View metadata, citation and similar papers at core.ac.uk
brought to you by CORE
provided by Research Papers in Economics

TURKISH ECONOMIC ASSOCIATION

DISCUSSION PAPER 2003/7
http://www.tek.org.tr

CORPORATE GOVERNANCE AND IMPLICATIONS FOR MINORITY SHAREHOLDERS IN TURKEY

Burçin B. Yurtoğlu

December, 2003

A later version of this paper is published in JOURNAL OF CORPORATE OWNERSHIP & CONTROL, *1(1), 2003, 72-86.*

Corporate Governance and Implications for Minority Shareholders in Turkey

B. Burcin Yurtoglu*

University of Vienna, Department of Economics
BWZ, Bruennerstr. 72, A-1210, Vienna
e-mail: burcin.yurtoglu@univie.ac.at
Tel: ++ 43 1 4277 37482
Fax: ++ 43 1 4277 37489

Abstract

This paper reports on the ownership and control structures of publicly listed firms in Turkey using data from 2001. While holding companies and non-financial firms are the most frequent owners at the direct level, families ultimately own more than 80 percent of all publicly listed firms in Turkey. Pyramids and dual class shares are common devices that families use to separate their cash-flow rights from control rights. We also show that such deviations result in significantly lower market to book ratios suggesting large agency costs because of the conflict of interests between controlling families and minority shareholders.

Keywords: Ownership Structure, Corporate Governance, Business Groups, Family Ownership, Turkey

JEL Classification: G31, G32, O16

* I would like to thank Reha Tanör, who kindly offered his careful and constructive comments in several places of an an earlier version. I also thank to Melsa Ararat, Dennis C. Mueller and Ajit Singh for comments, discussions and encouragement. Financial support from the Jubiläumsfonds of the Austrian National Bank through Project #8090 is gratefully acknowledged.

1. Introduction

The recent law and finance literature shows that some important characteristics of financial systems are to a large degree shaped by the strength of the legal system in protecting the minority shareholders from expropriation by insiders.[1] Better legal protection leads to more valuable stock markets (La Porta et al., 1998), to higher market valuation (Claessens et al., 2002), greater dividend pay-out ratios (La Porta et al., 2000 and Gugler and Yurtoglu, forthcoming), and to improved investment performance (Gugler, Mueller and Yurtoglu, 2002 and 2003 and Mueller and Yurtoglu, 2000).

Another consequence of weak corporate governance systems is that a country tends to have a thin equity market (Modigliani and Perotti, 1997 and La Porta et al., 1998). Recent work by Levine and Zervos (1998), Rajan and Zingales (1998), and Demirgüc-Kunt and Maksimovic (1998) linking economic growth to the size of a country's capital market suggests that large equity markets contribute positively to a country's economic performance. If weak corporate governance systems lead to thin equity markets, which in turn lead to slower economic growth, then countries which improve their corporate governance systems can expect improved investment and growth performance.

In Anglo-Saxon countries with a common law system insiders are often salaried managers who own too little of their companies' shares to internalize the interests of a large number of dispersed shareholders. A relatively large number of papers have looked at the costs and benefits of this agency or managerial discretion problem and they show that the divergence of interests problems reduce shareholder wealth for widely held firms.[2] One potential correction to the managerial discretion problem is to have a less dispersed share ownership structure. Since large shareholders can internalize the benefits from their monitoring effort they have greater incentives to monitor and take corrective action. They also have greater incentives to place a takeover bid for a badly managed company, because they appropriate part of the appreciation of the shares due to the improved management.[3,4]

There is now a fair amount of evidence that the Berle and Means (1932) corporation with a dispersed shareholding structure is a rarity even in developed countries. Several studies report that concentrated ownership is the rule rather than the exception in a large number of countries across the world. Faccio and Lang (2002), for example, report that families, who are the insiders in most of the civil law system countries, ultimately own about 45 percent of more than 5000 publicly listed Western European companies. Claessens, Djankov, and Lang (2000) report that a single shareholder controls more than two-thirds of publicly listed East Asian companies and that the management is very often related to the family of the controlling shareholder.

Another finding of these and related studies is that controlling shareholders often establish control over their firms despite relatively small cash-flow rights. Pyramidal structures, cross-ownership, dual-class shares and various control-enhancing corporate charter provisions are devices that are commonly used to achieve this wedge.[5] In the above mentioned countries the managerial agency problem is less pronounced compared to the potential problems emerging from the conflict between controlling shareholders and minority shareholders. The interests of these two major actors are not perfectly aligned due to to the existence of a wedge between control and cash-flow rights. Examples of wealth transafers from minority to controlling shareholders abound, for which Johnson et al. (2000) dubbed the term tunneling.

As Bebchuk et al. (2000) and Wolfenzon (1999) argue the conflict between the controlling owners and minority shareholders is likely to be resolved in favor of the first one, implicating that the agency costs associated with the presence of a large shareholder exceed the reduction in managerial discretion. One objective of this paper is to provide empirical evidence on the net effect of controlling shareholders by studying the impact of concentrated ownership and the devices used to maintain it despite relatively cash-flow rights.

Turkey provides an ideal setting to analyze these questions because it shares almost all of the salient features of weak corporate governance regimes including concentrated family ownership, weak institutions (law enforcement, accounting standards, shareholder and creditor protection), pyramidal business groups and dual class shares.

The next section describes the institutional background of corporate governance in Turkey. Section three details several features of the ownership structures of Turkish companies using ownership data from 2001. Section four analyzes the influence of ownership structure on the valuation of companies. The final section discusses the implications of these findings.

2. The background

2.1 State-business relations

State-business relations are a major determinant of the structure and the conduct of today's big business in Turkey. Modern Turkey has inherited from the Ottoman Empire an economy, which was predominantly agricultural and heavily dependent on foreign capital. Early surveys of the manufacturing industries reveal that establishments around 1920 were concentrated in the Western parts of the country with two employees on average indicating production for regional markets with antiquated technology (Kepenek and Yentürk, 1996).

