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The separation of ownership and control in East Asian Corporations☆

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Abstract

We examine the separation of ownership and control for 2,980 corporations in nine East Asian countries. In all countries, voting rights frequently exceed cash-flow rights via pyramid structures and cross-holdings. The separation of ownership and control is most pronounced among family-controlled firms and small firms. More than two-thirds of firms are controlled by a single shareholder. Managers of closely held firms tend to be relatives of the controlling shareholder's family. Older firms are generally family-controlled, dispelling the notion that ownership becomes dispersed over time. Finally, significant corporate wealth in East Asia is concentrated among a few families.

JEL classification: G32; L22

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1. Introduction

Much of the literature on the role and functioning of the modern firm is based on the assumption of widely dispersed ownership. This notion originally derives from Berle and Means (1932) and has been propagated by Baumol (1959), Jensen and Meckling (1976), and Grossman and Hart (1980). A more recent line of the literature shows, however, that some concentration of ownership exists even among the largest American corporations (Demsetz, 1983; Shleifer and Vishny, 1986; Morck et al., 1988), and that an even higher level of ownership concentration exists in other developed and developing countries (La Porta et al., 1998, 1999).

La Porta et al. (1999) is the first study that investigates the issue of ultimate control, i.e., they trace the chain of ownership to find who has the most voting rights. The findings suggest that ownership and control can be separated to the benefit of the large shareholders. In this paper, we improve on their methodology and apply it to East Asia. We investigate the separation of ownership and control in 2,980 publicly traded companies in nine East Asian countries (Hong Kong, Indonesia, Japan, South Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand).

In all East Asian countries, control is enhanced through pyramid structures, and cross-holdings among firms. Voting rights consequently exceed formal cash-flow rights, especially in Indonesia, Japan, and Singapore. We find that more than two-thirds of firms are controlled by a single shareholder. Separation of management from ownership control is rare, and the top management of about 60% of firms that are not widely held is related to the family of the controlling shareholder. These findings have important implications for the ability and incentives of controlling shareholders to expropriate from minority shareholders, as shown in a companion paper (Claessens et al., 1999).

We find extensive family control in more than half of East Asian corporations. Significant cross-country differences exist, however. Corporations in Japan, for example, are generally widely held, while corporations in Indonesia and Thailand are mainly family controlled. State control is significant in Indonesia, Korea, Malaysia, Singapore, and Thailand. The separation of ownership and control is most pronounced among family-controlled firms and among small firms. In Korea, Singapore, and Taiwan, large family-controlled firms also display a significant wedge between ownership and control. We find that older firms are more likely to be family controlled, as are smaller firms. The concentration of control generally diminishes with the level of a country's economic development.

The evidence also suggests that in some countries a significant share of corporate assets rests in the hands of a small number of families. At the extreme, 16.6% and 17.1% of the total value of listed corporate assets in Indonesia and the Philippines, respectively, can be traced to the ultimate control of a single family. The largest ten families in Indonesia, the Philippines, and Thailand control half of the corporate assets in our sample, while the largest ten families in Hong Kong and Korea control about a third of the corporate sector. The exception is Japan, where family control is insignificant.

The paper is organized as follows. Section 2 reviews the relevant literature on control of East Asian corporations. Section 3 discusses the construction of the data. Section 4 defines the main variables of interest. Section 5 provides several examples of ownership structures of East Asian firms. Section 6 shows the separation of ownership and control of East Asian corporations, distinguishing among four types of ultimate owners and the size of firms. Section 7 studies the determinants of the concentration of control. Section 8 discusses the evidence on "crony capitalism." Section 9 concludes.

2. The literature on ownership structures in East Asia

As surveyed in Rodrik (1997), numerous scholars have examined the performance of East Asian corporations over the last four decades, but their ownership structure and the separation between ownership and control remain largely unknown. Several studies on corporate governance in Japan (Aoki, 1990; Prowse, 1992; Hoshi et al., 1991; Kaplan, 1994) point to the significance of keiretsu groups. These studies focus, however, on company performance, and do not attempt to trace the ownership of each company to its ultimate owners and identify those owners by type and control stake. The exception is Lim (1981) who studies in detail the ownership structures of the largest 100 corporations in Malaysia.

There do exist, however, a number of case studies that describe the ownership and control structures of some of the largest business groups in East Asian countries: Taylor (1998) for the Li Ka-shing group in Hong Kong, Sato (1993) for the Salim group in Indonesia, Okumura (1993) for the Mitsubishi group in Japan, Taniura (1993) for the Lucky Goldstar group in Korea, Koike (1993) for the Ayala group in the Philippines, Numazaki (1993) for the Tainanbang group in Taiwan, Taniura (1989) for the Formosa group in Taiwan, Suehiro (1993) for the Charoen Pokphand group in Thailand, and Vatikiotis (1997) for the Dhanin Chearavanont group in Thailand.

These case studies provide us with insights into the evolution of corporate ownership and control in East Asia. The findings suggest that the dominance of most business groups lies in the privileges that they solicit from the government: exclusive exporting or importing rights, protection from foreign competition for extensive periods of time, granting of monopoly power in the local market, procurement of large government contracts, etc. The case study literature does not, however, allow for cross-country comparisons; neither does it document the precise mechanisms through which the owners are able to exercise and extend their control.

The recent contributions of La Porta et al. (1998) and La Porta et al. (1999) go a long way towards filling this gap in our knowledge. The former study documents the ownership structure of the ten largest nonfinancial corporations for a cross-section of 49 countries, including nine East Asian countries. The results show that although ownership concentration of East Asian corporations is high, it is not significantly different from that in other countries at similar levels of economic and institutional development. The latter study investigates in great detail the control structure of the largest 20 publicly traded corporations in 27 rich countries, including four (Hong Kong, Japan, Korea, and Singapore) East Asian countries. It traces control to the ultimate owners of each company and distinguishes among five types of owners. Ownership in the majority of Japanese and Korean corporations is found to be widely dispersed, corporations in Hong Kong are predominantly controlled by families, while about half of the sampled companies in Singapore are controlled by the state.

La Porta et al. (1999) also examine the means through which control is enhanced. The study shows that owners extend their resources through the use of pyramiding and management appointments, as well as through cross-ownership and the (infrequent) use of shares that have more votes. They document that control of East Asian corporations can be achieved with significantly less than an absolute majority share of the stock, as the probability of being a single controlling owner through holding only 20% of the stock is very high (above 80% across the four East Asian countries).

The previous research leaves unanswered several questions. First, are there any differences in the separation of ownership and control across the East Asian countries? Second, are there within-country differences in the separation of ownership and control? Third, do such differences depend on the age and size of the corporation? Finally, to what extent is corporate control concentrated in the hands of particular families? The answers to these questions have strong implications for understanding the corporate governance structure of East Asian firms.

3. Construction of the data

The analysis in the following sections is based on newly assembled data for 2,980 publicly traded corporations, including both financial institutions and nonfinancial institutions, in Hong Kong, Indonesia, Japan, South Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand. As the starting point in the data collection of cash-flow and voting rights, we use the Worldscope 1998 database which generally provides the names and immediate holdings of all owners that hold more than 5% of a company's stock (Table 1). We supplement the immediate ownership information from Worldscope with data from the *1998 Asian Company Handbook*, the *1998 Japan Company Handbook*, the Hong Kong Stock Exchange's *1997 Company Handbook*, the *1996 Indonesian Capital Markets Directory* published in Jakarta by the Institute for Economic and Financial Research, the Philippine Stock Exchange's *Investment Guide for 1996*, and the Securities Exchange of Thailand's *1997 Company Handbook* to include all owners who have more than 5% of the outstanding shares of the company and are missing in Worldscope. In all cases, we collect the ownership structure data as of the end of the 1996 fiscal year or the closest possible date. This is because ownership information typically lags by one or two years in the company handbooks and in Worldscope. For example, the *Asian Company Handbook* for 1998 frequently reports ownership data for 1996 only.

The total number of listed companies in the nine sample countries is 5,284. Worldscope reports financial and ownership data for 4,413 of those publicly traded firms.[1] We define a company to have sufficient immediate ownership data if we can collect 50% of the cash-flow rights or can ascertain that all the largest owners are in the data. The latter happens when Worldscope or the various company handbooks report small stakes, e.g., 5% each, for the largest shareholders. In contrast, if there are large shareholders whose identity we cannot trace but we already have identified shareholders who own 50% or more of the stock, we leave the company in the sample.

For example, the Arab-Malaysian Finance Corporation (Malaysia) reports only one owner, AMMB Holdings, with 66.1% of the cash-flow rights. Even though the information on the remaining owners is missing, we include the company in our sample. Another example is Arab-Malaysian First Property Trust Co. Using both Worldscope and the *Asian Company Handbook*, we find the following immediate owners: the Arab-Malaysian Banking Group with 22.3%, Exotic Enterprises with 12.4%, Living Development with 10.2%, AMMB Holdings with 7.2%, and Citicorp nominees with 6.2%. We do not know who owns the Citicorp nominee accounts. Since we have over half of the total ownership rights without taking into consideration the nominee votes, however, we include the company in the data set. This procedure allows us to compile 3,249 companies with sufficient immediate ownership information.

