firms by foreign institutional investors. The difference between excess investment in family firms in countries with useful and non-useful family ownership is 1.65%. Considering that the unconditional average of excess investment in family firms is -0.39%, the result is also economically relevant. These country-level findings are consistent with the firm-level results.

5. Family Ownership and Firm Value

We proceed to investigate the relation between Tobin’s Q and family ownership conditioning on the “usefulness” of family ownership in the country of the firm. The dependent variable is Tobin’s Q defined as the ratio of enterprise value to the book value of assets measured at the semi-annual level. The main explanatory variable is family control interacted with useful and non-useful country dummies as defined above. The layout of the columns is based on the different definitions of horizontal (H) and vertical (V) governance that are used to define countries with "useful" and "non-useful" family ownership. The set-up of specifications and the use of control variables is similar to the previous analysis.

The results, reported in Table 5, show an overall negative correlation between family control and Tobin’s Q. Families in general display a 0.02 lower Tobin’s Q than non-family owned firms. The effect, however, is concentrated in countries with non-useful family ownership where family firms display a 0.03 lower Tobin’s Q than non-family firms. In contrast, as expected, in useful countries family firms do not differ in value from non-family firms in either a statistical or an economic sense. The F tests display a statistically significant difference in coefficients between families in useful and non-useful countries.

These findings suggest that in useful countries the political connections provided by families offset the negative effect of minority shareholder expropriation.

6. A Link between Foreign Ownership and Firm Value

We have separately shown that family firms in useful countries are worth more (discounted less) and that foreign investors are attracted by family firms when they provide protection against expropriation and their fear of expropriation by majority shareholders is limited. We now explicitly link these two pieces. We use an exogenous shift in the ability of foreign institutions to invest and we see whether this shock affects family firms disproportionately more than non-family ones.

We focus on financial fire sales. “Funds experiencing large outflows tend to decrease existing positions, which creates price pressure in the securities held in common by distressed funds. Future flow-driven transactions are predictable, creating an incentive to front-run the anticipated forced trades by funds experiencing extreme capital flows” (Coval and Stafford, 2007). Higher outflows induce the funds that face withdrawals to sell their assets to meet redemption claims.

We concentrate on foreign investors as our findings show that their investment in family firms is greatly affected by country governance. We expect that in useful countries shocks in the ability of foreigners to invest should affect the value of family firms more than the value of non-family firms. Additionally, we expect little differential effect between family and non-family firms in non-useful countries.

We therefore regress the change in firm value on the aggregate net flow to the foreign investors who hold shares of the firm, indicators for whether family ownership is useful in the country, their interaction with net flow as well as a set of control variables. We calculate the aggregate net flows as follows. For each foreign institutional shareholder of the company we estimate the percentage change in assets under management net of portfolio appreciation

(multiplied by 100) over the previous year. We then value weight individual investor net flow by assets under management.

We report the results in Table 6. They show that net flows to the foreign shareholders positively affect company value. This effect is most pronounced for family firms, but only if they are in useful countries. We find that in these countries the net flows to foreign shareholders have between 134.74% and 191.60% larger impact on the value of the family firms than for non-family firms.¹⁰ In contrast, we find no differential effect for family and non-family firms in non-useful countries.

7. An Experiment: Family Ownership and Change in Corruption

We now focus on event that exogenously affects the quality of vertical governance: changes in the country corruption level. An improvement in country-level anti-corruption practices provides a good identifying restriction as firms with connections to the government would stand to lose from less intrusion of the state into the economy. Morck and Yeung (2004) argue that powerful business families can play an important role in sustaining a high level of political corruption in the economy.

If family-owned firms help to take advantage of political connections, reduction in corruption should make them less useful to outsiders and thus reduce the incentives of institutional investors to invest in family controlled firms (rather than in non-family firms) and also reduce firm value. The effect should be concentrated mostly in countries with useful family ownership. This analysis will also help to pin down the channel of value creation of family firms as well as provide a robustness check to control for endogeneity.

We perform our test by estimating the change in institutional ownership as corruption drops. In line with Angrist and Pischke (2008) and Roberts and Whited (2011), we use an exogenous change in country characteristics (the corruption perception index) to assess the impact on firm

¹⁰ These estimates are obtained by dividing the coefficient on Net flow to foreigners \times Family \times useful by the coefficient on Net flow to foreigners.

value. We regress the change in institutional ownership between the end of year $t - 1$ – the year of the change in the corruption index – and the end of year $t + 1$ on a family control dummy interacted with dummies for usefulness and the improvement in anti-corruption practices. The improvement in the corruption dummy takes the value of one if the change in Transparency International corruption perception index between years $t - 1$ and t has been at least 0.3; about 10% of country-year changes in corruption index could be defined as improvements.¹¹

Then, we define four family-related dummies based on interacting useful and non-useful dummies with improvement and no-improvement dummies and we use them jointly with our family dummy. To facilitate the interpretation of the results let's consider, for example, the interaction between family, useful, and improvement dummy – i.e., family dummy \times useful dummy \times improvement dummy. Given that we have country and time fixed effects in all the regressions, this term identifies family firms in useful countries which undergo improvement in anti-corruption practices. The use of country and time fixed effects also eliminates the need to include the improvement in corruption dummy. As the corruption index is updated annually, we conduct the analysis on an annual level as well.

All the control variables are measured at the end of the previous year. We include industry, time, and country fixed effects. The standard errors are clustered at the country level. We report the F-test for the difference in coefficients between family dummy \times useful dummy \times improvement dummy and family dummy \times useful dummy \times no improvement dummy with corresponding p-values.

We report the results in Table 7. They show a strong negative correlation between the improvement in the quality of vertical governance in countries where family ownership is useful and an incremental increase in institutional investor demand for family-controlled firms (Panel A).

¹¹ The Transparency International Corruption Perception Index is measured on a 10-point scale with 0.1 increments. When choosing a cut-off of 0.3 we are motivated by two criteria: a) the change in corruption perception should be meaningful and representative. For example, there are less than 1% country-year observations for which a change in the corruption perception index was 0.4 or more. We also perform a robustness check by considering only improvements in the corruption index that were not followed by reversals in subsequent years. The results are qualitatively and quantitatively similar.

When families are useful, the improvement in the corruption index (lower corruption) leads to a significantly – about 0.9% in terms of shares outstanding – larger decline in institutional ownership of family firms than non-family firms. This should be compared to the average institutional ownership of 7.8%.

As expected, the results are driven by foreign institutional investors. No effect is there in the case of domestic institutional ownership. Also, an improvement in anti-corruption practices has no differential effect on the institutional demand for family firms in countries with non-useful family ownership. The results are robust to different definitions of the usefulness of family ownership in a country.

The fact that the effect of a governance change is concentrated in foreign institutional investors is supportive of our argument that they are more sensitive to the risk of state expropriation than local investors.

We then consider the effect of a change in corruption on firm value. We estimate a similar difference-in-difference specification using as dependent variable the change in Tobin's Q of the firm. That is, we relate the change in Tobin's Q between t and $t + 1$ to the changes in the corruption perception index between $t - 1$ and t , family ownership, and type of governance (family ownership useful or not useful). As in the previous specification, this provides four interaction terms involving families.

We report the results in Table 8. We find a strong negative correlation between the change in value of the family-owned firm and the improvement in the quality of vertical governance/anti-corruption practices in countries where family ownership is useful. If such countries experience an improvement in anti-corruption practices, the Tobin's Q of family firms drops by 0.16 relative to Q of non-family firms. The economic effects for other interacted terms are much smaller.