To cope with the consequences of an underdeveloped economy etatist policies shaped the development of the industry from its early days to 1960s when a more conscious import substitution policy was implemented. During this period a large number state-owned enterprises were founded and managed by the state. These failed to produce the desired degree of industrialization and rates of economic growth due to a number of reasons (Kepenek and Yentürk, 1996). The state had (and still has) a key role both as an owner of large industrial companies and by allocating resources to the private sector. The import substitution policy was replaced in 1980 by an export-led stabilization and structural adjustment program implemented under a military regime. One major step of this program includes the liberalization of the capital market, which was carried out over the 1980-1989 period.[6] The Capital Market Law was enacted in 1981 followed by the establishment of the Capital Market Board in 1982. After a five-year preparation process, Istanbul Stock Exchange was reorganized and reopened in 1986.

An important feature of a variety of government policies towards industry was the inconsistency among their various elements and the consequent uncertainty they introduced into the decision making process of the private sector (Bugra, 1994). Government intervention was in general oriented towards short-term palliative measures instead of generating lasting solutions to the structural problems of the economy. This irregular and at times erratic attitude has according to Bugra (1994) led to an uncertain and severely deficient framework within which business people had to operate.

2.2 The characteristics of corporate governance in Turkey

The characteristics of the Turkish corporate governance regime are to a large degree reflected by the following features of the Turkish capital market. First, only a small fraction of Turkish companies are publicly listed and traded. Table 1 shows that even though the number of traded companies increases from 80 at the end of 1986 to 310 in 2001 and the market capitalization amounts to 25% of the GDP in 2001, it was less than 20% over the

1990s. Since 1990, there were on average 22 initial public offerings raising a total of $500 million in new funds annually.

Second, there is no active market for corporate control due to the concentrated ownership of the typical traded company. It is almost impossible to acquire a traded company through a hostile takeover bid since the controlling owner must approve a control change. Table 1 shows that transactions of large blocks occur very infrequently with a volume of only $106 million on average over the last decade. Yurtoglu (2000) reports the occurrence of less than 20 such cases over a ten-year period from 1988 to 1997.[7] Both of these two characteristics are consistent with the predictions of the law and finance literature discussed in the introduction.

A third, feature of the Turkish corporate governance landscape is the presence of business groups (BGs). BGs in Turkey are a collection of industrial and financial companies organized under the legal form of a holding company. A single family or sometimes a coalition of a small number of families controls these BGs, which often include a bank serving a function similar to the main bank in the Japanese BGs. Thus, the performance-improving[8] role of bank monitoring – as some observes argue for the bank-oriented systems of Japan and Germany – is at best questionable. Recent corporate scandals[9] raise also considerable doubt on the monitoring function of banks in Turkey. Consistent with the development of the Turkish economy from the remnants of the Ottoman Empire even the oldest of the BGs are relatively young. *Koc Holding* and *Cukurova Holding*, two of the oldest and largest BGs in Turkey, for example, have started their activities in the 1920s. Most of the today's largest 500 firms in Turkey are founded in the 1970s or later on (Bugra, 1994).

2.3 The legal environment

La Porta et al. (1998) report that stronger shareholder protection measures are associated with lower concentration of ownership, suggesting that concentrated ownership is a response to poor investor protection. The rights attached to shares of a company protect investors from potential expropriation by insiders and increase the probability with which they can assure the returns on their investment. Because shareholders exercise their power by voting for directors, La Porta et al. (1998) focus on voting procedures in evaluating shareholder rights.

The following section gives only a brief overview of the rights attached to shares and rights that support the voting mechanism against interference by the insiders. The interested reader is urged to Tanör (1999 and 2000), which gives a comprehensive account of the laws and regulations governing the publicly listed corporation in Turkey. These rights are defined by the Turkish commercial code and by the Capital Market law, which applies to the publicly listed firms in Turkey.

One of the most important findings of the empirical studies on ownership and control structures across the world is the frequently observed deviation of cash-flow rights from control rights, which is associated with lower firm value. There are mainly two ways around the one-share-one-vote principle in Turkey. First, companies can issue shares with different cash-flow rights and with different collateral rights in liquidation. Non-voting shares and shares assigning an arbitrarily high number of votes to one class of shares outstanding[10] can be issued. The second way in which the owners can reduce their ownership below their control rights is to organize the ownership structure of the firm in a pyramid. In the next section, we will present the extent to which these devices are used in Turkish listed companies.

Concerning the list of rights attached to the shares, several changes have improved the rights of minority shareholders in Turkey compared to Yurtoglu (2000), which looked at the period prior to 1997.[11] While it is not realistic to expect an immediate impact of these changes, laws and regulations move towards stronger minority shareholder rights. Overall, the legal framework will, of course, have a material impact with similar improvements in the enforcement of these laws.

3. Ownership and control structures of publicly listed Turkish companies

3.1 The dataset

The following analysis of the ownership and control structures is based on 305 companies listed at the Istanbul Stock Exchange at the end of 2001.[12] Table 2 gives some information on the market value of equity, age and the number of employees by broad industry classification. Manufacturing companies account for 65 percent of all listed companies. Seven percent are financial companies such as banks, insurance companies or other financial intermediaries. The remaining 28 percent come from a broadly defined service sector including hospitals, hotels, or wholesale trade. The mean and median market values are substantially lower than the figures corresponding to the end of 1997 (Yurtoglu, 2000) mainly due to the impact of the 2000-2001 financial crisis in Turkey. Half of the listed companies have a market value of less than $21 million. The median company is 28 years old and has about 280 employees. The firm size measured by the number of employees is larger in the financial sector due to the presence of large national banks in the sample. The listed firms constitute a fairly representative sample employing about 250,000 people in total.

3.2 Direct and ultimate ownership and control

Turkish companies exhibit highly concentrated and centralized ownership structures. Families, directly or indirectly, own about 80 percent of all companies and keep the majority control. The separation of ownership and control is mainly achieved through pyramidal or complex ownership structures and by using dual-class shares. In a substantial fraction of companies, the management coincides with the family of the controlling owner. Table 2 provides information on the identities and the percentage shareholdings of direct and ultimate shareholders in Turkey using data from year 2001[13].