For the remaining 1,164 companies, data are either completely missing, available only on nominee accounts, or not sufficient to collect more than half of

[1] In other words, roughly 20% of the firms in the sample have incomplete ownership data. This creates a concern about the biases that these missing observations may create in the calculation of the fraction of widely held firms in various countries. One way of addressing this issue is to look at the composition of the board of directors for a subsample of these firms and examine whether board members share common family names. This exercise is beyond the scope of the paper.

Table 1
Sources of ownership and control data for East Asian firms

Country	Immediate ownership data	Dual-Class Shares	Business groups: pyramids and cross-holdings
Hong Kong	Worldscope 1998 *1998 Asian Company Handbook* *1997 Hong Kong Company Handbook*	Datastream International 1998	Chu and Hamilton (1993) Taylor (1998) *1997 Hong Kong Company Handbook*
Indonesia	Worldscope 1998 *1998 Asian Company Handbook* Institute for Economic and Financial Research (1996)	Datastream International 1998 Institute for Economic and Financial Research (1996)	Fisman (1998) Carr Banque Indosuez Group (1997) Indobusiness (1998)
Japan	Worldscope 1998 *1998 Japan Company Handbook*	Datastream International 1998	Dodwell Marketing Consultants (1997)
South Korea	Worldscope 1998 *1998 Asian Company Handbook*	Datastream International 1998	Korean Fair Trade Commission (1997) Lim (1998)
Malaysia	Worldscope 1998 *1998 Asian Company Handbook*	Datastream International 1998 *1997 Company Handbook*	Hiscock (1998) http://www.ambg.com.my for the A-M Banking Group http://www.berjaya.com.my for the Berjaya Group http://ww.simenet.com for the Sime Darby Group http://www.lion.com.my for the Lion Group http://www.hongleong-group.com.sg for the Hong Leong Group

Philippines	Worldscope 1998 *1998 Asian Company Handbook* *1997 Investment Guide*	Datastream International 1998 *1997 Investment Guide*	*1997 Investment Guide* Tan (1993)
Singapore	Worldscope 1998 *1998 Asian Company Handbook*	Datastream International 1998 *1997 Singapore Company Handbook*	*1997 Singapore Company Handbook* Hiscock (1998)
Taiwan	Worldscope 1998 *1998 Asian Company Handbook*	Datastream International 1998	China Credit Information Service (1997) Baum (1994)
Thailand	Worldscope 1998 1998 Asian Company Handbook	Datastream International 1998 *1997 Securities Exchange of Thailand's Company Handbook*	Tara Siam Company (1997) The Nation, September 11, 1998, 1–76.
	1997 Securities Exchange of Thailand's Company Handbook		Vatikiotis (1997)

the ownership rights. We exclude these companies from the data set. Nominee accounts are especially problematic in Malaysia and Thailand, where we exclude 66 companies and 92 companies that report either nominee ownership only, or a mixture of nominee and direct ownership with direct ownership below 50%. Only nine Singaporean companies are excluded from the sample due to reporting nominee ownership.

The exclusion of companies that report nominee accounts could create a bias. If nominee accounts are prevalent in closely held firms, we are likely to understate the fraction of such firms. One option is to go back to primary sources, i.e., collect information from the annual reports of companies. This is, however, a very time-consuming process and in many cases (especially in Thailand) these reports are only provided in the local language. Moreover, companies in Thailand and Singapore are not required to disclose the identity of their major shareholders, i.e., direct ownership information is not reported. Such information is held only by the Securities and Exchange Commissions and is not publicly available.

In an attempt to study the direction of the bias when excluding firms that report nominee accounts, we look through our sources for group affiliation and identify firms that report nominee accounts in Worldscope and the other sources of immediate ownership data. The idea is to see whether in fact nominee accounts are more common in widely held firms. We find, for example, that the Arab-Malaysian Development Co. belongs to the A-M Banking Group (Malaysia), which holds 44.5% of ownership. Arab-Malaysian Finance and Arab-Malaysian First Property Trust also belong to this group, together with six other companies listed on the Kuala Lumpur Stock Exchange. Two of the latter also report nominee accounts in the original database. Repeating this process for each firm, we find that 41 of the 66 Malaysian firms belong to family groups, as do 67 of the 92 Thai firms and three of the nine Singaporean firms. The remaining firms are not mentioned in any of the sources of business group information. This exercise shows that, if anything, the exclusion of firms that report nominee accounts biases our results against finding more family ownership and control.

Of the 3,249 companies that provide sufficient ownership data, we are able to trace ultimate owners for 2,980 companies. We are not able to ascertain the ultimate ownership of 232 companies and exclude them from the data set. This occurs when a company is owned by another company whose ultimate owners we cannot identify. Since it is generally easier to identify widely held firms than to trace ultimate ownership, the frequency of widely held firms in the final sample is likely overestimated due to this selection criterion. For 37 Taiwanese companies, the largest owners are reported as mainland Chinese companies, which are in turn owned by Taiwanese families according to China Credit Information Service (1997). Since the precise magnitude of these ownership links is not obvious from the data, we choose to exclude these companies from the sample.

While Worldscope provides data on cash-flow rights, it does not have information on multiple classes of voting rights. These data are provided in Datastream International (1998) for the majority of our companies (Table 1), while Nenova (1999) provides a detailed description of the data on multiple classes of voting rights in Datastream. Since Datastream does not cover as many firms as Worldscope, however, we are forced to collect additional information on voting rights for Indonesia, the Philippines, Malaysia, Singapore, and Thailand. The sources for these data are the Institute for Economic and Financial Research (1996), the Philippine Stock Exchange's *1997 Investment Guide*, the Kuala Lumpur Stock Exchange's *1997 Company Handbook*, the Singapore Stock Exchange's *1997 Singapore Company Handbook*, and the Securities Exchange of Thailand's *1997 Company Handbook*. These publications provide information on each class of voting shares and their owners.

The sources for immediate ownership data do not offer an accurate picture of group affiliation. For example, many of the companies that belong to business groups in Korea are classified as widely held companies in the *1998 Asian Company Handbook*. We therefore use specialized sources for group-affiliation information to avoid inaccuracies (Table 1, last column). This greatly improves the data coverage. For example, there are only two entries for firms in the Lotte group in the *1998 Asian Company Handbook*, Lotte Confectionery and Lotte Chilsung Beverage. In contrast, the Korean Fair Trade Commission (1997) identifies 27 companies as affiliated with the Lotte group, of which five are publicly traded.[2] Equally important, the specialized sources of group information provide ownership data for privately held corporations, which are unavailable from other publications. Without them, it would be impossible to trace ultimate ownership in group-affiliated companies.

The use of publications on group affiliation creates some problems too. For example, the definition of group affiliation differs across countries – group affiliation in Japan is based on CEO participation in the Presidential Council of the keiretsu, while the Korean Fair Trade Commission (1997) defines a firm as group affiliated if 30% of its outstanding stock is owned by other companies in the same group. Also, the group-affiliation data for Hong Kong are for 1992 and do not capture any changes between 1992 and 1996. To the best of our knowledge, however, there are no superior sources of group information.

4. Definitions of variables

The coverage of the sample differs somewhat across the nine countries, as shown in Table 2. Typically, we cover about three-quarters of the market value

[2] The organizational chart of the Lotte group is available at http://www.lotte.co.kr. The group affiliation of companies in the largest five groups in South Korea are available at http://www.hyundai.net, http://www.daewoo.com, http://www.samsung.com, http://www.lg.co.kr, and http://www.ssangyong.co.kr, respectively.

Table 2
Coverage of the sample

The sample includes newly assembled data for 2,980 publicly traded corporations (including both financial and nonfinancial institutions) collected from Worldscope and supplemented with data from country-specific sources. In all cases, we collect the ownership structure as of the end of fiscal year 1996 or the closest possible date.

Country	Stock exchange	Est.	Number of companies	Market cap. (US$ million)	No. of companies in our sample	Share of total market cap. (%)
Hong Kong	Stock Exchange of Hong Kong	1891	583	449,258	330	78
Indonesia	Jakarta Stock Exchange	1977	253	91,016	178	89
Japan	Tokyo Stock Exchange	1878	1,749[a]	3,106,108	1,240	93
Korea	Korea Stock Exchange	1956	760	138,817	345	76
Malaysia	Kuala Lumpur Stock Exchange	1964	621	307,179	238	74
The Philippines	Philippine Stock Exchange	1965	216	80,649	120	82
Singapore	Stock Exchange of Singapore	1910	266[a]	153,234	221	96
Taiwan	Taipei Stock Exchange	1962	382	273,608	141	66
Thailand	Stock Exchange of Thailand	1975	454	99,828	167	64

[a]Main Board only.

of assets even though our sample sometimes has only half of the listed firms (Korea, Malaysia, Taiwan, and Thailand). This is because we always cover the largest 100 firms in terms of market capitalization, i.e., the average firm in our sample is larger than the average listed firm.

We analyze the cash-flow and control rights of companies by studying all shareholders who control over 5% of the votes. In the majority of cases, the principal shareholders are themselves corporate entities, not-for-profit foundations, or financial institutions. We then identify their owners, the owners of their owners, etc. We do not distinguish among individual family members and use the family group as a unit of analysis.