Finally, we investigate the effect of a change in corruption index on firm profitability. Stronger anti-corruption measures should create a more level playing field for all types of firms. This should result in family firms – i.e., the more politically connected companies – to be less

able to generate incremental cash flows from their dealings with the state. We estimate a difference-in-difference specification similar to the previous ones using as the dependent variable the change in the company's net profit margin.

We report the results in Table 9. They show a strong negative correlation between the improvement in the quality of vertical governance in countries with useful family ownership and changes in the profitability of the family firms. If such countries experience an improvement in anti-corruption practices, the profitability of family firms decreases by 2.12% relative to non-family firms (or 68.43% relative to the unconditional mean). We find no comparable effect for family firms in non-useful countries that improved their anti-corruption practices or in useful countries that did not experience any improvement.

Conclusion

We study how family ownership affects institutional investor demand and firm value depending on the quality of governance of the country. We argue that family firms provide protection against state expropriation, but at the same are more prone to expropriate minority shareholders themselves. This cost-benefit trade-off depends on the quality of country governance: family firms are attractive investment opportunities in countries in which the value of political connections is high, but the majority shareholders have limited ability to expropriate, i.e., “useful” countries.

We argue and show that foreign investors – more sensitive both to the risk of expropriation by the government and to the risk of expropriation by majority shareholders – are particularly responsive to this trade-off. While on average foreign institutional investors are less likely to invest in family firms and such firms have lower value, these effects disappear when family ownership in a country is useful.

Our results provide a first step in analysis of how institutional investors – especially international investors – invest conditional on differences in country governance. While we know

that their investment is affected by the quality of governance of a country, our research, to our knowledge, is the first attempt to see how they cope with that.

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Appendix: Variables definition

Variable	Description of Variable and Source of Data
Family	a dummy variable that takes the value of 1 if a company is family owned and 0 otherwise. We define a family owned firm as a firm that has at least 25% of its voting rights belonging to an individual, a group of individuals related by blood, or legally unrelated group of individuals which made their equity investments in the firm through a jointly owned investment vehicle whose sole purpose is to exercise control over the firm; estimated from Orbis/Osiris and doubled checked manually.
Institutional ownership	fraction of company's shares outstanding owned by institutional investors; estimated from FactSet.
Foreign Institutional Ownership	fraction of company's shares outstanding owned by institutional investors domiciled abroad; estimated from Factset.
Domestic Institutional Ownership	fraction of company's shares outstanding owned by institutional investors domiciled domestically; estimated from Factset.
Tobin Q	ratio of market value of equity (WorldScope 08001) minus book value of equity (WorldScope 03501) plus book value of assets (WorldScope 02999) divided by total assets (WorldScope 02999).
Market Cap	a market value of company's equity at the end of the previous 6 months period (in millions of US dollars) (WorldScope 0299).
Assets	a book value of company assets at the end of the previous 6 months period (in millions of US dollars) (WorldScope 08001).
Book-to-Market, B/M	the market value of equity (WorldScope 08001) divided by book value of equity (WorldScope 03501).
Investment Opportunities	two-year geometric average of annual growth rate in net sales in US dollars (WorldScope 01001).
ROE	return on equity (WorldScope 08301).
Tangibility	PP&E (WorldScope 02501) divided by total assets (02999).
Leverage	ratio of long-term debt (WorldScope 03251) to total assets (WorldScope 02999).
Dividend Yield	dividend yield scaled up by 100 (WorldScope 09404).
Momentum	past 6- months return on a company stock in US dollars; estimated from Datastream.
Revised Anti-Directorship Index	an index aggregating shareholder rights. The index is formed by adding 1 right when: (1) the country allows shareholders to mail their proxy vote; (2) shareholders are not required to deposit their shares prior to the general shareholders' meeting; (3) cumulative voting is allowed; (4) an oppressed minorities mechanism is in place; or (5) when the minimum percentage of share capital that entitles a shareholder to call for an extraordinary shareholders' meeting is less than or equal to 10% (the sample median). The index ranges from 0 to 5. Originally constructed and described in La Porta et al. (1997). Revised in Djankov et al. (2008).
Anti-Self-Dealing Index	an index of the strength of minority shareholder protection against self-dealing by the controlling shareholder; constructed and described in Djankov et al (2008).
Constraint on Executive Power	seven-category scale, from 1 to 7, where a higher score indicates more constraint: 1 indicates unlimited authority; 3, slight to moderate limitations; 5, substantial limitations; 7, executive parity or subordination; 2, 4, and 6, intermediate values; obtained from Polity IV dataset. Variable described in Gurr (1997).
Protection Against Expropriation by Government	risk of expropriation of private foreign investment, from 0 to 10, where a higher score means less risk; obtained from Political Risk Services; variable described by Knack and Keefer (1995).
Quality of Institutions	Sum of the International Country Risk Guide (ICRG) political risk sub-components: corruption, law and order, and bureaucratic quality. Source: Various issues of the International Country Risk Guide. Variable described in Bekaert et al. (2011).
Corruption Index	Corruption Perception Index by Transparency International; ranges from 0 to 10 with higher values indicating lower level of corruption. Updated annually.

Figure 1: Identification of countries with useful family ownership

This figure illustrates the identification of countries where the family ownership is considered to be useful. Horizontal axis depicts value of revised anti-directorship index (H1). Vertical axis reports value of constraint on executive power index (V1). Countries with useful family ownership (below median values of constraint on executive and above median values of revised anti-directorship index): Thailand, Korea, Brazil, Russia, and Singapore – are marked in red.