Panel A reports the concentration of direct ownership by the identity of the largest shareholder (C1). Holding companies are the most frequently observed direct shareholders having the largest stake in 121 companies. Their mean ownership is equal to 47 percent of the outstanding shares. Non-financial companies and financial companies have the largest stake in 57 and 39 companies, respectively. Their stakes are also close to 50 percent. Families are the largest direct shareholders of 54 companies and own on average about 35 percent of the shares. Direct foreign ownership is present in 21 cases with a mean stake of 65 percent. The Turkish state and some miscellaneous owners have the largest direct shareholdings in 6 and 7 companies, respectively. In the next column we present the mean and the standard deviation of the percentage of a company's outstanding equity held by the largest five shareholders (C5). Overall, the five largest shareholders own about 64 percent of the equity. The final columns reports the frequency distribution of the outstanding equity held by a large number of small investors (Dispersed). The mean of this fraction is equal to 33 percent of the equity.

Ultimate owners are by definition individuals or the state. In pyramidal structures, such as depicted in Figure 1, industrial companies and financial institutions appear among the owners. Substantial numbers of share stakes are held by companies, which in turn are held by other shareholders. Therefore, to pinpoint who actually owns a company, pyramidal ownership structures and the impact of dual class shares must be taken into account.

Figure 1 presents an example of separating the cash-flow rights from the control rights using pyramidal structures. *Celik Halat*, a medium-size industrial company has three direct owners: *Dogan Holding* with 48.44 percent, *Disbank* with 10 percent and *Dogan Dis Ticaret* with 4 percent[14] of the equity. The remaining 37.56 percent are distributed among a large number of dispersed shareholders. A closer inspection of the ownership chains of these three direct owners reveals that 49 percent of the shares of the largest direct owner, *Dogan Holding* belongs to *Adilbey Holding*, another holding company and to the *Dogan Family* with 16.7 percent of the shares. *Dogan Family* is the sole owner of *Adilbey Holding* with 100 percent of the shares outstanding. Dispersed shareholders held also 34.24 percent of the *Dogan Holding*. A similar chain of ownership relations is present in the second largest shareholder, *Disbank*, leading to the ultimate control of the *Dogan Family*. Since *Dogan Family* at each level has the majority control, the control rights amount to 62.44 percent (48.44%+10%+4%). Multiplying and summing over all relevant control chains, we come up with 39.82 percent of cash-flow rights, which is substantially lower than the control rights. The wedge in this example is equal to 1.56 (62.44/39.82), wheras the number of pyramidal layers (*PYR*) is equal to 4.

The second figure displays the use of dual class shares to achieve a similar separation of cash-flow rights from control rights. *Selcuk Gida*, a small company based in Izmir, has two classes of shares. There are 280,000 A-shares and 4,520,000 B-shares. A- and B-shares have the same face value constituting a total stock capital of 4,800,000 million shares. A-shares carry 50 voting rights and B-shares carry only one voting right. Thus, A-shares carry 78.18 percent of the voting rights, while B-shares carry 21.82 percent of the total votes. Four largest shareholders of *Selcuk Gida* are Mr. *E. I. Alharal* (general manager and board member), Mr. *E. V. Alharal* (board member), Mr. *V. Franco* (board member), and Mr. *T.*

Berkan. Not surprisingly, the four largest shareholders own all A-shares and some fraction of B-shares, whereas dispersed shareholders own only B-shares. The distribution of A- and B-shares among the large and minority shareholders is shown in Figure 2. Mr. *E. I. Alharal* owns 143,998 A-shares and 298,246 B-shares which make up 9.2 percent of the cash-flow rights ((143,998 + 298,246)/4,800,000 = 9.2%). On the other hand, the control (voting) rights associtaed with his shareholdings amount to 40.48 percent (7,199,900 votes from his A-shares and 298,246 votes from B-shares of a total of 18,520,000 votes). Similar computations show that the voting rights of *E. V. Alharal*, Mr. *V. Franco*, and Mr. *T. Berkan* are 13.36 percent, 13.34 percent, and 10.97 percent, respectively. The total voting rights of the *Alharal family* in Selcuk Gida is, thus, 53.85 percent, while their cash-flow rights are only 11.8 percent. The wedge in this example is equal to 4.56 (=53.85/11.8).

Panel B reports the results of this exercise of tracing the ultimate ownership of companies. Families control 242 of the 305 listed companies with available ownership data. Twenty-six of the remaining companies are controlled by two legal entities which have rather unusual ownership structures. The first (*Türkiye Is Bankasi*) is a quasi-private bank under managerial control and the second (*OYAK* Group) is a quasi-private group of companies.[15] Foreign companies are the controlling owners of 22 Turkish companies and there are 12 companies under state ownership. The remaining three companies in the miscellaneous category are controlled by entities similar to foundations.

At the direct ownership level, the average stake of the largest shareholder is about 45 percent. This number understates the true control potential of large shareholders. It is usual that the controlling owner has more than a single direct ownership stake. Combing all ownership stakes under the control of the ultimate owner, we observe that the true fraction of control rights of families is about 67 percent of the outstanding shares (column 3). The cash-flow rights are, however, substantially lower than this figure. The cash-flow rights of families has a mean of 50 percent. In more than half of the companies controlled by families there are substantial deviations of cash-flow rights from control rights leading to an average wedge of 5.29 (Wedge=Voting Rights/Cash-flow rights). It is worth noting that, this figure is much higher than 1.32, which Yurtoglu (2000) reports for Turkish companies under ultimate family control using 1997 data. The main reason for this large difference is that 1997 data do not allow to consider the role of dual class shares, whereas improved disclosure allows us to consider them using the latest data. In the next column, we present the average number of pyramidal layers (*PYR*) used to sustain the wedge. The mean of *PYR* is very close to two. In only 73 companies we observe no pyramiding. The remaining 169 companies have two or more layers of ownership chains. Of course, an alternative way of creating a wedge is the use dual class shares. The next column reports the fraction of companies with dual class shares. In 44 percent of companies under family control, there are more than one class of shares.