Our definition of ownership relies on cash-flow rights. The definition of control relies on voting rights and uses of deviations from one-share–one-vote, pyramiding schemes, and cross-holdings as means of separating cash-flow and voting rights. This distinction can make for enormous differences. Suppose, for example, that a family owns 11% of the stock of publicly traded Firm A, which in turn has 21% of the stock of Firm B. Assume that there are no deviations from one-share–one-vote or cross-holdings between firms A and B. We would say that the family owns about 2% of the cash-flow rights of Firm B, or the product of the two ownership stakes along the chain. We would say that the family controls 11% of Firm B, or the weakest link in the chain of voting rights.

In many cases, particularly in Japan, Malaysia, and Singapore where cross-holdings are often present, the ultimate controller has several control rights chains through which to control the votes in a company. We trace those pyramidal and cross-holding chains individually and then sum up the control rights to yield the ultimate control share. For example, suppose that a family owns 11% of the stock of publicly traded Firm A, which in turn has 21% of the stock of Firm B. The same family owns 25% of Firm C, which in turn owns 7% of Firm B. Looking at control rights, we would say that the family controls 18% of Firm B, or the sum of the weakest links in the chains of voting rights. In contrast, we would say that the family owns about 3.5% of the cash-flow rights of Firm B, or the sum of the products of the ownership stakes along the two chains.

We next discuss the mechanisms that separate ownership and control. We record evidence for the use of multiple classes of voting rights and pyramid structures. We also investigate the role of cross-holdings, although our data here are less comprehensive, as it is impossible to follow all the cross-holding patterns in such a large sample. For example, we used the information provided by Dodwell Marketing Consultants (1997) to identify 273 cross-holdings among the 42 companies of the Yasuda group, the fourth largest business group in Japan.

We begin with a description of the magnitude of deviations from one-share–one-vote through shares with different voting rights. Such deviations tend to be very small in the East Asian countries, as it takes on average 19.76%

ownership of all shares to get 20% of control rights (Table 3, Own = 20%Con). There is no evidence of superior voting shares in Japan, Korea, and Singapore. This is consistent with the findings in La Porta et al. (1999) and Nenova (1999) that companies in East Asia do not tend to use shares with superior voting rights.

Since we do not consider company-specific voting caps, we possibly understate the importance of deviations from the one-share–one-vote rule. To get a sense of how important distortions created by voting caps are, we study the company laws in each of the nine sample countries for evidence on restricted voting rights. We find that voting caps are not allowed in Hong Kong, Japan, Korea, Malaysia, the Philippines, and Thailand. Voting caps are not allowed in Singapore either, unless the shares have been issued prior to 1967. In Indonesia and Taiwan, the articles of incorporation can prescribe a voting cap on shareholders. Such a decision is taken on a by-company basis, i.e., we do not know which firms use voting caps in these two countries. Discussions with officials at the Security and Exchange Commissions in Jakarta and Taipei reveal that large shareholders can avoid voting caps by nominating proxy shareholders.

Table 3

Means of enhancing control in east asian corporations (full samples, percentage of total)

Newly assembled data for 2,980 publicly traded corporations (including both financial and non-financial institutions) collected from Worldscope and supplemented with information from country-specific sources. In all cases, we collect the ownership structure as of the end of fiscal year 1996 or the closest possible date. Own = 20%Con is the average minimum percent of the book value of common equity required to control 20% of the vote; Pyramids with Ultimate Owners (when companies are not widely held) equals one if the controlling owner exercises control through at least one publicly traded company, zero otherwise; Cross-Holdings equals one if the company has a controlling shareholder and owns any amount of shares in its controlling shareholder or in another company in that chain of control, zero otherwise; Controlling Owner Alone equals one if there does not exist a second owner who holds at least 10% of the stock, zero otherwise; Management equals one if the CEO, board chairman, or vice-chairman are from the controlling family, zero otherwise.

Country	Own = 20%Con (%)	Pyramids with ultimate owners	Cross-holdings	Controlling owner alone	Management
Hong Kong	19.71	25.1	9.3	69.1	53.4
Indonesia	19.17	66.9	1.3	53.4	84.6
Japan	20.00	36.4	11.6	87.2	37.2
Korea	20.00	42.6	9.4	76.7	80.7
Malaysia	19.14	39.3	14.9	40.4	85.0
The Philippines	18.71	40.2	7.1	35.8	42.3
Singapore	20.00	55.0	15.7	37.6	69.9
Taiwan	19.61	49.0	8.6	43.3	79.8
Thailand	19.82	12.7	0.8	40.1	67.5
East Asia nine	19.76	38.7	10.1	67.8	57.1

Pyramid structures are defined as owning a majority of the stock of one corporation which in turn holds a majority of the stock of another, a process that can be repeated a number of times. For 38.7% of the companies in our sample, ultimate control at the 20% level involves the use of a pyramid structure, with the number being the largest in Indonesia (66.9%) and the smallest in Thailand (12.7%). Singaporean companies also show a high incidence of pyramiding, while only a quarter of non-widely held companies in Hong Kong are controlled through pyramid structures.

Next we study cross-holding patterns whereby a company further down the chain of control has some shares in another company in the same business group. We do not find significant evidence of cross-holdings, with the exception of Malaysia and Singapore where 14.9% and 15.7% of companies have some cross-ownership. Interestingly, Korean companies are above the average for the nine East Asian countries on that indicator even though cross-holdings are limited by law. Thai companies display the least evidence of cross-holdings, a meager 0.8%.

The presence of cross-holdings creates some difficulties in measuring cash-flow and voting rights. Imagine that firm A owns 50% of firm B which, in turn, owns 25% of firm A. How should firm A be classified? La Porta et al. (1999, p. 483) classify such firms as widely held. In contrast, we classify firm A as controlled by firm B at the 20% cutoff level. We argue that this definition is superior in a study of East Asian corporations, since we most frequently observe that both firm A and firm B belong to a family group, i.e., the family owns some shares in both A and B. In such cases the cross-shareholding is also part of a pyramidal structure, which reinforces the view that the companies are not widely held.

Another difficulty emerges when dealing with subsidiary companies. Suppose that a shareholder has 25% of the voting rights in firm A, which owns 100% of firm B. Firm B in turn owns 50% of firm A. What share of the voting rights does the shareholder have in firm A? Following our definition of control, we determine that the shareholder has 50% of the control rights in firm A, 25% directly and 25% through a pyramidal chain.

We also identify two means that strengthen ultimate control but are not used in the calculations of the separation between ownership and control. The first is the possibility of being the only controlling owner, with a second controlling owner defined as somebody with at least 10% of the voting rights. The idea is that if such a second party exists, it could be more difficult for the first owner to control the board of directors. However, a large owner who controls more than half of the votes is classified as the single controller. The data show that more than two-thirds of the sample companies that are not widely held have single ultimate owners. This share is highest in Japan (87.2%) and Korea (76.7%) and lowest in the Philippines (35.8%), Singapore (37.6%), and Thailand (40.1%). The results for Thailand, combined with the low use of pyramids and cross-holdings, reflect the importance in Thailand of informal alliances among the small number of families controlling most Thai companies. Often, several families will jointly own a large stake in a corporation, with one family in the alliance taking the role of primary controlling shareholder; Suehiro (1993) describes interfamily business cooperation in Thailand.

Finally, we study the separation of control and management by investigating whether a member of the controlling family or an employee of the controlling widely held financial institution or corporation is the CEO, chairman, honorary chairman, or vice-chairman of the company. It is generally difficult to find whether a manager is an employee of a controlling financial institution or corporation, although such information does exist in the Stock Exchange guides of several East Asian companies. It is much easier to find family membership, even if the particular manager does not have the same last name. This is because in all countries we are able to obtain the family trees for the 15 largest family groups.

The correspondence between control and management in our data is striking (Table 3, last column). On average, about 60% of companies that are not widely held have the controlling owner appoint a member of top management. Four-fifths or more of companies in Indonesia, Korea, Malaysia, and Taiwan have managers who belong to the controlling group. The correspondence between control and management is less frequent in Japan and the Philippines, where less than half of the managers are related to the controlling owner. In Japan, this finding is consistent with previous sociological studies, which generally conclude that "the Japanese had a tradition of professional management well before the Meiji Restoration – before, that is, the country had even embarked on the industrialization process" (Fukuyama, 1996, p. 329). The latter case is in part explained by the tendency of Philippine corporations to have interlocking directorates and management boards, whereby members of one family would serve on the board of directors or management board of companies controlled by other influential families (Tan, 1993). The numbers of managers affiliated to the controlling families are higher than the ones reported in La Porta et al. (1999) because in many cases we have traced family members with different last names, and also because smaller companies are more likely to have an owner who is also the CEO or the board chairman.

5. Examples of ownership structures

We divide corporations into those that are widely held and those with controlling owners. A widely held corporation is a corporation that does not have any owners with significant control rights. Owners are further divided into four categories: families, the state, widely held financial institutions such as banks and insurance companies, and widely held corporations. Our definition of ultimate control implies that a firm can have more than one significant owner. If, for example, the firm is owned by a family and a widely held corporation, each with 10% of the voting rights, we say that this firm is one-half controlled by each type of owner at the 10% level. At the 20% level, however, the firm is widely held. A different picture emerges if the owners do not have equal voting rights. If the family has 30% of the voting rights and the widely held corporation has only 10%, then at the 10% cutoff the family and the corporation are each assigned one-half of the ultimate control. At the 20% level, however, the firm is fully controlled by the family.