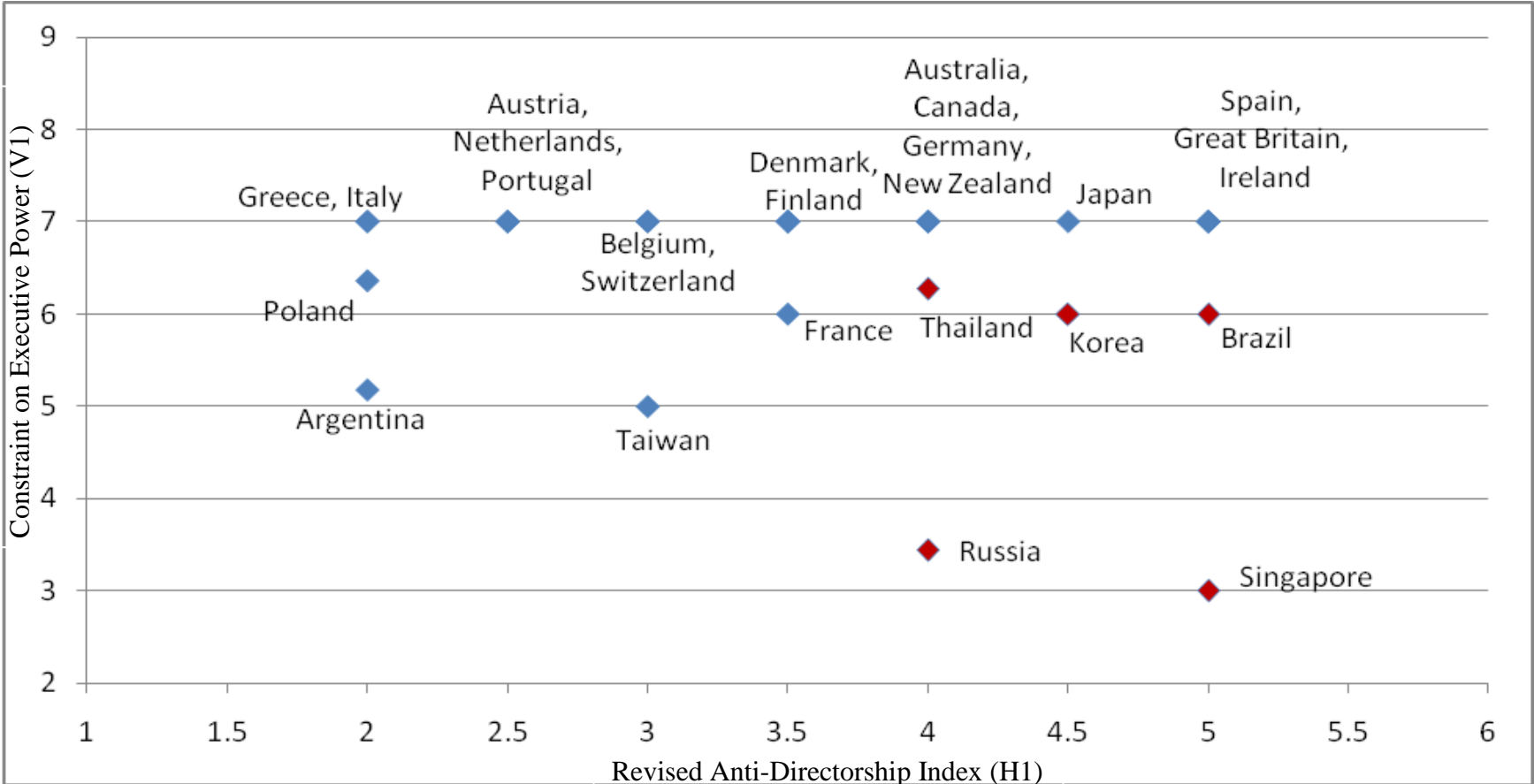


Table 1: Descriptive Statistics

We report summary statistics for the variables used in the study. Our sample covers the period between 1999 and 2009. Panel A presents the distribution of firms and family ownership across countries. Panel B reports descriptive statistics of the variables. All variables are described in the Appendix.

Panel A: Distribution of Firms and Family Ownership across Countries

Countries	N	% of family owned firms	Countries	N	% of family owned firms
Argentina	42	0.10	Netherlands	76	0.18
Austria	67	0.13	New Zealand	65	0.10
Australia	664	0.12	Norway	123	0.19
Belgium	91	0.22	Poland	185	0.32
Brazil	49	0.34	Portugal	33	0.21
Canada	510	0.10	Russia	51	0.16
Denmark	112	0.18	Singapore	304	0.32
Finland	117	0.12	South Africa	154	0.08
France	561	0.41	Spain	90	0.27
Germany	538	0.30	Sweden	250	0.17
Greece	178	0.52	Switzerland	170	0.12
Ireland	44	0.05	Thailand	205	0.24
Italy	207	0.29	Taiwan	629	0.31
Japan	3139	0.11	United Kingdom	1027	0.09
Korea	755	0.22			

Panel B: Descriptive Statistics of Main Variables

	N	mean	median	std
Institutional ownership	109331	0.078	0.035	0.104
Tobin's Q	109331	1.485	1.127	1.169
Log10(Market Cap)	109331	2.499	2.436	0.801
Log10(Assets)	109331	2.202	2.131	0.721
Log10(B/M)	109331	-0.110	-0.080	0.366
Cash	109331	0.157	0.103	0.159
Investment Opportunities	109331	0.136	0.099	0.252
ROE	109331	0.099	0.082	0.144
Tangibility	109331	0.292	0.257	0.231
Leverage	109331	0.115	0.068	0.133
Dividend Yield	109331	1.953	1.231	5.205
Momentum	109331	0.039	0.052	0.391

Table 2: Foreign Institutional Ownership in Countries with Useful and Non-Useful Family Ownership

We report summary statistics for foreign institutional ownership in countries with useful and non-useful family ownership. Family ownership is deemed to be “useful” if country’s level of horizontal governance is above the median and its level of vertical governance is below the median. “Not useful” is a complement to “useful”. We consider two measures of horizontal governance (revised anti-directorship index (H1) and anti self-dealing index (H2)) and three measures of vertical governance (constraints on executive (V1), protection against expropriation (V2), and quality of institutions (V3)). All measures of governance are described in the Appendix. Countries where family control is useful according to vertical governance measure V1 and horizontal governance measure H1 are Brazil, Korea, Russia, Singapore, and Thailand. Similarly, Korea, Singapore, Taiwan, and Thailand are the countries with useful family ownership if we use measures V1 and H2; Australia, Brazil, Korea, Russia, Singapore, South Africa, and Thailand according to V2 and H1; Australia, Korea, Singapore, South Africa, Taiwan, and Thailand according to V2 and H2; Brazil, Hong Kong, Ireland, Japan, Korea, Russia, Singapore, Spain, South Africa, and Thailand according to V3 and H1; and Belgium, Hong Kong, Ireland, Japan, Korea, Singapore, South Africa, Taiwan, and Thailand according to V3 and H2. Foreign institutional ownership is a fraction of a company’s shares outstanding owned by institutional investors domiciled abroad. We present equally weighted (ew), value weighted (vw), and float-adjusted value weighted (favw) average values of foreign institutional ownership. Float-adjusted ownership is calculated by rescaling market capitalization to adjust for the percentage of not closely held shares, as reported in Table 1 of Dahlquist et al., (2003)

Usefulness defined on measures	Useful countries			Non-Useful countries		
	mean(ew)	mean(vw)	mean(favw)	mean(ew)	mean(vw)	mean(favw)
(V1; H1)	0.051	0.082	0.239	0.057	0.149	0.227
(V1; H2)	0.048	0.130	0.214	0.058	0.143	0.229
(V2; H1)	0.051	0.091	0.187	0.058	0.153	0.233
(V2; H2)	0.049	0.118	0.182	0.059	0.146	0.236
(V3; H1)	0.047	0.109	0.201	0.066	0.162	0.241
(V3; H2)	0.047	0.120	0.197	0.068	0.153	0.243

Table 3: Family Control and Institutional Ownership

We relate family control to institutional ownership. Family dummy takes the value of 1 if a private person or a group of family related people hold at least 25% ownership stake in the company. Family ownership is deemed to be “useful” if country’s level of horizontal governance is above the median and its level of vertical governance is below the median. “Not useful” is a complement to “useful”. We consider two measures of horizontal governance (revised anti-directorship index (H1) and anti self-dealing index (H2)) and three measures of vertical governance (constraints on executive (V1), protection against expropriation (V2), and quality of institutions (V3)). All measures of governance are described in the Appendix. Countries where family control is useful according to vertical governance measure V1 and horizontal governance measure H1 are Brazil, Korea, Russia, Singapore, and Thailand. Similarly, Korea, Singapore, Taiwan, and Thailand are the countries with useful family ownership if we use measures V1 and H2; Australia, Brazil, Korea, Russia, Singapore, South Africa, and Thailand according to V2 and H1; Australia, Korea, Singapore, South Africa, Taiwan, and Thailand according to V2 and H2; Brazil, Hong Kong, Ireland, Japan, Korea, Russia, Singapore, Spain, South Africa, and Thailand according to V3 and H1; and Belgium, Hong Kong, Ireland, Japan, Korea, Singapore, South Africa, Taiwan, and Thailand according to V3 and H2. The dependent variable is institutional ownership measured on a semi-annual basis. Panel A (B, C) reports the results for total (foreign, domestic) institutional ownership. All control variables are measured at the end of the previous year. We report the results of Tobit regressions with industry, time, and country fixed effects. Standard errors are clustered at the country level. F-test for the difference in coefficients between family dummy \times useful dummy and family dummy \times not useful dummy are reported; p-values are in parentheses. All variables are defined in the Appendix.