3.3 The board of directors

From an agency perspective the independence of the board of directors is seen as a disciplining mechanism on the discretionary behavior of managers. While the bargaining power of the top managers has an influence on the composition and characteristics of boards, the board composition and size seem to be related to the alignment of shareholder and manager interests[16]. For example, Core et al. (1999) and Hallock (1997) report higher CEO pay when a board contains directors, who are more likely to be influenced by the CEO, which is consistent with an entrenchment effect.

Owner families dominate the boards of Turkish companies and boards are in the first place an internal mechanism of control affirming the owners' influence on the company. The fraction of board members that are members of the controlling family is reported in the last column of Table 3 (Panel B) along with the median board size. At least half of the board members are also members of the controlling family in the median family-controlled company.[17]

3.4 Other mechanisms of control

The previous section documents the separation of cash flow rights from control rights through pyramiding and dual-class shares. In addition to these powerful mechanisms of control, there are some other control-enhancing corporate charter provisions used by Turkish companies. These include preferential treatment of the controlling owners in the design of board of directors and board of supervisors. They also include the preferential treatment of the controlling owners in the determination of the dividend policy and preferential treatment of controlling owners in case of liquidation among different classes of shares.

Twenty-nine company charters allow for superior dividends for classes of shares held by controlling family and there are 16 companies, whose charters treat the controlling owners better than minority shareholders in case of bankruptcy. In 126 companies the absolute majority of the board of directors can solely be nominated by controlling owners and 52 companies allow their insiders to determine the composition of the supervisory board. The incidence of these additional mechanisms to enhance the corporate control underline the fact that control is valuable and insiders are keen to protect it firmly.

3.5 Families

The analysis of ultimate ownership and control structures presented in panel B of table 2 is conducted at the level of individual firms. Perhaps, a more interesting way of summarizing this information is to report the fractions of total market value under the control of individual families. Similar information on East Asian and European countries indicate that the control of listed companies rests in the hands of a small number of families.[18] For example, in the Philippines, Indonesia, Korea, Italy and Switzerland, the most powerful family controls more than 10 percent of the total market value of listed companies. The fraction of total value of listed companies under the control of top 5 (10) families is much more concentrated reaching almost 43 percent (53 percent) in the Philippines, 41 percent (58 percent) in Korea and 32 percent (46.2 percent) in Thailand to give a few examples.

Similar computations for Turkey suggest a big concentration of the value of corporate assets in the hands of a few families. Table 4 gives an overview of the ten largest business groups containing eight of the richest families in Turkey that own publicly listed companies. Along with the number of listed firms and their total market value as a fraction of the total market value of ISE companies, we also report the name of the controlling family, the foundation year of the first group member company, the total number of (listed and unlisted) firms, and the total employment of the group as a whole.[19]

The largest family, *Koc* controls 15 companies listed at the ISE. The total market value of these companies amounts to almost 19 percent of the total market capitalization in Turkey. *Koc* is a diversified conglomerate with 103 companies among them many with firm relationships to world's household names such as Ford Motor Company, Fiat, Allianz, and LG Electronics. The group employs a total of about 50 thousand people, has investments in almost all sectors ranging from finance to automotive and food to energy, and a turnover close to $10 billion. Its roots can be traced back to 1926, when the founder *Vehbi Koc* started out with a modest investment in a retail shop. The group is now run by the grandson of *V. Koc*, *Mustafa Koc*, who took over the chairmanship from his father.[20]

The next largest business group is organized around *Sabanci* holding, which controls a total of 71 companies out of which 10 are listed at the ISE. The market values of these ten listed companies amount to 14 percent of the total capitalization at the ISE. The third largest family in Table 4, *Karamehmet* family, which controls the *Cukurova Group*, has six listed companies accounting for about 13 percent of the market capitalization. In total, the top five business groups account for almost half of the total market capitalization. Adding the total market values of the five next largest groups raises this fraction to 55 percent.

It is worth noting that, two of the listed groups are not organized under family ownership but have a rather unusual ownership structure as mentioned before. The larger of these two groups, *Is Bankasi*, can be described as being the central decision-making unit of another group of companies owned and managed by a foundation belonging to the employees of the bank.[21] The second non-family group, *Oyak*, is a quasi-private group of companies founded in 1961 by a special law as the social security organization for the members of the Turkish army and enjoys a compulsory 10 percent levy on the net salary of Turkey's 155,000 serving officers who, together with 30,000 current pensioners, make up *Oyak*'s members.[22]

4. The impact on company valuation

Perhaps the most important result on the relationship between ownership structure and performance is due to Mørck, Shleifer and Vishny (1988). They present evidence of a relationship between the shareholdings of a company's board of directors and Tobin's q and find a non-monotonic up/down/up again pattern, which they attribute to two conflicting effects of insider share ownership: incentive alignment effect and the entrenchment effect.

In contrast, Demsetz and Lehn (1985) contend that the ownership structure of the firm may not have important implications for firm performance due to lower capital acquisition costs and other profit-enhancing aspects of diffuse ownership if shareholders choose to broaden ownership. Indeed, they find no correlation between ownership concentration and performance and assert that there is little support for the divergence in managerial and stockholder interests hypothesized by Berle and Means (1932).

More recently, Claessens et al. (2002) present evidence for a large sample of East Asian companies that the divergence of cash-flow rights from control rights is associated with entrenchment discounts.[23] The available evidence on Turkey is also consistent with these findings. Yurtoglu (2000) using data from 1997 reports that market-to-book ratios of Turkish listed companies where cash-flow rights deviate from control rights are significantly lower than in companies with no deviation. Similar results are obtained for dividend pay-out ratios and profitability measures such as return on assets.