To better understand the variety of ownership structures that determine the ultimate control of companies, we illustrate several examples from the data. They show some of the complications in the construction of ultimate control and the range of data that are necessary to identify the owners of East Asian corporations.

The first set of examples is based on the organizational chart of the Ayala group, the largest conglomerate in the Philippines (Fig. 1). We identify 26 companies under the ultimate control of the Ayala family. First, we look at the ownership of the Ayala Corporation, the second largest publicly held company on the Manila Stock Exchange in terms of market capitalization. The largest publicly owned company, Ayala Land, and the fifth-largest publicly owned

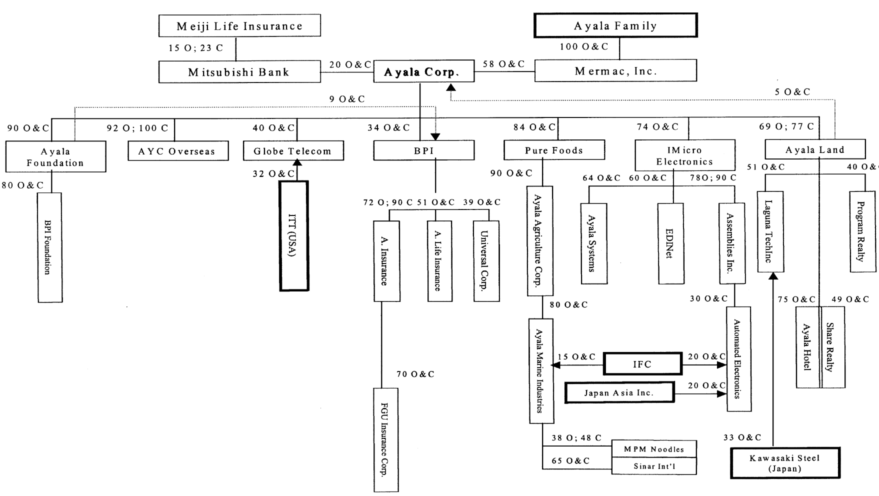

Fig. 1. The Ayala group (The Philippines). The principal shareholders are shown in thick-bordered boxes. Ownership stakes are denotes with "O" and control stakes are denoted with "C". Pyramidal holdings are denoted with thick lines and cross-holdings are denoted with dotted lines. The difference between ownership and control at any given node implies that shares with superior voting rights have been used. Ayala Corp., Globe Telecom, BPI, and Ayala Land are publicly traded. All other companies in the Ayala group are closely held.

company, the Bank of the Philippine Islands, also belong to the Ayala conglomerate. Note that Ayala Corp. has 69% of the cash-flow rights and 77% of the voting rights in Ayala Land, which in turn has 5% of the cash-flow and control rights of Ayala Corp., an example of cross-holdings between companies in the same group. The separation between ownership and control of Ayala Corp. is due to the existence of some shares with superior voting rights. In another example of a cross-holding, Ayala Corp. has 90% of the shares in the Ayala Foundation and 34% of the shares in the BPI, the Bank of the Philippine Islands; the Ayala Foundation, in turn, has 9% of the shares in the BPI.

The principal owners of the Ayala corporation are the privately held Mermac Inc., with 58% of the ownership and control rights, and the Mitsubishi Bank, with 20% of ownership and 23% of control. Each other owner of Ayala Corp. has less than 5% of the stock. We next trace the owners of the owners of Ayala Corp. The Ayala family has 100% of the control of Mermac Inc., while Meiji Life Insurance of Japan has 23% control of Mitsubishi Bank. There are no other significant owners of Mitsubishi Bank. We now say that the ultimate owners of the Ayala Corp. are the Ayala family, with 58% of the control rights, and Meiji Life Insurance, with 20% of the control rights. Since the Ayala family has more than half of the votes, however, it is regarded as the single controlling owner in the subsequent analysis.[3]

Next, we study the ultimate control structure of Globe Telecom, another member of the Ayala conglomerate. The two principal owners of Globe Telecom are the ITT corporation, with 32% of the ownership and control rights, and the Ayala corporation, with 40% of the ownership and control rights. We have already established that Ayala Corp. is controlled by the Ayala family, with 58% of ownership and control rights. We hence conclude that Globe Telecom has two ultimate controllers: the Ayala family with 40% and ITT with 32%. While ITT has 32% of the cash-flow rights as well, the Ayalas have only 23.2%, the product along the chain of ownership.

Finally, we investigate the ultimate control structure of Automated Electronics (the lower right corner of Fig. 1). Two of the ultimate owners are the International Finance Corporation (part of the World Bank Group) and Japan Asia Inc., both widely held corporations that own (and control) 20% of Automated Electronics each. Another 30% of Automated Electronics is owned by Assemblies Inc., which in turn is owned (78%) by IMicro Electronics, which in turn is owned (74%) by the Ayala Corp. We thus determine that Automated Electronics has three ultimate owners: the International Finance Corporation with 20%, Japan Asia Inc. with 20%, and the Ayala family with 30%. While

[3] We thank Andrei Shleifer for suggesting this change in the definition of ultimate control, i.e., a shareholder with over half of the voting rights is considered the sole ultimate control holder. This makes it easier to identify controlling shareholders in the sample, since small shareholders are more difficult to track down.

there is no separation between ownership and control for the International Finance Corporation and Japan Asia Inc., there is a significant wedge between the two for the Ayala family. In particular, the Ayalas have 30% of the voting rights but only 10.1% of cash-flow rights, the product along the chain of ownership (58%*74%*78%*30%).

As a second example, we use the Li Ka-shing conglomerate, which is the largest business group in Hong Kong (Fig. 2). The conglomerate consists of 25 companies, some of which are among the largest in Hong Kong in terms of market capitalization: Hutchison Whampoa is the second largest, Cheung Kong is the sixth largest, Hong Kong Electric is the 13th largest, and Dai Heng Bank is the 22nd largest. Using the information in Fig. 2, we identify the ultimate ownership and control of Hong Kong Electric and Dao Heng Bank.

Hong Kong Electric has only one ultimate owner, the Li Ka-shing family, which controls 34% of the vote with 2.5% of the cash-flow rights. We establish this following the ownership chain of Li Ka-shing: Cheung Kong – Hutchison Whampoa – Cavendish International – Hong Kong Electric, where the weakest link in the chain is the 34% control of Hong Kong Electric by Cavendish International. The Dao Heng Bank has two controllers, Kwek Leng Chan, a Malaysian businessman, with 36% of control and 25.2% of cash-flow rights, and Li Ka-shing with 12% of ownership and 3% of control. This is because

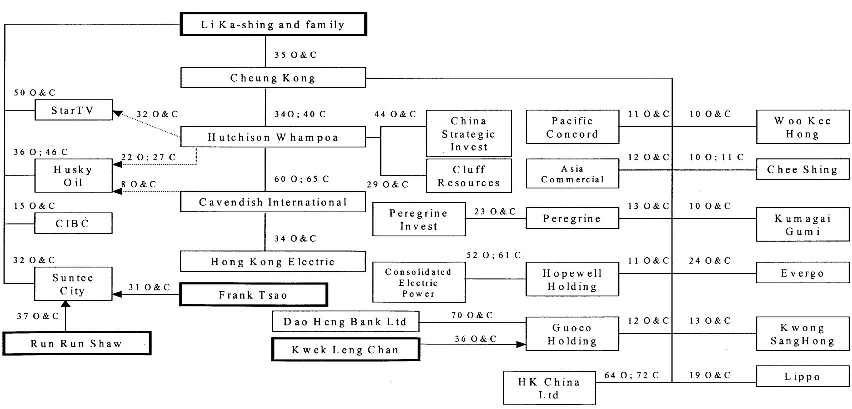

Fig. 2. The Li Ka-shing group (Hong Kong). The principal shareholders are shown in thick-bordered boxes. Ownership stakes are denotes with "O" and control stakes are denoted with "C". Pyramidal holdings are denoted with thick lines and cross-holdings are denoted with dotted lines. The difference between ownership and control at any given node implies that shares with superior voting rights have been used. Star TV, Husky Oil, CIBC, Cheung Kong, Hutchinson Whampoa, Cavendish International, Hong Kong Electric, China Strategic Invest, Dao Heng Bank, Consolidated Electric Power, Pacific Concord, Peregrine, Hopewell Holding, Guoco Holding, Woo Kee Hong, Kumagai Gumi, Evergo, Kwong Sang Hong, and Lippo are publicly traded. Suntec City, Cluff Resources, Peregrine Invest, Asia Commercial, HK China Ltd, and Chee Shing are closely held companies.

Kwek Leng Chan owns 36% of Guoco Holdings which in turn owns 70% of Dao Heng Bank; Li Ka-shing owns 35% of Cheung Kong which owns 12% of Guoco Holding which in turn owns 70% of Dao Heng Bank.