Panel A: Total Institutional Ownership

			<u>(V1; H1)</u>		<u>(V1; H2)</u>		<u>(V2; H1)</u>		<u>(V2; H2)</u>		<u>(V3; H1)</u>		<u>(V3; H2)</u>	
	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Family	-0.014	(-4.30)												
\times not useful			-0.016	(-4.59)	-0.016	(-4.70)	-0.016	(-4.53)	-0.016	(-4.64)	-0.016	(-4.36)	-0.017	(-4.61)
\times useful			-0.003	(-1.52)	-0.002	(-0.96)	-0.004	(-1.69)	-0.003	(-1.42)	-0.007	(-1.87)	-0.004	(-2.02)
log(Market Cap)	0.047	(11.86)	0.047	(11.85)	0.047	(11.85)	0.047	(11.86)	0.047	(11.85)	0.047	(11.81)	0.047	(11.78)
log(B/M)	0.012	(3.19)	0.012	(3.20)	0.012	(3.22)	0.012	(3.20)	0.012	(3.22)	0.012	(3.21)	0.012	(3.22)
Cash	0.010	(1.19)	0.010	(1.19)	0.010	(1.19)	0.010	(1.18)	0.010	(1.18)	0.010	(1.18)	0.010	(1.18)
InvOpp	0.001	(0.14)	0.001	(0.13)	0.001	(0.14)	0.001	(0.13)	0.001	(0.14)	0.001	(0.13)	0.001	(0.13)
ROE	0.006	(0.82)	0.006	(0.82)	0.006	(0.83)	0.006	(0.82)	0.007	(0.83)	0.006	(0.82)	0.007	(0.83)
Tangibility	-0.018	(-2.23)	-0.018	(-2.24)	-0.018	(-2.24)	-0.018	(-2.23)	-0.018	(-2.23)	-0.018	(-2.24)	-0.018	(-2.24)
Leverage	0.020	(1.68)	0.020	(1.69)	0.020	(1.69)	0.020	(1.69)	0.020	(1.69)	0.020	(1.67)	0.020	(1.67)
Dividend Yield	0.018	(0.36)	0.017	(0.35)	0.016	(0.34)	0.017	(0.36)	0.017	(0.35)	0.018	(0.36)	0.017	(0.35)
Momentum	-0.018	(-6.23)	-0.018	(-6.22)	-0.018	(-6.22)	-0.018	(-6.22)	-0.018	(-6.22)	-0.018	(-6.20)	-0.018	(-6.17)
F-test			11.51		16.9		7.46		11.67		2.89		10.53	
			(0.01)		(0.01)		(0.01)		(0.01)		(0.09)		(0.01)	
Adj R ²	0.3168		0.3169		0.3170		0.3169		0.3169		0.3169		0.3170	
N	109331		109331		109331		109331		109331		109331		109331	

Panel B: Foreign Institutional Ownership

	estimate	t-stat	<u>(V1; H1)</u>		<u>(V1; H2)</u>		<u>(V2; H1)</u>		<u>(V2; H2)</u>		<u>(V3; H1)</u>		<u>(V3; H2)</u>	
			estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Family	-0.008	(-4.89)												
× not useful			-0.010	(-5.66)	-0.010	(-6.23)	-0.010	(-5.69)	-0.010	(-6.26)	-0.010	(-5.32)	-0.010	(-5.85)
× useful			-0.001	(-0.25)	0.002	(0.93)	-0.001	(-0.33)	0.001	(0.69)	-0.003	(-1.07)	-0.001	(-0.39)
controls	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
F-test			8.91		21.09		8.33		18.74		2.43		9.35	
			(0.01)		(0.01)		(0.01)		(0.01)		(0.12)		(0.01)	
Adj R ²	0.1624		0.1625		0.1626		0.1625		0.1626		0.1625		0.1626	
N	109331		109331		109331		109331		109331		109331		109331	

Panel C: Domestic Institutional Ownership

	estimate	t-stat	<u>(V1; H1)</u>		<u>(V1; H2)</u>		<u>(V2; H1)</u>		<u>(V2; H2)</u>		<u>(V3; H1)</u>		<u>(V3; H2)</u>	
			estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Family	-0.005	(-1.04)												
× not useful			-0.005	(-1.07)	-0.006	(-1.08)	-0.005	(-1.02)	-0.005	(-1.02)	-0.005	(-0.90)	-0.006	(-1.03)
× useful			0.006	(1.54)	0.006	(1.61)	-0.002	(-0.33)	-0.001	(-0.26)	-0.006	(-1.69)	0.000	(0.01)
controls	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
F-test			2.29		2.35		0.20		1.13		0.01		0.51	
			(0.14)		(0.13)		(0.66)		(0.29)		(0.94)		(0.48)	
Adj R ²	0.4874		0.4875		0.4875		0.4874		0.4874		0.4874		0.4875	
N	109331		109331		109331		109331		109331		109331		109331	

Table 4: Family Control and Institutional Ownership: Country Level

We relate investment in family firms in a country *i* (recipient country) by institutional investors from country *j* (donor country) to the “usefulness” of family control in country *i*. Family ownership is deemed to be “useful” if country’s level of horizontal governance is above the median and its level of vertical governance is below the median. “Not useful” is a complement to “useful”. We consider two measures of horizontal governance (revised anti-directorship index (H1) and anti self-dealing index (H2)) and three measures of vertical governance (constraints on executive (V1), protection against expropriation (V2), and quality of institutions (V3)). All measures of governance are described in the Appendix. Countries where family control is useful according to vertical governance measure V1 and horizontal governance measure H1 are Brazil, Korea, Russia, Singapore, and Thailand. Similarly, Korea, Singapore, Taiwan, and Thailand are the countries with useful family ownership if we use measures V1 and H2; Australia, Brazil, Korea, Russia, Singapore, South Africa, and Thailand according to V2 and H1; Australia, Korea, Singapore, South Africa, Taiwan, and Thailand according to V2 and H2; Brazil, Hong Kong, Ireland, Japan, Korea, Russia, Singapore, Spain, South Africa, and Thailand according to V3 and H1; and Belgium, Hong Kong, Ireland, Japan, Korea, Singapore, South Africa, Taiwan, and Thailand according to V3 and H2. The dependent variable is the excess foreign institutional ownership of family firms, EFIOF defined as the difference between (a) the ratio of foreign investment in family owned firms in country *i* by institutional investors from country *j* to total foreign investment by country *j* into country *i* and (b) the ratio of market capitalization of family controlled firms in country *i* to total market capitalization of firms in country *i*,

$$EFIOF_{ij} = \frac{\text{investment in family firms}_{ji}}{\text{total investment}_{ji}} - \frac{\text{market capitalization of family firms}_i}{\text{market capitalization of all firms}_i},$$

estimated on a semi-annual basis. All control variables are aggregated at the country level and are measured at the end of the previous year. We report the results of robust regressions with time fixed effects. We control for selection bias by estimating a selection model of (any) institutional investment into country *i* by country *j* (we use the dummy for the same geographic area as an instrument) and utilizing Heckman’s lambda from this regression. All variables are defined in the Appendix.