Table 5 reports the impact of separating voting rights (*VR*) from cash-flow rights (*CFR*). Equation 1 reports that higher cash flow rights are associated with significantly higher market valuation as measured by the market to book ratio (market value of equity divided by the book value of total assets). On the other hand, higher control or voting rights (*VR*) lead to lower market to book ratios.[24] The equation controls for the size of sample firms by including the logarithm of total sales as an additional explanatory variable. Overall these three variables account for 3 percent of the variation in market to book ratios of 274 listed non-financial firms. The next equation enters the ratio of *CFR* to *VR* again controlling for firm size. We obtain a similar result, the coefficient of 0.16 for the *CFR/VR* variable indicates significantly lower market to book ratios for firms where *CFR* are lower than *VR*. The next the columns report the impact of pyramiding and dual class shares. In equation 3 a dummy variable, *Pyramids*, takes on the value 1 if a firm is two or more levels down a pyramidal structure. In equation 4, another dummy variable, *Dual*, takes on the value 1 if the separation of cash flow rights and voting rights is achieved with dual class shares. The estimated coefficients on *Pyramids* and *Dual* show that the existence of both mechanisms is associated with lower market valuation, but none is significant at the conventional levels, suggesting poor performance in companies where the deviation of cash-flow rights from voting rights is not only present but also large.

We have also employed the following variables along with company sales to account for other factors that are likely to affect firm valuation ratios: firms with greater *sales growth* and higher *investment* rates are more likely to have better investment opportunities, we also predicted that *firm age* (measured in years since establishment) to be positively related to firm value due to first-mover advantages in the most profitable sectors of the economy. Twenty-one industry dummies were also included to account for industry specific fixed effects. All of these variables with the exception of *investment* and *sales growth* when they were both included were significant and did not change the significance of the impact of control variables in a substantial way.[25] We have also found that older firms had significantly higher market to book ratios, which is possibly due to their longer presence associated with better disclosure, more liquid trading and more attention from analysts as predicted by Claessens et al. (2002).

5. Conclusion

This paper described the ownership structures of 305 publicly listed companies in Turkey. The overwhelming majority of these firms are ultimately owned and controlled by families who organize a large number of companies under a pyramidal ownership structure or through a complicated web of inter-corporate equity linkages. Thus, Turkey can be classified as an "insider system" country, with the insiders being the country's richest families.

The controlling owners use also dual class shares or other corporate charter arrangements through which they can reduce their cash flow rights while they firmly sit on their companies.

A number of empirical papers have shown that such arrangements harm minority shareholders while they benefit the controlling owners. The results obtained here are consistent with the available empirical evidence on an already long list of countries with similar corporate governance problems. These results obtained with 2001 data are similar to those reported for the 1990s (Yurtoglu, 2000) and indicate that the systematically lower market valuation for companies with such arrangements is not a time specific phenomenon.

Given that bad governance discourages small shareholders to supply the funds that companies badly need, which steps should be taken to improve corporate governance in Turkey?[26] While the integration of world financial markets will in the long run improve corporate governance as some observers argue, existing evidence suggests that increased legal protection of investors through stronger accounting standards, increased transparency and other legal remedies that allow investors to take action can also be useful. Recent research shows that such reforms are both feasible and fruitful regardless of the legal system of countries (Gugler, Mueller and Yurtoglu, 2003).

The fact that families have concentrated a huge amount of wealth under their control suggests in itself that future work on corporate governance issues in developing countries should give priority to a deeper understanding of families' objective functions. The much-debated corporate governance reform at a more substantial level will be hard to accomplish against the will and interests of such powerful actors in Turkey.

Appendix: Ownership Data

Data on the ownership structures were collected from the footnotes accompanying the 2001 financial statements available from the Istanbul Stock exchange. These notes provide data on the first level of shareholding (direct ownership) such as the names of the owners, the number of shares declared[27], the percentage of ownership, and the voting rights associated with dual class shares whenever they exist. There is also detailed information on all the participations of listed companies in listed or unlisted subsidiaries. Specifically, this detailed information provided by holding companies enables us to go beyond the direct ownership and to determine the ultimate owners. In some cases, where the necessary information on ownership was not available, we consulted individual company reports. In a handful of cases, we assumed that the unlisted owner company was owned by 100 percent by the family or holding company associated with the listed company.

Table 1 Overview of the publicly listed firms and of the Istanbul Stock Exchange (ISE)

	Number of Listed Companies	***IPOs***	***De-Listings***	***Trading Volume (Mn. $)***	***Funds raised through IPOs***	***Off-stock exchange transactions (Mn. $)***	***ISE-100 Index ($ based: 1985=100)***	***Stock Market Capitalization (Mn. $)***	***Stock Market Capitalization /GDP***
1986	80			13			132	938	
1987	82			118			385	3,125	2.25%
1988	79			115			120	1,128	2.39%
1989	76			773			561	6,756	3.49%
1990	110	35	10	5,854	985.31	3	643	18,737	8.30%
1991	134	24	--	8,502	391.63	20	501	15,564	10.71%
1992	145	13	2	8,567	94.42	10	273	9,922	7.72%
1993	160	17	2	21,771	152.45	37	833	37,824	13.14%
1994	176	25	9	23,203	270.48	33	413	21,785	18.60%
1995	205	30	1	52,357	246.78	38	383	20,782	13.59%
1996	228	25	2	37,737	167.92	106	534	30,797	15.20%
1997	258	31	1	58,104	420.38	240	982	61,879	24.17%
1998	277	20	1	70,396	383.35	220	484	33,975	16.92%
1999	285	10	2	84,034	87.41	94	1,654	114,271	59.70%
2000	315	36	6	181,934	2,809.53	354	817	69,507	33.82%
2001	310	1	6	80,400	0.24	121	558	47,689	25.06%

Table 2 Descriptive statistics

Industry	% of Listed Firms	Market value of equity (Million $)		Age		Employees	
		Mean	Median	Mean	Median	Mean	Median
Manufacturing	65%	123.31	21.16	30.42	30.00	737.10	388.00
Financial	7%	377.84	22.50	23.00	19.00	1604.39	653.00
Services	28%	144.73	11.40	19.94	12.00	706.46	33.00
Total		147.71	20.29	26.82	28.00	793.95	281.50