Finally, Fig. 3 shows the organizational structure of the Lotte group, the tenth largest business group in Korea. The Lotte group is controlled by the Kyuk Ho Shin family which owns 30% of the cash-flow rights and 34% of the voting rights in Lotte Japan, and 100% of both in the Samnam Foundation, which are in turn the two largest shareholders of the companies affiliated with the chaebol. We establish that the Dabnid Ham corporation is controlled by the Kyuk Ho Shin family at the 24% level. This is because the Samnam Foundation controls 21% of the votes in Daehong Communications, which in turn controls 24% of the votes in Dabnid Ham. In addition, Lotte Japan controls 24% of Lotteria, which controls 13% of the votes in Daehong Communications. The latter ownership chain adds to the level of ultimate control since the weakest link in the chain now becomes Deahong which has 24% voting rights in Dabnid Ham. The control of Dabnid Ham by the Kyuk Ho Shin family is ensured with only 6% of the cash-flow rights in the company through the use of pyramiding, as the Samnam Foundation controls Daehong which in turn controls Dabnid Ham, and cross-holding, through the additional votes that Lotteria has in Daehong.

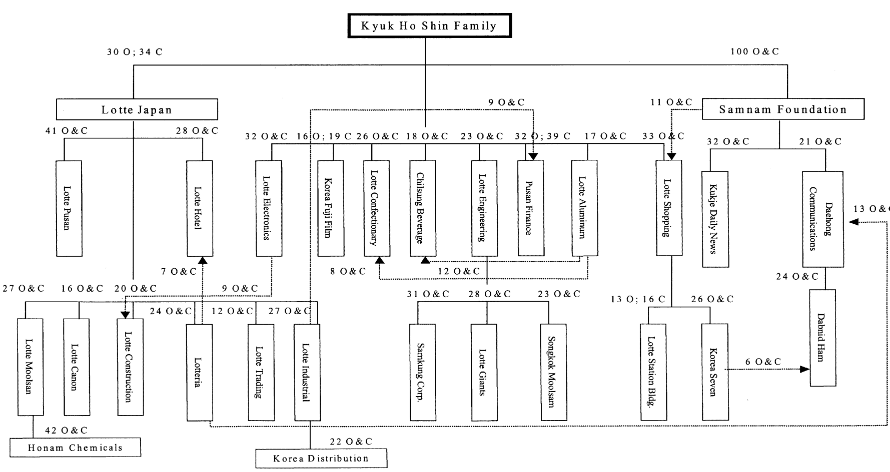

Fig. 3. The Lotte group (South Korea). The principal shareholders are shown in thick-bordered boxes. Ownership stakes are denotes with "O" and control stakes are denoted with "C". Pyramidal holdings are denoted with thick lines and cross-holdings are denoted with dotted lines. The difference between ownership and control at a node implies that shares with superior voting rights have been used. Lotte Confectionary, Chilsung Beverage, Pusan Finance, Samkung Corp., and Honam Chemicals are publicly traded. All other companies in the Lotte group are closely held.

We also study the ultimate ownership structure of Pusan Finance. The Kyuk Ho Shin family has 32% of the cash-flow rights and 39% of the voting rights in Pusan Finance directly. Lotte Japan has a 27% control of Lotte Industrial, which in turn has a 9% ownership ands control stake in Pusan Finance. Summing up the two chains of ultimate ownership, the controlling family has 48% of the control rights in Pusan Finance, while holding only 33% of the cash-flow rights.

6. The separation of ownership and control

Theory suggests that both cash-flow and voting rights are important. Crucially, the incentives to expropriate vary with cash-flow rights (Jensen and Meckling, 1976). This section hence focuses on the level of cash-flow and voting rights and on the wedge between cash-flow and voting rights in East Asian corporations. Table 4 reports descriptive statistics on the separation of ultimate cash-flow and control rights of East Asian corporations in the hands of the largest controlling holder, for all companies in which the largest control holder has at least 5% of the vote. Thai corporations display the most concentrated cash-flow rights, 32.84% on average, followed by Indonesian companies with 25.61% and Hong Kong companies with 24.30%. Japanese and Korean corporations have the least concentration of ownership rights at 6.90% and 13.96%, respectively. A quarter of Thai companies have more than 40% of the cash-flow rights in the hands of the largest blockholder, while a quarter of Japanese companies have only 2% of the cash-flow rights in the hands of the largest blockholder.

The concentration of control rights in the hands of the largest blockholder is similar to the concentration of cash-flow rights, with Thai and Indonesian companies having the highest concentration at 35.25% and 33.68%, respectively, followed by Malaysian and Hong Kong companies at 28.32% and 28.08%, respectively. The least concentration of control rights is documented in Japan, Korea, and Taiwan (10.33%, 17.78%, and 18.96%, respectively; see Panel B).

Panel C shows the ratio of cash-flow to control rights. The separation of ownership and control is highest in Japan, Indonesia, and Singapore and lowest in the Philippines and Thailand. For example, the typical large control holder in Japan has ten ultimate votes for each six direct shares held. In contrast, the typical Thai large control holder has ten ultimate votes for each 9.5 shares held. We further investigate whether the separation of ownership and control varies significantly by type of owner and by firm size in the next table.

We study the four types of controlling shareholders as defined in La Porta et al. (1999). Control is defined as 20% voting rights, which is a more conservative cutoff than the one we use in Table 4. To look at the separation of ownership and control across different sizes of firms, we use market capitalization as a proxy to identify the largest 20, the median 50, and the

Table 4
Separation of cash-flow and voting rights in East Asian corporations (largest control holder)

The newly assembled data for 2,611 publicly traded corporations (including both financial and nonfinancial institutions) where the largest controlling holder has at least 5% of the voting rights as collected from Worldscope and supplemented with information from country-specific sources. In all cases, the data are as of the end of fiscal year 1996 or the closest possible date. This sample is smaller than the previous sample (2,980) as 369 firms do not have any owner that controls more than 5% of the voting rights.

Country	Number of Corporations	Mean	Standard deviation	Median	1st Quartile	3rd Quartile
A. *Cash-flow rights*						
Hong Kong	330	24.30	11.43	18.67	17.43	29.68
Indonesia	178	25.61	12.54	24.00	16.00	34.00
Japan	1117	6.90	8.51	4.00	2.00	10.00
Korea	211	13.96	9.36	10.10	8.29	18.57
Malaysia	238	23.89	11.68	19.68	14.00	30.00
Philippines	99	21.34	11.52	19.22	10.00	28.64
Singapore	211	20.19	10.82	20.00	13.27	29.66
Taiwan	92	15.98	8.76	14.42	10.00	19.27
Thailand	135	32.84	13.51	30.00	20.00	40.00
East Asia	2,611	15.70	13.44	12.00	5.06	22.00
B. *Voting rights*						
Hong Kong	330	28.08	11.73	19.64	19.22	37.95
Indonesia	178	33.68	11.93	30.19	27.52	40.27
Japan	1117	10.33	7.98	9.71	4.95	10.39
Korea	211	17.78	10.74	20.00	10.01	20.08
Malaysia	238	28.32	11.42	29.72	18.97	30.58
Philippines	99	24.36	11.58	21.00	19.05	30.37
Singapore	211	27.52	11.12	29.35	18.52	41.12
Taiwan	92	18.96	8.57	21.28	9.85	21.96
Thailand	135	35.25	13.36	39.52	29.90	51.44
East Asia	2,611	19.77	13.65	19.83	10.24	30.47
C. *Ratio of cash-flow to voting rights*						
Hong Kong	330	0.882	0.214	1.000	0.800	1.000
Indonesia	178	0.784	0.241	0.858	0.630	1.000
Japan	1117	0.602	0.376	0.600	0.200	1.000
Korea	211	0.858	0.229	1.000	0.700	1.000
Malaysia	238	0.853	0.215	1.000	0.733	1.000
Philippines	99	0.908	0.201	1.000	1.000	1.000
Singapore	211	0.794	0.211	0.800	0.600	1.000
Taiwan	92	0.832	0.198	0.975	0.700	1.000
Thailand	135	0.941	0.164	1.000	1.000	1.000
East Asia	2,611	0.746	0.321	1.000	0.450	1.000

smallest 50 companies in each country sample. The first group of companies represent the largest 20 companies on their respective stock markets, whereas the median 50 and the bottom 50 companies in our sample are not necessarily the median 50 and bottom 50 of all listed corporations in each country. We use the 20–50–50 breakdown for three reasons. First, the largest-20 group allows us to replicate the results in La Porta et al. (1999). Second, the median and small-firm groups include a larger number of companies and we expect more variation in control structures across those types of companies. Third, our sample for the Philippines has only 120 companies, and consequently it is not possible to make any of the groups larger as they currently cover all Philippine firms.

The results show several interesting patterns (Table 5). In all countries but Japan and Singapore, family-controlled firms have the most separation of ownership and control. Firms controlled by widely held financial institutions have the most separation (0.495) in Japan. State-controlled firms show the most separation among all types of firms in Singapore (0.685). The latter result is consistent with La Porta et al. (1999). The pattern across company size is less clear. Among family-controlled firms, the largest separation in Hong Kong, Japan, the Philippines, and Thailand occurs in the smallest firms. In Korea, Singapore, and Taiwan, it is the largest firms that display the most separation of ownership and control. In Malaysia and Indonesia, medium-size firms show the most separation.