	(V1; H1)		(V1; H2)		(V2; H1)		(V2; H2)		(V3; H1)		(V3; H2)	
	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
“useful” family	0.017	(7.98)	0.022	(10.36)	0.020	(9.91)	0.024	(12.59)	0.013	(8.40)	0.021	(13.00)
<u>Recipient country</u>												
log(Market Cap)	0.032	(24.69)	0.032	(24.83)	0.032	(24.46)	0.032	(24.39)	0.031	(23.63)	0.031	(24.19)
log(B/M)	-0.031	(-8.02)	-0.028	(-7.50)	-0.019	(-5.00)	-0.009	(-2.34)	-0.015	(-3.96)	-0.022	(-5.98)
Cash	0.040	(2.24)	0.009	(0.50)	0.073	(4.10)	0.046	(2.61)	0.034	(1.88)	0.014	(0.78)
InvOpp	0.012	(1.48)	0.000	(0.05)	0.007	(0.95)	-0.005	(-0.59)	0.017	(2.18)	0.010	(1.32)
ROE	0.029	(2.54)	0.053	(4.58)	0.024	(2.12)	0.052	(4.61)	0.038	(3.39)	0.064	(5.62)
Tangibility	0.029	(3.61)	0.022	(2.82)	0.019	(2.31)	0.009	(1.14)	0.025	(3.11)	0.033	(4.28)
Leverage	0.015	(1.11)	0.022	(1.63)	0.034	(2.44)	0.044	(3.26)	-0.007	(-0.49)	0.020	(1.49)
Dividend Yield	0.003	(5.03)	0.004	(5.57)	0.002	(2.74)	0.002	(2.93)	0.005	(6.94)	0.005	(7.33)
Momentum	0.015	(3.09)	0.004	(0.83)	0.014	(3.04)	0.004	(0.84)	0.021	(4.35)	0.008	(1.72)
<u>Investing country</u>												
log(Market Cap)	-0.002	(-1.50)	-0.002	(-1.50)	-0.002	(-1.34)	-0.002	(-1.36)	-0.002	(-1.54)	-0.002	(-1.55)
log(B/M)	0.000	(0.06)	0.000	(0.07)	0.000	(0.08)	0.000	(0.07)	0.000	(-0.07)	0.000	(-0.05)
Cash	0.018	(0.99)	0.016	(0.89)	0.015	(0.83)	0.012	(0.66)	0.015	(0.83)	0.009	(0.51)
InvOpp	-0.001	(-0.14)	0.000	(0.00)	-0.003	(-0.34)	-0.003	(-0.34)	-0.005	(-0.59)	-0.005	(-0.58)
ROE	0.023	(1.93)	0.020	(1.71)	0.024	(2.05)	0.022	(1.86)	0.024	(2.02)	0.022	(1.87)
Tangibility	-0.047	(-5.95)	-0.047	(-6.01)	-0.044	(-5.59)	-0.044	(-5.63)	-0.045	(-5.75)	-0.043	(-5.58)
Leverage	-0.004	(-0.28)	-0.004	(-0.27)	-0.008	(-0.57)	-0.008	(-0.58)	-0.007	(-0.47)	-0.009	(-0.63)
Dividend Yield	-0.001	(-0.74)	0.000	(-0.60)	-0.001	(-0.85)	-0.001	(-0.71)	-0.001	(-0.83)	-0.001	(-0.77)
Momentum	-0.002	(-0.35)	0.003	(0.43)	0.001	(0.14)	0.007	(1.08)	-0.003	(-0.48)	0.001	(0.20)
Heckman's lambda	-0.034	(-10.76)	-0.037	(-11.22)	-0.042	(-12.54)	-0.045	(-13.07)	-0.037	(-11.33)	-0.043	(-12.86)
N	8791		8791		8791		8791		8791		8791	

Table 5: Family Control and Firm Value: Tobin's Q

We relate family control to Tobin's Q. Family dummy takes the value of 1 if a private person or a group of family related people hold at least 25% ownership stake in the company. Family ownership is deemed to be "useful" if country's level of horizontal governance is above the median and its level of vertical governance is below the median. "Not useful" is a complement to "useful". We consider two measures of horizontal governance (revised anti-directorship index (H1) and anti self-dealing index (H2)) and three measures of vertical governance (constraints on executive (V1), protection against expropriation (V2), and quality of institutions (V3)). All measures of governance are described in the Appendix. Countries where family control is useful according to vertical governance measure V1 and horizontal governance measure H1 are Brazil, Korea, Russia, Singapore, and Thailand. Similarly, Korea, Singapore, Taiwan, and Thailand are the countries with useful family ownership if we use measures V1 and H2; Australia, Brazil, Korea, Russia, Singapore, South Africa, and Thailand according to V2 and H1; Australia, Korea, Singapore, South Africa, Taiwan, and Thailand according to V2 and H2; Brazil, Hong Kong, Ireland, Japan, Korea, Russia, Singapore, Spain, South Africa, and Thailand according to V3 and H1; and Belgium, Hong Kong, Ireland, Japan, Korea, Singapore, South Africa, Taiwan, and Thailand according to V3 and H2. The dependent variable is Tobin's Q defined as the ration of enterprise value to the book value of assets measured at the semi-annual level. All control variables are measured at the end of the previous year. We report the results of regressions with industry, time, and country fixed effects. Standard errors are clustered at the country level. F-test for the difference in coefficients between family dummy \times useful dummy and family dummy \times not useful dummy are reported; p-values are in parentheses. All variables are defined in the Appendix.

			<u>(V1; H1)</u>		<u>(V1; H2)</u>		<u>(V2; H1)</u>		<u>(V2; H2)</u>		<u>(V3; H1)</u>		<u>(V3; H2)</u>	
	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Family	-0.021	(-1.79)												
\times not useful			-0.027	(-2.10)	-0.027	(-2.03)	-0.032	(-2.45)	-0.032	(-2.38)	-0.056	(-4.13)	-0.050	(-3.59)
\times useful			0.019	(0.84)	0.013	(0.63)	0.038	(1.62)	0.032	(1.45)	0.103	(4.58)	0.075	(3.66)
Institutional Ownership	0.960	(19.82)	0.959	(19.79)	0.959	(19.79)	0.958	(19.78)	0.958	(19.78)	0.956	(19.81)	0.956	(19.80)
log(assets)	-0.115	(-15.67)	-0.115	(-15.68)	-0.115	(-15.68)	-0.115	(-15.69)	-0.115	(-15.69)	-0.115	(-15.76)	-0.116	(-15.77)
Cash	1.271	(25.10)	1.271	(25.11)	1.271	(25.10)	1.271	(25.10)	1.271	(25.09)	1.269	(25.15)	1.269	(25.14)
InvOpp	0.370	(16.05)	0.370	(16.03)	0.370	(16.04)	0.370	(16.02)	0.370	(16.04)	0.369	(16.02)	0.370	(16.04)
ROE	1.439	(28.54)	1.439	(28.54)	1.439	(28.55)	1.439	(28.55)	1.440	(28.55)	1.439	(28.56)	1.439	(28.56)
Tangibility	0.006	(0.29)	0.006	(0.29)	0.006	(0.29)	0.006	(0.29)	0.007	(0.30)	0.006	(0.28)	0.006	(0.29)
Leverage	-0.166	(-4.96)	-0.166	(-4.94)	-0.166	(-4.95)	-0.166	(-4.94)	-0.166	(-4.95)	-0.168	(-5.01)	-0.166	(-4.96)
Dividend Yield	-0.008	(-3.78)	-0.008	(-3.78)	-0.008	(-3.78)	-0.008	(-3.78)	-0.008	(-3.78)	-0.008	(-3.78)	-0.008	(-3.78)
Momentum	0.340	(19.41)	0.340	(19.41)	0.340	(19.40)	0.340	(19.41)	0.340	(19.40)	0.340	(19.40)	0.340	(19.41)
F-test			3.11		2.65		6.62		6.02		35.47		24.33	
			(0.08)		(0.10)		(0.02)		(0.02)		(0.01)		(0.01)	
Adj R ²	0.3143		0.3143		0.3143		0.3143		0.3143		0.3147		0.3145	
N	107793		107793		107793		107793		107793		107793		107793	

