Control-ownership Patterns in Turkey-listed Firms

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Abstract

The motivation of this study stems from the importance of protecting investors’ rights, and particularly those of minority shareholders. This study addresses the predominant control-ownership structure of the top 100 firms listed in Bursa Istanbul (BI) using the data for 2015. It shows the most common control-ownership structure within business groups, in which shareholders exercise control over a group of firms and maintain a small stake of firms’ equities. Turkish firms are categorised with highly concentrated ownership and families’ being the dominant shareholders owning more than 80\% of all publically listed firms in BI. The results of the study indicate that the divergence between cash rights and control rights (wedge) in the top 100 Turkish firms is mainly achieved through a pyramidal ownership structure, dual class shares, and cross-ownership at about 41\%, 40\%, and 11\%, respectively, while approximately 8\% of firms do not use wedge. Hence, wedge exacerbates Type II Agency problems. This paper calls for future research to study the environment of the wedge for Turkish firms listed in BI.

Keywords: wedge, pyramidal structure, dual class shares, cross-ownership, Turkey

1. INTRODUCTION

The literature addresses firms’ ownership structure extensively. These studies compare ownership concentration with dispersed ownership, in which block ownership possesses a majority of the firms’ equities. In contrast, this paper investigates an ownership structure in which a founder exercises control and maintains a small portion of equity (cash-flow rights) in the affiliated firms. There are three principles ways to diversify between control rights and cash-flow rights: pyramids, dual class shares, and cross-ownership. Nevertheless, how this is exercised in this paper is referred to as wedge. This is because it allows shareholders to control affiliated firms with a small stake of investment (cash-flow rights). Wedge is defined as a mechanism to separate control rights and cash-flow rights. Wedge entrenches controllers from the market regarding corporate control, and it maintains firm control in the hands of the majority shareholders with a small fraction of cash-flow rights (Claessens, Djankov, & Lang, 2000). This enriches the majority shareholders’ control rights. Although this mitigates agency conflict between the agent and principal, the principal–principal agency conflicts still exist (Demirag & Serter, 2003). This facilitates expropriating minority shareholders’ rights in the interests of majority shareholders (Ararat, Aksu, & Tansel Cetin, 2015). This conflicts severely between controlling shareholders and minority shareholders, depending upon the relationship between the control rights and cash-flow rights (Bebchuk, Kraakman, & Triantis, 2000; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2002). This paper defines control rights as a controller’s ability to change the direction of a firm’s operation (this is due to the controller’s ability to invest in expensive projects or vice-versa). Whereas, cash-flow rights indicate a shareholder’s right to a firm’s profits and liquidity. Wedge is common in markets controlled by a family-ownership structure. These kinds of ownership structures distort controllers’ incentives; hence, they put more
concentration on the corporate governance mechanisms, extending from legal protection for minority shareholders to reputational limitations on controlling families. The same reason attracts political and market scrutiny in many countries to concentrate on problems inherent in exercising wedge. Thus, this study is an analysis of the governance and incentive features of ownership structures. Very few studies have examined the control-ownership structure in Turkey (Demirag & Serter, 2003; Yurtoglu, 2000). Based on the available literature, this study provides a sectoral analysis on control-ownership structure practised by firms listed in Bursa Istanbul. The paper’s main objective is to determine the mechanisms of wedge exercised in BI, which will provide the basis for future research and to examine the Type II Agency Problem in the Turkey business environment. Regarding theoretical contribution, this study extends the context of agency theory factors under investigation such as ownership structure. A study by Villalonga & Amit (2006) reports that the most important factors that worsen agency problem is control-ownership structure. Furthermore, regarding practical contribution this study’s finding will provide a useful ground for Capital Market Board of Turkey (CMBT) and policy makers to provide a relevant policy to enhance corporate governance’s effectiveness to mitigate agency problems.

2. MECHANISMS FOR SEPARATING CASH FLOW AND CONTROL

In this part, the discussion concentrates on the Turkish holding-ownership structure mechanisms used to maintain their control on affiliated firms through providing a small stake of equities, achieved via pyramidal ownership structure, cross-ownership, and dual class shares (Ararat et al., 2015). This study symbolises the divergence between control rights and cash-flow rights by $\alpha$, which reflects the stake of the majority shareholders’ equities (cash-flow rights).