The separation of ownership and control in state-controlled firms occurs only in Malaysia, the Philippines, and Singapore, and is especially pronounced in the latter. In all three cases, it is the smallest firms that display the most separation. The only country that has any significant separation of ownership and control among firms held by financial institutions is Japan, and this is only the case for medium- and small-size firms. Finally, the only country with a measurable wedge between cash-flow and voting rights in firms controlled by widely held corporations is Malaysia. The largest separation (0.789) again occurs in small firms.

In summary, the evidence suggests that firms controlled by families are most likely to have separation between ownership and control. Small firms are most likely to have a larger wedge between cash-flow and control rights, regardless of the type of ownership. In three countries (Korea, Singapore, and Taiwan), families seem to use mechanisms to separate ownership and control in large firms. These results are robust to the 10% definition of ultimate control.

7. What determines the concentration of control?

From a corporate governance standpoint, the concentration of voting rights is crucial, as it enables owners to determine dividend policies, investment

Table 5
The separation of ownership and control across type of the largest controlling shareholder and company size

Newly assembled data for publicly traded corporations (including both financial and nonfinancial institutions) as collected from Worldscope and supplemented with information from country-specific sources. In all cases, we collect the ownership structure as of the end of fiscal year 1996 or the closest possible date. Controlling shareholders are defined at the 20% (benchmark) cutoff. Size is classified as the largest 20 firms, the median 50 firms, and the smallest 50 firms in terms of market capitalization. Widely held firms are excluded from the sample. The reported numbers represent the mean ratio of cash-flow over control rights. N.a. means that no firms fit this category.

Country	Category	Family	State	Widely held financial	Widely held corporation
Hong Kong	All firms	0.826	1.000	0.876	0.993
	Largest 20	0.832	1.000	0.656	n.a.
	Middle 50	0.886	1.000	1.000	1.000
	Smallest 50	0.805	1.000	1.000	0.988
Indonesia	All firms	0.687	1.000	1.000	0.949
	Largest 20	0.741	1.000	n.a.	1.000
	Middle 50	0.677	1.000	1.000	0.927
	Smallest 50	0.702	n.a.	n.a.	1.000
Japan	All firms	0.984	1.000	0.495	0.943
	Largest 20	1.000	1.000	n.a.	n.a.
	Middle 50	1.000	1.000	0.512	0.956
	Smallest 50	0.983	n.a.	0.446	0.867
Korea	All firms	0.833	1.000	1.000	0.986
	Largest 20	0.619	1.000	n.a.	n.a.
	Middle 50	0.807	1.000	1.000	1.000
	Smallest 50	0.864	n.a.	n.a.	1.000
Malaysia	All firms	0.785	0.959	1.000	0.895
	Largest 20	0.942	0.871	n.a.	1.000
	Middle 50	0.787	1.000	1.000	0.752
	Smallest 50	0.795	0.692	1.000	0.789
Philippines	All firms	0.819	0.914	0.965	0.956
	Largest 20	0.878	1.000	n.a.	1.000
	Middle 50	0.837	1.000	0.932	0.938
	Smallest 50	0.775	0.742	0.909	0.975
Singapore	All firms	0.722	0.685	0.956	0.944
	Largest 20	0.604	0.794	n.a.	n.a.
	Middle 50	0.693	0.659	1.000	1.000
	Smallest 50	0.768	0.655	1.000	0.907
Taiwan	All firms	0.757	1.000	0.989	0.922
	Largest 20	0.643	1.000	1.000	1.000
	Middle 50	0.704	1.000	1.000	0.904
	Smallest 50	0.763	n.a.	0.969	0.894
Thailand	All firms	0.920	1.000	1.000	1.000
	Largest 20	0.969	1.000	n.a.	n.a.
	Middle 50	0.935	1.000	1.000	1.000
	Smallest 50	0.859	1.000	1.000	1.000

projects, personnel appointments, etc. This section describes the differences in the concentration of control across the nine East Asian countries. We start by reporting statistics on the distribution of ultimate control among the five ownership groups identified in Section 5 (Table 6). We study ultimate control at two cutoff levels, 10% and 20% of voting rights.

There are large differences across countries in the distribution of ultimate control at the 10% level. Japan, for example, has only 13.1% of companies in family hands as compared to over half of companies in most other countries (Indonesia has slightly over 40%). Across the nine East Asian countries, Japan has ownership by widely held financial institutions of 38.5%, while another 41.9% of corporations are widely held. At the other extreme, Indonesia has more than two-thirds (67.1%) of its publicly listed companies in family hands, and only 0.6% are widely held. Singapore is an interesting case, with almost a quarter (23.6%) of its companies state controlled.

Table 6
Control of Publicly Traded Companies in East Asia

Newly assembled data for 2,980 publicly traded corporations (including both financial and non-financial institutions) as based on Worldscope and supplemented with information from country-specific sources. In all cases, we collect the ownership structure as of the end of fiscal year 1996 or the closest possible date.

Country	Number of corporations	Widely held	Family	State	Widely held financial	Widely held corporation
10% cutoff						
Hong Kong	330	0.6	64.7	3.7	7.1	23.9
Indonesia	178	0.6	68.6	10.2	3.8	16.8
Japan	1,240	42.0	13.1	1.1	38.5	5.3
Korea	345	14.3	67.9	5.1	3.5	9.2
Malaysia	238	1.0	57.5	18.2	12.1	11.2
Philippines	120	1.7	42.1	3.6	16.8	35.9
Singapore	221	1.4	52.0	23.6	10.8	12.2
Taiwan	141	2.9	65.6	3.0	10.4	18.1
Thailand	167	2.2	56.5	7.5	12.8	21.1
20% cutoff						
Hong Kong	330	7.0	66.7	1.4	5.2	19.8
Indonesia	178	5.1	71.5	8.2	2.0	13.2
Japan	1,240	79.8	9.7	0.8	6.5	3.2
Korea	345	43.2	48.4	1.6	0.7	6.1
Malaysia	238	10.3	67.2	13.4	2.3	6.7
Philippines	120	19.2	44.6	2.1	7.5	26.7
Singapore	221	5.4	55.4	23.5	4.1	11.5
Taiwan	141	26.2	48.2	2.8	5.3	17.4
Thailand	167	6.6	61.6	8.0	8.6	15.3

At the 20% (benchmark) cutoff level the differences across countries widen. Fewer than one-tenth of Japanese companies (9.7%) are now controlled by families, while almost four-fifths (79.8%) are widely held. This drop in family control arises as many Japanese companies have family ownership between 10% and 20%. At a threshold of 20%, these corporations are defined as widely held. An even more dramatic change takes place in Korea, where family control drops from 67.9% to 48.4%, and in Taiwan, where family control decreases from 65.6% to 48.2%. In the Indonesian sample, the share of family control increases at the expense of state, widely held financial, and widely held corporate control. A similar but even more pronounced pattern can be observed for Thailand, where family control increases from 50.8% to 61.6%, and Malaysia, where family control increases from 57.7% to 67.2%. The most stable control structure between these two cutoff levels is observed in the Philippines and Singapore.

Some of the differences in the concentration of control likely arise from variations in company laws across countries. For example, differences in minimum percentages in shareholdings required for blocking major decisions or the minimum percentages required to entitle a shareholder to call an extraordinary shareholders' meeting are important in determining the minimum shareholder stake necessary to exercise effective control. Other rules also affect the size of ownership necessary to exercise effective control. In Korea, for example, restrictions on the voting rights of institutional investors in listed companies and past high minimum percentages required to file class-action suits imply that relatively low ownership stakes can result in effective control. In four of the nine countries (Hong Kong, Japan, Korea, and Singapore) there are limits to the share of ownership that banks can have in other companies, while such ownership is not permitted in Indonesia at all (Institute of International Bankers, 1997). It is not surprising then that the role of widely held financial institutions is greatly diminished at the 20% level for all countries.

Overall, the concentration of control seems to diminish with the level of economic development of the country. Japan has the largest share of widely held firms, followed by Korea and Taiwan. Indonesia and Thailand have the smallest share of widely held firms, together with Singapore. Given the small number of countries in the sample, however, the robustness of this finding is limited.

The differences in concentration of control within a country could be related to firm-specific variables like age and size. Some previous papers (e.g., Black and Gilson, 1998) argue that younger companies are more likely to have concentrated ownership, while older companies are more frequently widely held. Anecdotally, this argument holds some appeal if one were to look at the U.S. market where the recent new listings of technology-related companies has increased the number of companies with controlling owners. Microsoft has one ultimate owner, Bill Gates, with 24% of the stock; so does Yahoo!, where the Japanese entrepreneur Masayoshi Son has 29% of the voting rights. These examples suggest a life-cycle story of concentrated ownership. One might also expect that small investors are more willing to buy stock in firms with established track records. In this section, we establish the representative facts on the relation between age of companies and concentration of control in the East Asian context, without attempting to test a specific theory of ownership structures.

We run simple correlations between the number of years the corporation has been in operation, where 1996 is considered the end year, and the control stake of the largest owner (Table 7). Only in Japan are older firms more frequently widely held. In the other eight countries, the correlation coefficients are always positive, i.e., older firms have more concentrated corporate control, and these coefficients are statistically significant in the Indonesian, Malaysian, and Taiwanese samples. These results seems to dispel the claim often made by historians that dispersion of ownership is just a matter of time. This finding is consistent with the conclusions in Holderness et al. (1999) who show that managerial ownership in U.S. publicly traded corporations is on average higher today than earlier in the century.