Table 6: Net flows to foreign investors and change in Tobin's Q

We report on the effect of net flows to foreign investors on the value (Tobin's Q) of the firm. Net flow is calculated as follows. For each foreign institutional shareholder of the company we estimate the percentage change in assets under management net of portfolio appreciation (multiplied by 100) over the previous six month period. We then value weight individual investor net flow by assets under management. Family dummy takes the value of 1 if a private person or a group of family related people hold at least 25% ownership stake in the company. Family ownership is deemed to be "useful" if country's level of horizontal governance is above the median and its level of vertical governance is below the median. "Not useful" is a complement to "useful". We consider two measures of horizontal governance (revised anti-directorship index (H1) and anti self-dealing index (H2)) and three measures of vertical governance (constraints on executive (V1), protection against expropriation (V2), and quality of institutions (V3)). All measures of governance are described in the Appendix. Countries where family control is useful according to vertical governance measure V1 and horizontal governance measure H1 are Brazil, Korea, Russia, Singapore, and Thailand. Similarly, Korea, Singapore, Taiwan, and Thailand are the countries with useful family ownership if we use measures V1 and H2; Australia, Brazil, Korea, Russia, Singapore, South Africa, and Thailand according to V2 and H1; Australia, Korea, Singapore, South Africa, Taiwan, and Thailand according to V2 and H2; Brazil, Hong Kong, Ireland, Japan, Korea, Russia, Singapore, Spain, South Africa, and Thailand according to V3 and H1; and Belgium, Hong Kong, Ireland, Japan, Korea, Singapore, South Africa, Taiwan, and Thailand according to V3 and H2. Crisis dummy takes a value of 1 if the year is 2008 or later, zero otherwise. The dependent variable is the change in Tobin's Q between years t and t+1. All control variables are measured at the end of the previous year t. We report the results of regressions with industry, time, and country fixed effects. Standard errors are clustered at the country level. All variables are defined in the Appendix.

	<u>(V1; H1)</u>		<u>(V1; H2)</u>		<u>(V2; H1)</u>		<u>(V2; H2)</u>		<u>(V3; H1)</u>		<u>(V3; H2)</u>	
	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Net flow to foreigners	0.631	(1.92)	0.642	(1.96)	0.646	(1.97)	0.658	(2.00)	0.612	(1.86)	0.619	(1.88)
Net flow to foreigners × Family × not useful	-0.716	(-1.17)	-0.510	(-0.94)	-0.665	(-1.14)	-0.440	(-0.87)	-0.814	(-1.42)	-0.419	(-0.83)
Net flow to foreigners × Family × useful	1.209	(3.92)	0.865	(2.13)	1.235	(3.69)	0.911	(1.93)	1.016	(2.54)	0.972	(1.92)
Family × not useful	0.016	(0.79)	0.014	(0.66)	0.013	(0.61)	0.011	(0.48)	0.019	(0.80)	0.017	(0.69)
Family × useful	0.049	(4.94)	0.057	(6.08)	0.063	(4.82)	0.069	(4.65)	0.031	(1.75)	0.036	(1.88)
controls	Yes		Yes		Yes		Yes		Yes		Yes	
Adj R2	0.2247		0.2247		0.2247		0.2247		0.2247		0.2246	
N	41088		41088		41088		41088		41088		41088	

Table 7: Change in Country-Level Corruption and Change in Institutional Ownership of Family Controlled Firms

We report on the effect of changes in country corruption level on institutional ownership in family-controlled firms. Family dummy takes the value of 1 if a private person or a group of family related people hold at least 25% ownership stake in the company. Family ownership is deemed to be “useful” if country’s level of horizontal governance is above the median and its level of vertical governance is below the median. “Not useful” is a complement to “useful”. We consider two measures of horizontal governance (revised anti-directorship index (H1) and anti self-dealing index (H2)) and three measures of vertical governance (constraints on executive (V1), protection against expropriation (V2), and quality of institutions (V3)). All measures of governance are described in the Appendix. Countries where family control is useful according to vertical governance measure V1 and horizontal governance measure H1 are Brazil, Korea, Russia, Singapore, and Thailand. Similarly, Korea, Singapore, Taiwan, and Thailand are the countries with useful family ownership if we use measures V1 and H2; Australia, Brazil, Korea, Russia, Singapore, South Africa, and Thailand according to V2 and H1; Australia, Korea, Singapore, South Africa, Taiwan, and Thailand according to V2 and H2; Brazil, Hong Kong, Ireland, Japan, Korea, Russia, Singapore, Spain, South Africa, and Thailand according to V3 and H1; and Belgium, Hong Kong, Ireland, Japan, Korea, Singapore, South Africa, Taiwan, and Thailand according to V3 and H2. The improvement dummy takes the value of 1 if the country level corruption index by Transparency International has increased by at least 0.3 between years t - 1 and t. The dependent variable is the change in institutional ownership between the end of year t and the end of year t + 1. Panel A (B, C) reports the results for total (foreign, domestic) institutional ownership. All control variables are measured at the end of the previous year t. We report the results of regressions with industry, time, and country fixed effects. Standard errors are clustered at the country level. F-test for the difference in coefficients between family dummy × useful dummy × improvement dummy and family dummy × useful dummy × no improvement dummy are reported as well; p-values are in parentheses. All variables are defined in the Appendix.