Table 3 Ownership and control structure of Turkish listed companies

Panel A: Direct ownership

Largest Shareholder Identity	N	C1		C5		Dispersed	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
Holding Company	121	46.39	17.56	66.45	15.71	31.74	15.22
Non-financial companies	57	47.83	16.16	67.92	13.40	30.53	13.69
Financial companies	39	41.18	19.19	52.72	20.47	44.66	22.95
Families	54	34.71	22.04	55.49	24.40	38.92	24.94
Foreign companies	21	65.75	19.91	81.00	12.98	18.6	13.48
State	6	72.56	29.76	74.86	26.32	19.31	20.26
Miscellaneous	7	51.13	26.81	68.31	18.28	28.13	18.88
All	305	45.88	20.57	63.61	20.23	33.2	19.24

Panel B Ultimate ownership and control

Ultimate Owner Identity	N	Control Rights		Cash-flow Rights		Wedge		PYR	Dual	Board	Family / Board
		Mean	Median	Mean	Median	Mean	Median	Mean	Mean	Median	Median
Families	242	67.03	67.01	50.56	53.58	5.29	1.12	1.86	44%	6	3
Oyak - T. IS Bank	26	65.66	64.25	37.74	35.09	1.00	1.00	1.17	38%	7	0
Foreign	22	66.58	69.28	64.68	66.78	1.03	1.00	1.32	27%	7	2
State	12	66.90	57.17	62.26	54.56	1.10	1.00	1.33	25%	7	0
Miscellaneous	3	66.58	69.28	41.10	24.59	2.91	2.23	1.88	67%	6	0
All	305	66.62	66.23	50.85	53.00	4.57	1.00	1.79	42%	6	2

Table 4 Ten largest business groups with publicly listed firms

Rank	Business Group	Family	Industry	Establishment	Number of Listed Firms	Fraction of Market Capitalization	Total Number of Firms	Total Emp
1	Koc Holding	Koc	Diversified	1926	15	18.62%	103	50,543
2	Sabanci Holding	Sabanci	Diversified	1932	10	13.56%	71	31,560
3	Cukurova Holding	Karamehmet	Diversified	1925	6	12.46%	96	32,000
4	Is Bank Group	Foundation[a]	Banking	1924	13	9,57%	123	15,000
5	Dogan Holding	Dogan	Media	1950	11	3.02%	125	13,500
6	Akkök	Dinckök	Textiles / Energy	1952	4	2.09%	12	6,129
7	Enka Holding	Tara / Gülcelik	Construction	1957	3	2.05%	18	~5000
8	Oyak Group	Foundation[a]	Diversified	1961	7	1.50%	27	~5000
9	Alarko Holding	Alaton / Garih	Diversified	1954	3	1.01%	7[b]	6,000
10	Eczacibasi Group	Eczacibasi	Pharmaceuticals	1942	5	0.49%	37	7,300

[a] see the text for an explanation of the ownership structures of these groups.
[b] The Alarko Group is organized in a slightly different way than the ones listed in this table. We were only able to determine the sectors of activity instead of the number of companies under this group.

Table 5 Market to book ratios and the separation of control rights from cash-flow rights

Variables	(1)	(2)	(3)	(4)
CFR	0.2346[a] (0.0845)			
VR	-0.1830[a] (0.0915)			
CFR/VR		0.1662[a] (0.0594)	0.1249[b] (0.0648)	0.1616[b] (0.0608)
Pyramids			-0.0477 (0.1102)	
Dual				-0.0138 (0.0374)
Log (Sales)	0.0105 (0.0072)	0.0098 (0.0071)	0.0120 (0.0073)	0.0101 (0.0071)
Constant	0.8739[a] (0.1215)	0.8479[a] (.1195)	0.8534[a] (0.1285)	0.8427[a] (0.1245)
R^2	0.031	0.029	0.029	0.030
N	274	274	274	274

[a] significant at the 1% level.
[b] significant at the 5% level.

Figure 1 An Example of a Pyramidal Ownership Structure: Celik Halat A.S. (2001)

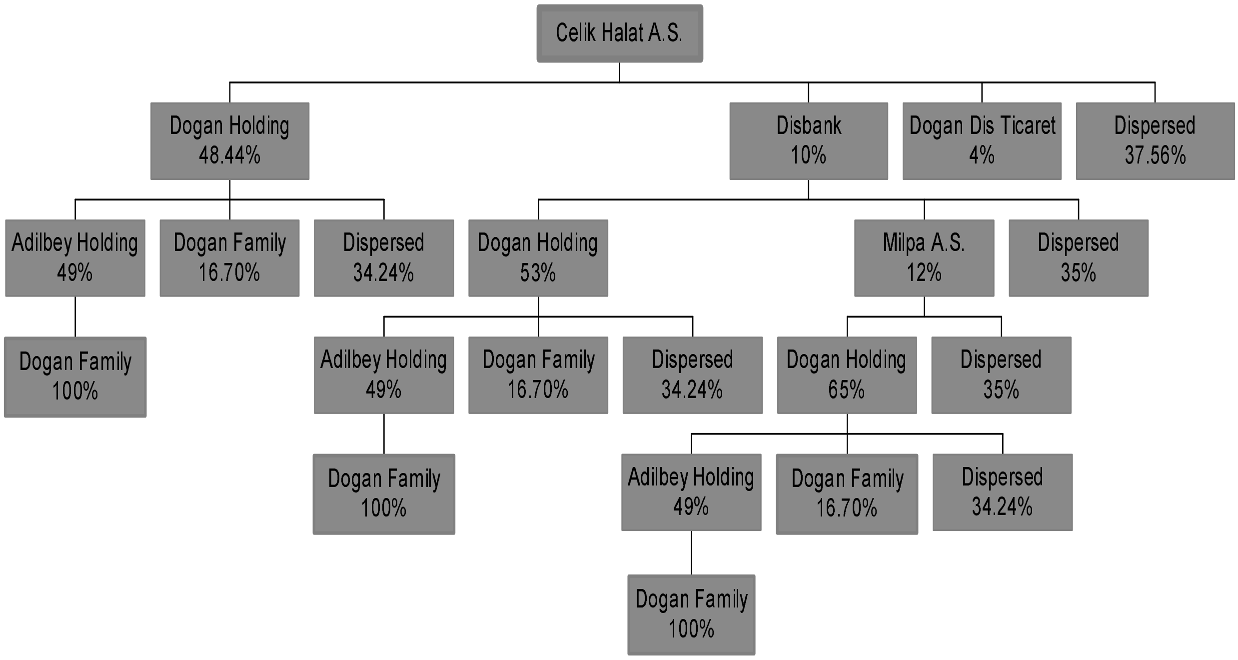
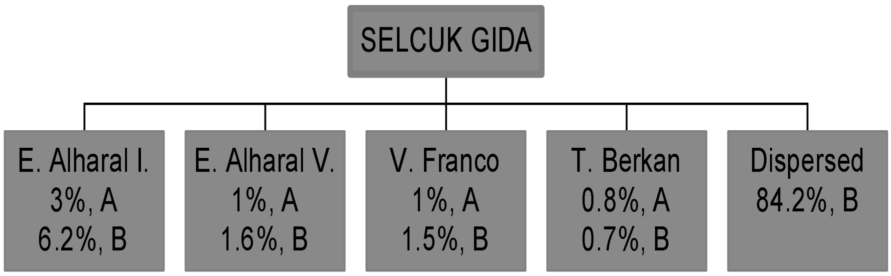