We next examine whether the concentration of control depends on company size. Size appears to matter significantly in explaining the distribution of control across ownership classes. Table 8 provides the comparisons within each country. In most countries, the share of family ownership increases for smaller firms. This pattern is especially strong in Japan, where only one of the largest 20 firms is in family control, while 57% of the smallest 50 companies are controlled by families. The same dramatic increase in family control is observed in Korea, where only four of the largest 20 companies are family controlled, while 48 of the

Table 7
Correlation between age and the size of control stakes in East Asian corporations

Newly assembled data for 2,980 publicly traded corporations (including both financial and non-financial institutions) as collected from Worldscope and supplemented with information from country-specific sources. In all cases, we collect the ownership structure as of the end of fiscal year 1996 or the closest possible date.

Country	Correlation (age; voting rights of largest owner)	Average age (years)	Average control (%)
Hong Kong	0.212	28.8	28.1
Indonesia	0.241[a]	24.1	34.4
Japan	− 0.204	57.2	8.9
Korea	0.139	31.2	18.2
Malaysia	0.308[a]	28.8	28.1
The Philippines	0.072	28.1	24.4
Singapore	0.089	26.8	27.3
Taiwan	0.278[a]	26.3	19.6
Thailand	0.103	21.2	35.6

[a]Significant at the 5% level.

Table 8
Concentration of control and company size

Newly assembled data for 2,980 publicly traded corporations (including both financial and non-financial institutions) as collected from Worldscope and supplemented with information from country-specific sources. We collect the ownership structure as of the end of fiscal year 1996 or the closest possible date. Size is classified as the largest 20 firms, the median 50 firms, and the smallest 50 firms in terms of market capitalization. The table reports the extent of ownership in percent by each category of owner.

Country	Category	Widely held	Family	State	Widely held financial	Widely held corporation
Hong Kong	All firms	7.0	66.7	1.4	5.2	19.8
	Largest 20	5.0	72.5	7.5	10.0	5.0
	Middle 50	6.0	66.0	2.0	4.0	22.0
	Smallest 50	14.0	57.0	3.0	1.0	25.0
Indonesia	All firms	5.1	71.5	8.2	2.0	13.2
	Largest 20	15.0	60.0	20.0	0.0	5.0
	Middle 50	6.0	62.7	3.3	3.0	25.0
	Smallest 50	0.0	93.0	0.0	1.0	6.0
Japan	All firms	79.8	9.7	0.8	6.5	3.2
	Largest 20	90.0	5.0	5.0	0.0	0.0
	Middle 50	96.0	2.0	0.0	0.0	2.0
	Smallest 50	0.0	57.0	0.0	30.0	13.0
Korea	All firms	43.2	48.4	1.6	0.7	6.1
	Largest 20	65.0	20.0	10.0	0.0	5.0
	Middle 50	66.0	11.0	5.0	0.0	18.0
	Smallest 50	0.0	97.0	0.0	1.0	2.0
Malaysia	All firms	10.3	67.2	13.4	2.3	6.7
	Largest 20	30.0	35.0	30.0	0.0	5.0
	Middle 50	12.0	69.0	10.0	4.0	5.0
	Smallest 50	0.0	84.0	5.0	2.0	9.0
Philippines	All firms	19.2	44.6	2.1	7.5	26.7
	Largest 20	40.0	40.0	7.5	7.5	5.0
	Middle 50	16.0	42.0	0.0	9.0	33.0
	Smallest 50	16.0	45.0	2.0	6.0	31.0
Singapore	All firms	5.4	55.4	23.5	4.1	11.5
	Largest 20	20.0	32.5	42.5	0.0	5.0
	Middle 50	10.0	46.0	35.0	4.0	5.0
	Smallest 50	2.0	67.0	4.0	5.0	22.0
Taiwan	All firms	26.2	48.2	2.8	5.3	17.4
	Largest 20	45.0	15.0	15.0	5.0	20.0
	Middle 50	36.0	38.0	0.0	6.0	20.0
	Smallest 50	6.0	80.0	0.0	4.0	10.0
Thailand	All firms	6.6	61.6	8.0	8.6	15.3
	Largest 20	10.0	57.5	20.0	7.5	5.0
	Middle 50	6.0	47.0	10.0	15.7	21.3
	Smallest 50	0.0	76.7	2.7	5.0	15.7

smallest 50 companies fall into that category. The magnitude of the increase of family control in smaller companies is similar in Taiwan, from 15% to 80% of the sample. In Indonesia, Malaysia, the Philippines, Singapore, and Thailand, the same pattern is present, although it is not as strong, as many large companies are also controlled by families. The exception is Hong Kong, where about three-fourths of the largest 20 companies are under family control, while fewer than 60% of the smallest 50 companies are in the same category.

These statistics also show that the majority of large and medium-size Japanese and Korean corporations are widely held. All bottom 50 companies have ultimate owners, however. In contrast, there is much less variation of control structures across company size in the Philippines, although this result could be driven by the smaller sample in that country. In all other countries, widely held corporations are the exception for small corporations, but less so for large and medium-size corporations.

When comparing our results for the largest 20 companies with La Porta et al. (1999), we must focus on Hong Kong, Japan, Korea, and Singapore, the East Asian countries reported in both studies. We obtain identical results for Japan and Singapore, while the differences in Hong Kong and Korea are within 5% of ownership. This implies that the data on corporate ownership across East Asia are fairly robust.

8. Evidence of crony capitalism

So far we have investigated the incidence of ultimate control at the level of the individual firm. Perhaps a more meaningful unit of analysis, particularly if we are concerned with issues of market entry, access to financing, and government policy, is the concentration of control of corporate assets in the hands of one or more family groups. We therefore calculate the number of firms in the sample controlled by a single family (Table 9). Indonesia stands out with the largest number of companies controlled by a single family, more than four on average. Japan has the fewest, with each family controlling approximately one company.

These numbers already suggest that the control of listed corporate assets rests in the hands of a small number of families in countries like Indonesia, the Philippines, and Hong Kong. This can be further demonstrated by calculating the value of total assets controlled by the largest family groups in each country. We adjust the value of assets held by each family group by assuming that the firms missing from our sample are not controlled by any of the largest 15 families. For example, the largest five families in the Philippines control 52.2% of the market capitalization in our sample. Since the sample firms represent 82% of total market capitalization in the Philippines (Table 2), we reach an adjusted figure of 42.8% (52.2%*82%) for the control holdings of the largest five families. At the extreme, 16.6% and 17.1% of total market capitalization in Indonesia and the Philippines, respectively (Table 9), can be traced to the ultimate control of a single family. The largest ten families in Indonesia and the Philippines control more than half of the corporate assets (57.7% and 52.5%, respectively). The concentration of control in the hands of large families is also high in Thailand (46.2%) and Hong Kong (32.1%). A quarter of the corporate sector in Korea, Malaysia, and Singapore is controlled by the largest ten families. In contrast, family control in Japan is insignificant, as the largest 15 families own only 2.8% of listed corporate assets.

The last column of Table 9 reports the corporate assets held by the largest 15 families in each country as a percentage of GDP in 1996. Since countries vary widely in the level of development of capital markets, the relative ranking of the concentration of family control changes dramatically. Hong Kong and Malaysia now display the largest concentration of control, 84.2% and 76.2% of GDP, respectively, as they have highly developed capital markets. In contrast, the relative importance of concentrated family control diminishes in Indonesia, Korea, and Thailand, all of which have smaller capital markets. In Japan, the largest 15 families control corporate assets worth only 2.1% of GDP in 1996.

Table 9
How concentrated is family control?

Newly assembled data for 2,980 publicly traded corporations (including both financial and non-financial institutions) in Hong Kong, Indonesia, Japan, Korea, Malaysia, the Philippines, Singapore, Taiwan, and Thailand as collected from Worldscope and supplemented with information from country-specific sources. In all cases, we collect the ownership structure as of the end of fiscal year 1996 or the closest possible date. The Average Number of Firms per Family refers only to firms in the sample. To avoid discrepancies in the cross-country comparison due to different sample coverage, we have scaled down the control holdings of each family group in the last four columns by assuming that the firms missing from our sample (see Table 2) are not controlled by any of the largest 15 families. The % of total GDP is calculated using market capitalization and GDP data from the World Bank.

Country	Average number of firms per family	% of total value of listed corporate assets that families control (1996)				% of GDP (1996)
		Top 1 family	Top 5 families	Top 10 families	Top 15 families	Top 15 families
Hong Kong	2.36	6.5	26.2	32.1	34.4	84.2
Indonesia	4.09	16.6	40.7	57.7	61.7	21.5
Japan	1.04	0.5	1.8	2.4	2.8	2.1
Korea	2.07	11.4	29.7	36.8	38.4	12.9
Malaysia	1.97	7.4	17.3	24.8	28.3	76.2
The Philippines	2.68	17.1	42.8	52.5	55.1	46.7
Singapore	1.26	6.4	19.5	26.6	29.9	48.3
Taiwan	1.17	4.0	14.5	18.4	20.1	17.0
Thailand	1.68	9.4	32.2	46.2	53.3	39.3

For comparison, the wealth of the 15 richest American families in 1998 was 2.9% of GDP.[4]

These results suggest that a relatively small number of families effectively control most East Asian economies. The question arises whether these families have had a strong effect on the economic policy of governments. One direct mechanism for such an effect is the extension of preferential treatment to family members of senior government members. A case in point is the business empire of the Suharto family in Indonesia, which is thought to control 417 listed and unlisted companies through a number of business groups led by children, other relatives, and business partners, many of whom also have held government offices (The New York Times, Sept. 8, 1998, p. 2). Other examples abound. Imelda Marcos, widow of the former Philippine president Ferdinand Marcos, has described the extent of her family's grip on the economy as follows: "We practically own everything in the Philippines from electricity, telecommunications, airlines, banking, beer and tobacco, newspaper publishing, television stations, shipping, oil and mining, hotels and beach resorts, down to coconut milling, small farms, real estate and insurance" (Financial Times, Dec. 8, 1998, p. 16).