Panel A: Changes in Total Institutional Ownership

			<u>(V1; H1)</u>		<u>(V1; H2)</u>		<u>(V2; H1)</u>		<u>(V2; H2)</u>		<u>(V3; H1)</u>		<u>(V3; H2)</u>	
	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Family	-0.001	(-1.78)												
× not useful × improvement			-0.001	(-0.67)	-0.001	(-0.74)	-0.001	(-0.72)	-0.001	(-0.79)	0.003	(0.97)	0.003	(0.98)
× not useful × no improvement			-0.001	(-1.01)	-0.001	(-1.25)	-0.001	(-1.08)	-0.001	(-1.32)	0.000	(0.02)	0.000	(0.24)
× useful × improvement			-0.009	(-5.13)	-0.009	(-4.78)	-0.009	(-4.70)	-0.008	(-4.20)	-0.006	(-2.13)	-0.005	(-1.71)
× useful × no improvement			-0.001	(-1.13)	0.000	(0.48)	0.000	(-0.52)	0.000	(0.69)	-0.001	(-1.47)	-0.001	(-0.48)
log(Market Cap)	0.004	(5.89)	0.004	(5.88)	0.004	(5.89)	0.004	(5.88)	0.004	(5.89)	0.004	(5.75)	0.004	(5.75)
log(B/M)	-0.004	(-6.23)	-0.004	(-6.21)	-0.004	(-6.20)	-0.004	(-6.19)	-0.004	(-6.18)	-0.004	(-6.07)	-0.004	(-6.07)
Cash	0.000	(-0.05)	0.000	(-0.05)	0.000	(-0.05)	0.000	(-0.05)	0.000	(-0.05)	0.000	(-0.08)	0.000	(-0.09)
InvOpp	0.004	(4.64)	0.004	(4.65)	0.004	(4.65)	0.004	(4.65)	0.004	(4.65)	0.004	(4.40)	0.004	(4.42)
ROE	0.005	(2.87)	0.005	(2.87)	0.005	(2.88)	0.005	(2.88)	0.005	(2.89)	0.005	(2.88)	0.005	(2.89)
Tangibility	0.000	(-0.17)	0.000	(-0.16)	0.000	(-0.15)	0.000	(-0.16)	0.000	(-0.14)	0.000	(-0.16)	0.000	(-0.15)
Dividend Yield	0.000	(-1.54)	0.000	(-1.54)	0.000	(-1.55)	0.000	(-1.54)	0.000	(-1.55)	0.000	(-1.63)	0.000	(-1.64)
Momentum	0.008	(5.75)	0.008	(5.64)	0.008	(5.63)	0.008	(5.64)	0.008	(5.63)	0.007	(5.52)	0.007	(5.53)
F-test			19.65		24.12		18.66		22.99		8.28		4.37	
			(0.01)		(0.01)		(0.01)		(0.01)		(0.01)		(0.05)	
Adj R ²	0.1704		0.1705		0.1705		0.1705		0.1705		0.1705		0.1704	
N	45664		45664		45664		45664		45664		45664		45664	

Panel B: Changes in Foreign Institutional Ownership

			<u>(V1: H1)</u>		<u>(V1: H2)</u>		<u>(V2: H1)</u>		<u>(V2: H2)</u>		<u>(V3: H1)</u>		<u>(V3: H2)</u>	
	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Family	-0.001	(-1.48)												
× not useful × improvement			0.000	(0.10)	0.000	(0.06)	0.000	(0.05)	0.000	(0.01)	0.001	(0.52)	0.001	(0.85)
× not useful × no improvement			-0.001	(-1.20)	-0.001	(-1.20)	-0.001	(-1.25)	-0.001	(-1.26)	-0.001	(-1.31)	-0.000	(-0.27)
× useful × improvement			-0.006	(-11.39)	-0.006	(-9.50)	-0.006	(-7.98)	-0.006	(-6.41)	-0.002	(-1.87)	-0.002	(-1.69)
× useful × no improvement			-0.001	(-0.86)	-0.001	(-0.83)	0.000	(-0.62)	0.000	(-0.58)	-0.000	(-0.44)	-0.002	(-1.71)
controls	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
F-test			35.56		24.68		29.74		19.56		0.15		0.34	
			(0.01)		(0.01)		(0.02)		(0.01)		(0.58)		(0.57)	
Adj R ²	0.1021		0.1022		0.1022		0.1022		0.1022		0.1021		0.1021	
N	45664		45664		45664		45664		45664		45664		45664	

Panel C: Changes in Domestic Institutional Ownership

			<u>(V1: H1)</u>		<u>(V1: H2)</u>		<u>(V2: H1)</u>		<u>(V2: H2)</u>		<u>(V3: H1)</u>		<u>(V3: H2)</u>	
	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Family	0.000	(-0.38)												
× not useful × improvement			-0.001	(-1.00)	-0.001	(-1.05)	-0.001	(-1.01)	-0.001	(-1.06)	-0.001	(-0.62)	-0.001	(-0.68)
× not useful × no improvement			0.000	(0.06)	0.000	(-0.20)	0.000	(0.03)	0.000	(-0.22)	0.000	(-0.05)	0.000	(-0.62)
× useful × improvement			-0.003	(-1.56)	-0.003	(-1.50)	-0.003	(-1.49)	-0.003	(-1.44)	0.001	(0.55)	0.001	(0.69)
× useful × no improvement			0.000	(0.16)	0.001	(0.84)	0.000	(0.42)	0.001	(0.95)	0.000	(-0.78)	0.001	(1.03)
Controls	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
F-test			2.19		2.86		2.29		3.02		0.59		0.03	
			(0.15)		(0.11)		(0.15)		(0.10)		(0.45)		(0.87)	
Adj R ²	0.0776		0.0776		0.0776		0.0776		0.0776		0.0776		0.0776	
N	45664		45664		45664		45664		45664		45664		45664	

Table 8: Change in Country Level Corruption and Change in Tobin's Q

We report on the effect of changes in country corruption level on value (Tobin's Q) of family controlled firms. Family dummy takes the value of 1 if a private person or a group of family related people hold at least 25% ownership stake in the company. Family ownership is deemed to be "useful" if country's level of horizontal governance is above the median and its level of vertical governance is below the median. "Not useful" is a complement to "useful". We consider two measures of horizontal governance (revised anti-directorship index (H1) and anti self-dealing index (H2)) and three measures of vertical governance (constraints on executive (V1), protection against expropriation (V2), and quality of institutions (V3)). All measures of governance are described in the Appendix. Countries where family control is useful according to vertical governance measure V1 and horizontal governance measure H1 are Brazil, Korea, Russia, Singapore, and Thailand. Similarly, Korea, Singapore, Taiwan, and Thailand are the countries with useful family ownership if we use measures V1 and H2; Australia, Brazil, Korea, Russia, Singapore, South Africa, and Thailand according to V2 and H1; Australia, Korea, Singapore, South Africa, Taiwan, and Thailand according to V2 and H2; Brazil, Hong Kong, Ireland, Japan, Korea, Russia, Singapore, Spain, South Africa, and Thailand according to V3 and H1; and Belgium, Hong Kong, Ireland, Japan, Korea, Singapore, South Africa, Taiwan, and Thailand according to V3 and H2. The improvement dummy takes the value of 1 if the country level corruption index by Transparency International has increased by at least 0.3 between years $t - 1$ and t . The dependent variable is the change in Tobin's Q between years t and $t + 1$. All control variables are measured at the end of the previous year t . We report the results of regressions with industry, time, and country fixed effects. Standard errors are clustered at the country level. F-test for the difference in coefficients between family dummy \times useful dummy \times improvement dummy and family dummy \times useful dummy \times no improvement dummy are reported as well; p-values are in parentheses. All variables are defined in the Appendix.