2.1 Dual class shares

Dual class shares represent the most straightforward mechanism for the divergence between the control rights and cash-flow rights of a single firm. In fact, this kind of ownership structure is the only one that can be exercised without creating multiple firms or a group of firms. The firms’ founders might sign all voting rights to a stake $\alpha$ of shares belonging to the controlling shareholders, with the remaining shares distributed to the public with zero right to vote. The multiple class shares structure is especially dominant in Sweden, South Africa, and Turkey. In Turkey, firms promulgate two or more classes of shares with disproportionate voting rights, which are known as dual class shares (Khalil, Magnan, & Cohen, 2008). This is because Turkish Commercial Law (TCL) does not embrace the principle of one-share-one-vote. Therefore, Turkish firms issue more than one class of shares with different cash-flow rights and with different collateral rights in liquidation. According to TCL Article 401, firms can issue one class of shares with non-voting rights or with a high number of voting rights. In addition, according to TCL Article 388, the decision about the scales of shares in terms of voting rights and cash-flow rights should be taken during the general assembly meeting. Figure 1 shows an example of Selçuk Gida A.Ş.’s use of dual class shares to diverge between control rights and cash-flow rights. This example explains the common dual class shares used by Turkish firms listed in BI (Yurtoglu, 2003).

Selçuk Gida A.Ş. is a small firm operating in Izmir city, located in the North East of Turkey. This firm has two classes of shares: 280,000 Class A and 4,520,000 Class B shares. The class A shares and class B shares possess equal nominal value, creating 4,800,000 million shares as an entire stock capital. Each class A share carries 50 voting rights, while each class B share carries only one voting right. Therefore, the A shares carry 78.18% of the voting rights, whereas the B shares carry 21.82% of the voting rights. Selçuk Gida A.Ş. has four controlling (largest) shareholders, namely Mr EI Alharal (general manager and board member), Mr EV Alharal (board member), Mr V Franco (board member), and Mr T Berkman. All A shares and some fraction of the B shares are owned by the largest shareholders, while the remaining B shares are owned by dispersed ownership. Figure 1 displays the distribution of the A and B class of shares between the controlling shareholders and minority shareholders. Mr. EI Alharal has a portfolio of A and B class shares which is 143,998 and 298,246, respectively. This indicates that Mr EI Alharal’s portion of cash-flow rights is about 9.2 ((143,998 + 298,246)/4,800,000).

![Figure 1 An example of a dual class share: Selçuk Gida A.Ş. (2001) (Yurtoglu, 2003)](image-url)
In contrast, the owner possesses control rights scaled with his ownership at about a 40.48 portion of total voting rights (A shares equal to 7,199,000 votes and B shares equal to 298,246 votes of a total of 18,520,000 votes). The similar calculation indicates that the control rights of the other three controlling shareholders Mr. EV Alharal, Mr. Franco and Mr. Berkan are about 13.36%, 13.34%, and 10.97%, respectively. This shows that the Alharal family possesses about 53.85% of the control rights on Selçuk Gida A.Ş., whereas the Alharal family possesses about 11.8% of the cash-flow rights, and so the wedge for this case is about 4.56 (= 53.85/11.8). In summary, the control-ownership structure reviewed above may reflect majority shareholders’ incentives to expropriate minority shareholders’ interests. This evidence proposes that majority shareholders use their control rights to jeopardise minority shareholders’ wealth.

2.2 Pyramids

Firms might exercise wedge using single class shares via a pyramidal ownership structure. Such a structure consists of two levels: the majority shareholders possess ultimate control in a holding firm that in turn possesses ultimate control in an operating firm. While in the three level pyramids, the main holding firm controls a second-level holding firm that in turn controls the operating firms. In order to explain the value of wedge for a sample case of pyramids comprising of two levels or \( n \geq 2 \) firms, it is proposed that the majority shareholder possesses a portion \( S_1 \) of the equity in firm 1, and firm 1 possesses a portion \( S_2 \) of the equity of firm 2, and so on. As long as \( S_i \geq \frac{1}{2} \), \( i = 1 \ldots N \), the controller possesses direct control of the assets. As to the cash-flow rights, the controller possesses a portion (Bebchuk et al., 2000):

\[
\alpha = \left( \prod_{i=1}^{n} S_i \right)
\]

For any portion \( \alpha \), however small, there is a pyramid that allows the majority shareholders to get full control of the firm’s assets without possessing more than \( \alpha \) of the firm’s equity rights. In the barrier case in which the majority shareholder possesses 50 portions (the minimum requirement for control) of voting rights at each level of the pyramid, \( \alpha = (0.5)^n \). For a clear example of how swiftly pyramiding splits equity from control, consider a three-level pyramid with \( S_i = 0.50 \) at each level. At this point, the minority shareholders control the firm with only 12.5 portions of its equity rights.