Figure 2: An Example of Dual Class Shares: Selcuk Gida A.S. (2001)



References:

Ararat, M. and M. Ugur, 2003, Corporate Governance in Turkey: an overview and some policy recommendations, *Corporate Governance*, 3 (1), 58-75.

Bebchuk,L., R. Kraakman and G. Triantis, 2000, Stock Pyramids, Cross-Ownership, and Dual Class Equity, in *Concentrated Corporate Ownership*, (R. Morck, ed.), 295-315.

Berglof, E. and E-L von Thadden, 1999, The Changing Corporate Governance Paradigm: Implications for Transition and Developing Countries, Conference Paper, *Annual World Bank Conference on Development Economics*, Washington D.C.

Berle, A.A. Jr. And G.C. Means. 1932. *The Modern Corporation and Private Property*, Macmillan, New York.

Bugra, A. 1994. *State and Business in Modern Turkey*, State University of New York Press.

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

Claessens, S., S. Djankov, J. P. H. Fan and L. H. P. Lang, 2002, Disentangling the Incentive and Entrenchment Effects of Large Shareholders, *Journal of Finance* 57, 2741-2771.

Core J., R. Holthausen, and D. Larcker, 1999, Corporate Governance, Chief Executive Officer Compensation, and Firm Performance, *Journal of Financial Economics* 51, 371-406.

Demirguc-Kunt, A. and Maksimovic, V., 1998, Law, Finance and Firm Growth, *Journal of Finance*, 53 (Dec.), pp.2107-2137.

Demsetz, H. and K. Lehn, 1985, The Structure of Corporate Ownership: Causes and Consequences, *Journal of Political Economy* 93, 1155-1177.

Economist, 2003 (April 19), The Retiring of Mr. Koc, p. 58.

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

Financial Times, 2001 (October 9), Empire-building that Began with a Military Exercise.

Gordon, G. and F. Schmid, 1996, Universal Banking and The Performance of German Firms, NBER working paper #5453.

Gugler, K. (Ed.), 2001, *Corporate Governance and Economic Performance*, Oxford University Press.

Gugler, K. and B. B. Yurtoglu, 2003, Average Q, Marginal Q, and the Relation Between Ownership and Performance, *Economics Letters*, 78(3), 379 - 384.

Gugler, K. and B. B. Yurtoglu, 2003, Corporate Governance and Dividend Pay-out Policy in Germany, *European Economic Review* (4) August, 731-758.

Gugler, K., Mueller, D. C. and Yurtoglu, B. B., 2002, Corporate Governance and the Returns on Investment, European Corporate Governance Institute, Finance Working Paper 06/2003.

Gugler, K., Mueller, D. C. and Yurtoglu, B. B., 2003, The Impact of Corporate Governance on Investment Returns in Developed and Developing Countries, *The Economic Journal, 113 (491), November,* F511-F539.

Hallock, K., 1997, Reciprocally Interlocking Boards of Directors and Executive Compensation, *Journal of Financial and Quantitative Analysis* 32, 331-334.

Hermalin, B.E. and Michael S. Weisbach, 2001, Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature, NBER working paper, #8161.

Jensen, M. 1986, The Agency Costs of Free Cash Flow: Corporate Finance and Takeovers, *American Economic Review,* Vol. 76, No. 2, 323-329.

Johnson, Simon, Rafael La Porta, Florencio López-de-Silanes, and Andrei Shleifer, 2000, Tunneling, *American Economic Review Papers and Proceedings*, Vol. 90, Iss. 2, 22-27.

Kepenek, Y. and N. Yentürk, 1996, *Türkiye Ekonomisi*, Remzi Kitapevi, Istanbul.

Khanna T. and K. Palepu, 2000, The Relation between Performance and Ownership in Emerging Markets: an Empirical Analysis of Indian Business Groups, in *Concentrated Corporate Ownership*, (R. Morck, ed.).

La Porta, R., F.Lopez-de-Silanes, A. Shleifer, and R. Vishny 2000, Agency Problems and Dividend Policies Around the World, *Journal of Finance* 55, 1, 1-33.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and R. Vishny, 1998, Law and Finance, *Journal of Political Economy* 106, 1113-1155.

Levine, R. and Zervos, S., 1998, Stock Markets, Banks, and Economic Growth, *American Economic Review*, 88 (June), pp. 537-558.