			<u>(V1; H1)</u>		<u>(V1; H2)</u>		<u>(V2; H1)</u>		<u>(V2; H2)</u>		<u>(V3; H1)</u>		<u>(V3; H2)</u>	
	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Family	0.011	(1.85)												
\times not useful \times improvement			-0.012	(-0.64)	-0.012	(-0.65)	-0.011	(-0.63)	-0.012	(-0.64)	0.009	(0.41)	0.008	(0.34)
\times not useful \times no improvement			0.017	(2.28)	0.017	(2.18)	0.012	(1.68)	0.012	(1.57)	0.016	(2.03)	0.013	(1.61)
\times useful \times improvement			-0.158	(-2.34)	-0.159	(-2.33)	-0.159	(-2.43)	-0.160	(-2.42)	-0.145	(-3.42)	-0.129	(-3.32)
\times useful \times no improvement			0.033	(2.45)	0.033	(2.60)	0.056	(3.45)	0.054	(3.54)	0.039	(2.67)	0.048	(3.61)
Institutional Ownership	-0.309	(-9.35)	-0.309	(-9.38)	-0.309	(-9.39)	-0.309	(-9.39)	-0.310	(-9.40)	-0.308	(-9.34)	-0.309	(-9.37)
log(assets)	0.002	(0.51)	0.002	(0.46)	0.002	(0.46)	0.002	(0.46)	0.002	(0.45)	0.002	(0.46)	0.002	(0.44)
Cash	-0.045	(-2.45)	-0.045	(-2.44)	-0.045	(-2.44)	-0.045	(-2.45)	-0.045	(-2.45)	-0.044	(-2.40)	-0.045	(-2.42)
InvOpp	-0.069	(-5.49)	-0.068	(-5.43)	-0.068	(-5.42)	-0.068	(-5.44)	-0.068	(-5.42)	-0.068	(-5.43)	-0.068	(-5.43)
ROE	-0.041	(-1.60)	-0.041	(-1.61)	-0.041	(-1.61)	-0.041	(-1.60)	-0.041	(-1.59)	-0.041	(-1.58)	-0.041	(-1.58)
Tangibility	0.009	(0.71)	0.009	(0.72)	0.009	(0.72)	0.009	(0.73)	0.009	(0.74)	0.009	(0.73)	0.009	(0.73)
Leverage	0.023	(1.09)	0.024	(1.11)	0.024	(1.11)	0.024	(1.12)	0.024	(1.12)	0.025	(1.17)	0.025	(1.17)
Dividend Yield	0.001	(1.52)	0.001	(1.52)	0.001	(1.52)	0.001	(1.52)	0.001	(1.52)	0.001	(1.52)	0.001	(1.52)
Momentum	0.395	(20.79)	0.394	(20.39)	0.394	(20.37)	0.394	(20.38)	0.394	(20.37)	0.394	(20.40)	0.394	(20.41)
F-test			6.94		6.79		9.40		9.07		15.16		15.96	
			(0.01)		(0.01)		(0.01)		(0.01)		(0.01)		(0.01)	
Adj R ²	0.2599		0.2602		0.2602		0.2603		0.2603		0.2604		0.2604	
N	49490		49490		49490		49490		49490		49490		49490	

Table 9: Change in Country Level Corruption and Change in Firm's Profitability

We report on the effect of changes in country corruption level on profitability (Net profit margin) of family controlled firms. Family dummy takes the value of 1 if a private person or a group of family related people hold at least 25% ownership stake in the company. Family ownership is deemed to be “useful” if country’s level of horizontal governance is above the median and its level of vertical governance is below the median. “Not useful” is a complement to “useful”. We consider two measures of horizontal governance (revised anti-directorship index (H1) and anti self-dealing index (H2)) and three measures of vertical governance (constraints on executive (V1), protection against expropriation (V2), and quality of institutions (V3)). All measures of governance are described in the Appendix. Countries where family control is useful according to vertical governance measure V1 and horizontal governance measure H1 are Brazil, Korea, Russia, Singapore, and Thailand. Similarly, Korea, Singapore, Taiwan, and Thailand are the countries with useful family ownership if we use measures V1 and H2; Australia, Brazil, Korea, Russia, Singapore, South Africa, and Thailand according to V2 and H1; Australia, Korea, Singapore, South Africa, Taiwan, and Thailand according to V2 and H2; Brazil, Hong Kong, Ireland, Japan, Korea, Russia, Singapore, Spain, South Africa, and Thailand according to V3 and H1; and Belgium, Hong Kong, Ireland, Japan, Korea, Singapore, South Africa, Taiwan, and Thailand according to V3 and H2. The improvement dummy takes the value of 1 if the country level corruption index by Transparency International has increased by at least 0.3 between years $t - 1$ and t . The dependent variable is the change in firm’s net profit margin between years t and $t + 3$. All control variables are measured at the end of the year t . We report the results of regressions with industry and country fixed effects. Standard errors are clustered at the country level. F-test for the difference in coefficients between family dummy \times useful dummy \times improvement dummy and family dummy \times useful dummy \times no improvement dummy are reported as well; p-values are in parentheses. All variables are defined in the Appendix.

			<u>(V1: H1)</u>		<u>(V1: H2)</u>		<u>(V2: H1)</u>		<u>(V2: H2)</u>		<u>(V3: H1)</u>		<u>(V3: H2)</u>	
	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat	estimate	t-stat
Family	-0.007	(-2.98)												
\times not useful \times improvement			0.003	(0.59)	0.003	(0.63)	0.003	(0.58)	0.003	(0.62)	0.004	(0.66)	0.005	(0.73)
\times not useful \times no improvement			-0.009	(-2.99)	-0.009	(-2.89)	-0.010	(-3.05)	-0.009	(-2.95)	-0.009	(-2.79)	-0.010	(-2.90)
\times useful \times improvement			-0.021	(-4.57)	-0.023	(-5.47)	-0.021	(-4.49)	-0.023	(-5.42)	-0.013	(-1.98)	-0.013	(-1.91)
\times useful \times no improvement			-0.005	(-0.64)	-0.008	(-1.09)	-0.003	(-0.35)	-0.005	(-0.78)	-0.008	(-1.13)	-0.004	(-0.68)
improvement dummy	-0.005	(-1.06)	-0.006	(-1.24)	-0.006	(-1.24)	-0.006	(-1.24)	-0.006	(-1.24)	-0.006	(-1.25)	-0.006	(-1.25)
Institutional Ownership	-0.021	(-2.04)	-0.021	(-2.04)	-0.021	(-2.04)	-0.021	(-2.05)	-0.021	(-2.04)	-0.021	(-2.04)	-0.021	(-2.05)
log(assets)	0.000	(0.07)	0.000	(0.07)	0.000	(0.07)	0.000	(0.07)	0.000	(0.07)	0.000	(0.09)	0.000	(0.08)
Log(B/M)	0.016	(3.72)	0.016	(3.73)	0.016	(3.73)	0.016	(3.73)	0.016	(3.73)	0.016	(3.70)	0.016	(3.70)
Cash	0.007	(0.85)	0.006	(0.82)	0.006	(0.82)	0.006	(0.82)	0.006	(0.82)	0.007	(0.83)	0.006	(0.82)
InvOpp	-0.024	(-3.94)	-0.024	(-4.01)	-0.024	(-4.01)	-0.024	(-4.02)	-0.024	(-4.01)	-0.024	(-4.02)	-0.024	(-4.03)
Tangibility	-0.010	(-1.87)	-0.010	(-1.91)	-0.010	(-1.91)	-0.010	(-1.91)	-0.010	(-1.90)	-0.010	(-1.90)	-0.010	(-1.90)
Leverage	0.015	(2.27)	0.015	(2.30)	0.015	(2.29)	0.015	(2.30)	0.015	(2.30)	0.015	(2.31)	0.016	(2.32)
Dividend Yield	-0.001	(-1.66)	-0.001	(-1.66)	-0.001	(-1.66)	-0.001	(-1.66)	-0.001	(-1.66)	-0.001	(-1.66)	-0.001	(-1.66)
Momentum	0.032	(7.82)	0.032	(7.75)	0.032	(7.75)	0.032	(7.75)	0.032	(7.74)	0.032	(7.80)	0.032	(7.79)
F-test			4.32		4.19		5.72		5.91		1.17		2.14	
				(0.04)		(0.05)		(0.02)		(0.02)		(0.28)		(0.14)
Adj R ²	0.0315		0.0318		0.0318		0.0318		0.0318		0.0317		0.0318	
N	21753		21753		21753		21753		21753		21753		21753	