The pyramid structure is the most dominant mechanism used to deviate between control rights and cash-flow rights (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1999). Claessens et al. (2000) claim that the pyramidal ownership structure is the most common ownership structure in Asian countries, and particularly Turkey (Ararat et al., 2015), as well as in several European countries (Holmén & Högfeldt, 1999). Çelik Halat A.Ş. represents an ideal example to illustrate the divergence between control rights and cash-flow rights using pyramidal structures in the context of Turkey. Figure 2 shows the pyramidal structure of Çelik Halat A.Ş. This medium-size industrial firm has three direct ownerships: 48.44% for Doğan Holding, 10% for Disbank and 4% of the equity for Doğan Diş Ticaret. The remaining equity is dispersed equity which is about 37.56%.

![Figure 2 Example of a pyramidal ownership structure: Çelik Halat A.Ş. (2001)](image)

The second level as it appears in the pyramidal structure in Figure 2 illustrates that 49% of Doğan Holding is owned by Adilbey Holding, with the remainder belonging to the Doğan family and dispersed ownership at 16.70% and 34.24%, respectively. The sole owner of Adilbey Holding with 100% shareholding is the Doğan
family. Therefore, it can be seen from Figure 2 that the Doğan family has the majority control at each level, which is about 62.44% (48.44% + 10% + 4%); whereas the cash-flow rights is about 39.82% as a result of calculations over relevant control chains. This is considered as a substantial gap between control rights and cash rights, known as a wedge. This can be calculated by dividing the control rights (62.44%) by the cash-flow rights (39.82%), which is about 1.56, while the pyramidal structure is a 4 pyramidal layer (PYR).

2.3 Cross-ownership

In opposition to the pyramidal ownership structure, the power of the controller reinforces and entrenches via horizontal cross-holdings of equities. Cross-ownership structure exercise control through distributing the voting rights of all the affiliated firms within the business group rather than concentrating them in the hands of an individual firm or investor. The relationship between cross-holding and control can be explained via the following example. Let us symbolise by $S_{ij}$ the portion of $n$ firm $i$ equity which is possessed by firm $j$, and propose that the majority controller possesses directly a portion $S_i$ of the equity of firm $i$. Proposing that for each $i$, the majority shareholder preserves (Bebchuk et al., 2000).

$$S_i + \left(\frac{\sum S_{ij}}{\sum S_{ij}}\right) S_{ij} > \frac{1}{2}$$

The majority shareholder controls the assets of all $n$ firms. Hence, the majority shareholders may possess a small portion of equity (cash-flow rights) in these firms. The clear example of a similar case is that the majority shareholders possess direct portions of equities $S$ in two firms with identical cross-ownership $h$ in the other, such that $S + h \geq \frac{1}{2}$ (e.g. majority shareholders control both firms). For this case, Bebchuk et al. (2000) report that the majority shareholder ratio of cash-flow rights is found out via its direct ownership $S$ over the total portion of equity that is not cross-held (1-h).

$$\alpha = \left(\frac{S}{1-h}\right)$$

Cross-holdings ownership is dominant in Asian nations, for instance in Turkey, where the most popular example is the largest pharmaceutical firm known as Eczacıbaşı İlaç (see Figure 3). This firm has three large shareholders with ownership portions ranging from 21.6 to 28.2%, whereas 22% of its capital is owned by dispersed ownership. All three large ownerships are under control of the Eczacıbaşı group. The Eczacıbaşı family is the founder and controller of this group, using two holding firms: Eczacıbaşı Yatırım Holding (traded) and Eczacıbaşı Holding (non-traded). These two holding firms, in turn, are under the control of the same business group. Eczacıbaşı İlaç possesses 43.5% of the control rights (voting rights) in Eczacıbaşı Holding. At the same time, the other two holding firms possess cross-ownerships between each other.