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

Modigliani, F. and Perotti, E., 1997, Protection of Minority Interest and the Development of Security Markets, *Managerial and Decision Economics*, 18 (Nov./Dec.), pp. 519-528.

MØrck, R., A. Shleifer and R. Vishny, 1988, Management Ownership and Market Valuation: An Empirical Analysis, *Journal of Financial Economics* 20, 293-315.

Mueller, D. C. and Yurtoglu, B. B., 2000, Country Legal Environments and Corporate Investment Performance, *German Economic Review*, *1*(May), 187-220.

Nenova, T., forthcoming, The value of Corporate Voting Rights and Control: A Cross-country Analysis, *Journal of Financial Economics*.

Rajan, R. and Zingales, L., 1998, Financial Dependence and Growth, *American Economic Review,* 58(June), pp. 559-586.

Sak, G., 1995, The Istanbul Stock Exchange and the Corporate Sector: Reflections on Turkey's Financial Liberalization Process, in *Development of Financial Markets in the Arab Countries, Iran and Turkey*, ERF Publication Services, Cairo, 199-213.

Shleifer, A. and R. W. Vishny, 1997. A Survey of Corporate Governance, *Journal of Finance* June, 737-83.

Tanör, R., 1999, *Türk Sermaye Piyasasi: Taraflar*, Beta Basim Yayim Dagitim, Istanbul.

Tanör, R., 2000, *Türk Sermaye Piyasasi: Halka Arz*, Beta Basim Yayim Dagitim, Istanbul.

Tilic, D., 2000, Media Ownership Structure in Turkey, Progressive Journalists Association, Ankara.

Wolfenzon, D., 1999, A Theory of Pyramidal Ownership, working paper, Harvard University.

Yurtoglu, B.B., 2000, Ownership, Control and Performance of Turkish Listed Companies, *Empirica* 27, 193-222.

Notes:

---

[1] Some scholars find the theoretical framework of the law and finance literature too narrow to analyze the corporate governance issues in developing countries (Berglof and von Thadden, 1999)

[2] See Morck, Shleifer and Vishny (1988) and McConnel and Servaes (1990), and Shleifer and Vishny (1997) for a survey.

[3] Another way of curbing the managerial discretion problem is to have more debt (Jensen 1986).

[4] See Gugler (2001, Table 2.2) for a survey indicating that the net effect of large shareholder monitoring in Anglo-Saxon countries is positive.

[5] Nenova (forthcoming) reports the extent and the effects of such devices for 18 countries.

[6] See Sak (1995) for an overview of Turkey's financial liberalization process after 1980.

[7] SDC, the major source of mergers and acquisitions data reports for the 1986-2002 period only 13 completed transactions with a control change (acquisition of more than 50 percent of the stock capital) and only 41 cases with more than 10 percent of the stock capital changing hands in Turkey.

[8] See for example, Gordon and Schmid (1996) who argue that bank influence improves firm performance.

[9] A long list of cases in tunneling raised considerable concern in the Turkish public over the last decade. Many of them were simple resource transfers of controlling shareholders from their firms in the form of outright theft or fraud. While a number of listed companies' minority shareholders were hurt by these activities, a larger fraction represented wealth transfers from state banks to controlling shareholders of unlisted firms, involving in most cases the visible hands of politicians.

[10] Many company charters contain provisions that assign to one class of shares outstanding a large number of votes (e.g., 100,000) in the appointment of the board of directors.

[11] To give an example, proxy by mail is now allowed in Turkey.

[12] See Yurtoglu (2000) for a similar exposition. The advantage of 2001 data is that they contain information on dual class shares, which was not available in 1997.

[13] For a similar analysis using 1997 data, see Yurtoglu (2000).

[14] To make the figure as simple as possible, we do not show the ownership structure of the third largest shareholder, Dogan Dis Ticaret. This company is also ultimately owned by Dogan family.

[15] This bank has an unusual ownership structure with 35 % of its voting stock under the control of a state agency and 45 % under the control of a foundation belonging to the employees of the bank.

OYAK Group is founded in 1961 by a special law as a social security organization for the members of the Turkish army.

[16] See Hermalin and Weissbach (2001) for a survey.

[17] These numbers understate the true extent of the family influence in boards, because we rely to a comparison of surnames in making these calculations. Bugra (1994) after a series of exceptionally informative case studies on Turkish firms is much more pessimistic about the independence of Turkish boards and cites an interesting comment of one of her interviewees: "They (outside board members) are more like the steward of a rural estate than the professional manager of an industrial corporation."

[18] See Claessens et al. (2000) for East Asia and Faccio and Lang (2002) for Europe.

[19] Perhaps an interesting extension of this table would be to report the concentration ratios at the industry level that are under control of the top 10 groups. Unfortunately such information is not available. Nevertheless, we present a few figures for some critical industries. For example, the top 10 groups control almost 90 percent of daily newspaper circulation and almost all of the television stations at the national level (Tilic, 2000). Some back of the envelope calculations indicate that a large fraction of domestic lending under the control of the top 10 groups through their ownership of most of the private banks and insurance companies.

[20] See, Economist (April 19, 2003).

[21] Interestingly, a political party, People's Republican party (CHP) which acted as the founding actor of the Turkish Republic, is one of the largest shareholders of this bank as well.

[22] See, Financial Times (October 9, 2001).

[23] Khanna and Palepu (2000) argue that if families provide superior management, which may be scarce in developing countries, than family control even organized under pyramids may be on net beneficial.

[24] The use of average performance measures such as market to book ratio to analyze agency problems has been critisized by Gugler and Yurtoglu (2003) who advocate the superiority of a marginal q. We stick to market to book ratios for comparability.

[25] Results are available upon request.

[26] See Ararat and Ugur (2003) for a discussion of related polics issues.

[27] Unless there is a special amendment to the company charter, shares in Turkey are registered rather than assigned to the bearer. For this reason, nominee shareholding is not a difficulty in Turkey.