These findings can be interpreted as indicative of both the motivation for and the means to crony capitalism in East Asia. The concentration of corporate control in the hands of a few families creates powerful incentives and abilities to "lobby" government agencies and public officials for preferential treatment, whether through trade barriers, non-market-based financing, preferential public contracts, or other means. Concentration of control might also have been a detriment to the evolution of the countries' legal systems. A concentrated control structure of the whole corporate sector could lead to the suppression of minority rights and hold back the institutional development of legal and regulatory channels to enforce these rights. Finally, the direct participation by government officials in the control of a large part of the corporate sector opens up the possibility of wide-spread conflicts between public and private interests of some individuals, leading to crony capitalism. While we cannot document whether and through what channels crony capitalism has developed in East Asia, the large ownership concentration certainly raises the likelihood of it.

These results do not show the direction of causality. The ability to lobby government could lead to further concentration of corporate control, thus creating a vicious circle of increased dependence of politicians and tycoons. Further work is necessary to disentangle these links and suggest ways to curb them.

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[4] These are Bill Gates, the Waltons, Warren Buffet, Paul Allen, Michael Dell, Jay and Robert Pritzker, John Kluge and family, Barbara Cox Anthony, Anne Cox Chambers, Gordon Moore, Sumner Redstone, Philip Anschutz, Ronald Perelman, Rupert Murdoch, and Ted Turner, as listed in the October 11, 1998 special issue of *Forbes*.

9. Conclusions

Previous research leaves unanswered several questions on the nature of corporate governance in East Asian corporations. In this paper, we find that corporate control is typically enhanced by pyramid structures and cross-holdings among firms in all East Asian countries. The separation of ownership and control suggests that a reexamination of the relation between ownership structure and corporate performance is needed, as previous studies have only looked at immediate ownership and not ultimate control. The separation of ownership and control is most pronounced among family-controlled firms and among small firms. In Korea, Singapore, and Taiwan, large family-controlled firms also display a significant wedge between ownership and control.

We also find that more than two-thirds of listed firms are controlled by a single shareholder. Separation of management from ownership control is rare, and management of 60% of the firms that are not widely held is related to the family of the controlling shareholder. While there is thus a separation between ownership and management, there is not a separation between control and management. Older firms are more likely family controlled, which dispels the claim that dispersion of ownership is just a matter of time. Across countries, the concentration of control at the individual firm level generally diminishes with the level of development. In most of the developing East Asian countries, wealth is very concentrated in the hands of few families. Wealth concentration might have negatively affected the evolution of the legal and other institutional frameworks for corporate governance and the manner in which economic activity is conducted. It could be a formidable barrier to future policy reform.

References

Aoki, M., 1990. Toward an economic model of the Japanese firm. Journal of Economic Literature 28, 1–27.

Baum, J., 1994. The money machine: Taiwan's Kuomintang. Far Eastern Economic Review August 11, 62–66.

Baumol, W., 1959. Business Behavior, Value and Growth. MacMillan, New York.

Berle, A., Means, G., 1932. The Modern Corporation and Private Property. MacMillan, New York.

Black, B., Gilson, R., 1998. Does venture capital require an active stock market. Journal of Financial Economics 47, 243–277.

China Credit Information Service, 1997. Business Groups in Taiwan 1996–1997. Taipei, Republic of China.

Chu, Y.-W., Hamilton, G., 1993. Business networks in Hong Kong. University of California, Davis, unpublished working paper, October.

Claessens, S., Djankov, S., Fan, J., Lang, L., 1999. Expropriation of minority shareholders: evidence from East Asia. Policy Research paper 2088. World Bank, Washington DC.

Demsetz, H., 1983. Corporate control, insider trading, and rates of return. American Economic Review 86, 313–316.

Dodwell Marketing Consultants, 1997. Industrial Groupings in Japan: the Anatomy of the Keiretsu. Tokyo, Japan, 12th Edition.
Fisman, R., 1998. Announcement effects of Suharto's illnesses on related companies. Harvard Business School, unpublished working paper, September.
Fukuyama, F., 1996. Trust: the social virtues and the creation of prosperity. Free Press Paperbacks, London.
Grossman, S., Hart, O., 1980. The costs and benefits of ownership: a theory of vertical and lateral integration. Bell Journal of Economics 11, 42–64.
Hiscock, G., 1998. Asia's Wealth Club. Nickolas Brealey Publishing. Melbourne, Australia.
Holderness, C., Kroszner, R., Sheehan, D., 1999. Were the good old days that good? changes in managerial stock ownership since the Great Depression. Journal of Finance 54, 435–470.
Hoshi, T., Kashyap, A., Scharfstein, D., 1991. Corporate structure, liquidity, and investment: evidence from Japanese industrial groups. Quarterly Journal of Economics 106, 33–60.
Indobusiness, 1998. 1995 Ranking of the Indonesian Largest Conglomerates. Available at http://indobiz.com/company/warta/conglo/htm.
Institute for Economic and Financial Research, 1996. Indonesian Capital Markets Directory. Jakarta, Indonesia.
Institute of International Bankers, 1997. Global Survey 1997: Regulatory and Market Developments. New York, New York.
Jensen, M., Meckling, W., 1976. Theory of the firm: managerial behavior, agency costs, and ownership structure. Journal of Financial Economics 3, 305–360.
Kaplan, S., 1994. Top executive rewards and firm performance: a comparison of Japan and the United States. Journal of Political Economy 102, 510–546.
Koike, K., 1993. The Ayala group during the Aquino period: diversification along with a changing ownership and management structure. Developing Economies 31, 442–463.
Korean Fair Trade Commission, 1997. 1996 List of the Largest 30 Chaebol. Seoul, Korea, unpublished working paper.
La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1998. Law and finance. Journal of Political Economy 106, 1113–1155.
La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 1999. Corporate ownership around the world. Journal of Finance 54, 471–518.
Lim, M.H., 1981. Ownership and Control of the One Hundred Largest Corporations in Malaysia. Oxford University Press, Oxford.
Lim, U., 1998. Ownership structure and family control in Korean conglomerates: with cases of the largest 30 chaebol, Seoul University, Seoul, unpublished working paper, November.
Morck, R., Shleifer, A., Vishny, R., 1988. Management ownership and market valuation: an empirical analysis. Journal of Financial Economics 20, 293–315.
Nenova, T., 1999. The value of a corporate vote and private benefits: cross-country analysis, Department of Economics, Harvard University, unpublished working paper, December.
Numazaki, I., 1993. The Tainanbang: the rise and growth of a banana-bunch-shaped business group in Taiwan. Developing Economies 31, 485–510.
Okumura, H., 1993. Interfirm relations in an enterprise group: the case of Mitsubishi. In: Sato, K., Hoshino, Y. (Eds.), The Anatomy of Japanese Business. Provident House, London.
Prowse, S., 1992. The structure of corporate ownership in Japan. Journal of Finance 47, 1121–1140.
Rodrik, D., 1997. The paradoxes of the successful state. European Economic Review 41, 411–442.
Sato, Y., 1993. The Salim group in Indonesia: the development and behavior of the largest conglomerate in Southeast Asia. Developing Economies 31, 408–441.
Shleifer, A., Vishny, R., 1986. Large shareholders and corporate control. Journal of Political Economy 94, 461–488.

Suehiro, A., 1993. Family business reassessed: corporate structure and late-starting industrialization in Thailand. Developing Economies 31, 378–407.
Tan, E., 1993. Interlocking directorates, commercial banks, other financial institutions, and non-financial corporations. Philippine Review of Economics and Business 30, 1–50.
Taniura, T., 1989. Management in Taiwan: the case of the Formosa plastics group. East Asian Cultural Studies 28, 21–46.
Taniura, T., 1993. The Lucky Goldstar group in the Republic of Korea. Developing Economies 31, 465–484.
Tara Siam Company, 1997. Thai Business Groups 1996–1997: A Unique Guide to Who Owns What. Bangkok, Thailand.
Taylor, M., 1998. Have cash, will travel: Hong Kong is no longer big enough for property tycoon Li Ka-Shing. Far Eastern Economic Review March 5, 56–60.
Vatikiotis, M., 1997. From chicken to microchips: Thailand's Dhanin Chearavanont. Far Eastern Economic Review January 23, 38–43.
W. I. Carr Banque Indosuez Group, 1997. Indonesian Group Connections. Jakarta, Indonesia.