![Diagram](Figure 3 Control-ownership of Eczacıbaşı İlaç (Yurtoglu, 2000))

3. OTHER MECHANISMS OF CONTROL

The previous part addresses the divergence between control rights and cash-flow rights using pyramiding, dual class shares, and cross-ownership. In addition to these important control-ownership mechanisms, Turkish firms
use some other mechanisms of control-enhancing corporate charter provisions. Accordingly, controlling shareholders get some preferential treatment in order to design the board of directors, and determine the dividend policies and liquidation preferences between the different classes of shares. The controlling shareholders of the three firms of this study’s sample have shares with privilege that allows them to obtain dividend concessions. In 38 firms, the absolute majority of the board of directors can solely be nominated by the controlling shareholders.

4. RESEARCH METHOD AND DATA COLLECTION

The aim of this paper is to identify the extent to which the top 100 firms listed in BI for the year-end of 2015 use a wedge. In order to hand-pick the wedge data, this study uses the BI website, and particularly the public disclosure platform, as this platform provides firms’ data related to control rights, cash-flow rights, dual class shares and cross-ownership. This assists to identify the control-ownership structure of Turkish firms and get a better grasp of Turkish firms’ ownership structure and corporate governance system.

5. DATA ANALYSES AND RESULTS

The descriptive statistics of control-ownership structure are disclosed in Figure 4. Firms using the pyramidal ownership structure are about 41% of the top 100 firms listed in BI, while firms using cross-ownership structure are about 11% of the top 100 firms listed in BI and the rest have about 8% with no divergence between control rights and cash-flow rights.

![Figure 4 Control-ownership patterns in the top 100 listed firms in BI](Image)

Those firms using dual-class shares to deviate between control rights and cash-flow rights are about 40%. Firms using dual-class shares are classified into two categories. The first category uses this ownership mechanism in order to control a large number of firms and maintain a small fraction of equity, and these firms represent about 5% of the top 100 firms listed in BI; for instance, Alkim Alkali Kimya A.Ş. holds class A, B, C and D shares that have 100 votes per share, while each shareholder with class E shares has 1 vote per share. The second category consists of firms using dual-class shares to obtain some privilege in a particular class of shares. This category comprises of three firms listed in BI using multiple classes of shares in order to get dividend concessions, and 32% of the top 100 firms listed in BI use dual-class shares to get the privilege to nominate candidates to the board of directors and audit committee. Finally, one of the firms using the multiple class of shares possesses class A, B, C and D shares, namely GSD Holding A.Ş. Shareholders who hold the A, B and D class of shares possess the privilege to select the board of directors, while the shareholders who possess the A and B class of shares hold the privilege to choose the external auditor. The bar graph in Figure 5 shows information about the distribution of wedge exercised by the top 100 firms listed in BI in 2015 by sectors.

Figure 5 gives values for all the wedge mechanisms such as dual class shares, pyramidal, cross-ownership and firms with no wedge. According to the figure, the most dominant mechanism for separation between ownership and control is both the dual class shares and pyramidal structure, with 14% and 16% of firms working in the finance sector using dual-class shares and pyramidal structure, respectively. On the other hand, about 1% of firms working in the construction exercise wedge using dual-class shares and pyramidal structure. Cross-ownership is exercised by 3% of firms listed in BI under each of the financial institution and wholesale and retail trade sectors. At the same time, of the firms listed in BI with no wedge about 4% work in the finance sector.

6. CONCLUSIONS

This paper analyses the control-ownership structure of the top 100 Turkish firms publically listed in BI. The majority of these firms are controlled by families that control a group of affiliated firms through dual class shares, cross-ownership ties, and pyramidal ownership structure. Therefore, the insider system is the most dominant in the Turkish capital market, and this richest insider wealth is particularly the case for the family
Control structure. The ultimate controller uses the dual class shares mechanism to create divergence between control rights and cash-flow rights. This is in order to control a large number of firms, despite the decrease in their stake of equity in those firms. Previous studies document that the previous control-ownership structure arrangement enhances majority shareholders’ incentive and ability to extract private benefits from the firms it controls, at the expense of the minority shareholders (Ararat, Süel, Aytekin, & Alkan, 2014; Demirag & Serter, 2003). This study recommends to policy makers and regulators to provide relevant policies that will support investors position particularly minority shareholders, for instance, minority shareholders that possess a particular threshold of voting rights to hold a right to challenge management manipulation, and to call for an extra general assembly meeting or participate in firm’s strategic decision such as select independent directors, or dividend policies.

![Figure 5 Sectorial Distribution of the Wedge](image_url)

### REFERENCES


