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Tugba Guelen

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# I. INTRODUCTION

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Executive compensation attracts substantial attention since some corporate scandals such as Enron, Tyco and WorldCom. The literature on the determinants of pay at the top is extensive. Nevertheless, most of these studies focus on the executive compensation in widely-held companies that are present mostly in UK and USA. Consequently, most of the research is grounded in agency or managerialist perspectives. There is much less research about executive compensation in emerging markets. Most of the companies in developing countries are privately-held by families and presence of owner-managers is not a rarity. These so-called “family firms” represent a different form of governance than that of widely-held firms. Thus, agency problem and consequently executive compensation issue has a distinct nature. At first, it can be suggested that agency costs arising from the conflict of interests between managers and owners should be minimized because the classical principal/agent problem does not exist in privately-held companies. This suggestion might be correct due to the alignment effect of large shareholdings by the owner-manager or controlling family. Moreover, owner-managers are emotionally attached to their firms and since they are unlikely to compete in the external CEO market, they accept lower compensation for their service. According to Meija-Gomez et al., in family-controlled firms, risk averse agents trade higher job security for lower earnings if they are related to principles. On the other hand, due to emotional commitment strengthened by their control power, owner-managers may stay at the helm despite their poor performance, they may have a great discretion in the firm and hire some unqualified family members and distribute family wealth by paying high compensation to them, they may fail to grasp profitable investment opportunities by acting over risk-averse. Consequently, family-controlled public corporations create their own agency problems which differ from that of companies with dispersed owners.

Turkish firms, similar to many firms in countries that adopt insider<sup>1</sup> corporate governance regimes, exhibit concentrated ownership structures. Most of the companies are privately-held, majority in the hands of families. Protections offered to minority shareholders is limited. Above mentioned features, together with its relatively higher growth rates in recent years and developments in its capital markets, makes Turkey an interesting country to examine.

This thesis focuses on the impact of ownership concentration on the level of total remuneration paid to executives. The purpose is to find out if performance is an important determinant of pay and to determine to what extent and in which direction the ownership concentration influence executive compensation in Turkish listed companies.

The analysis relies on a six-year unbalanced panel dataset of roughly 203 companies listed on the Istanbul Stock Exchange (ISE). The regression models control for firm size, firm performance and ownership concentration at the direct level.

The layout of the thesis is as follows: the second chapter is the review of existing literature, grouped under two subsections. The first subsection briefly explains the framework of corporate governance, different regimes in different countries, also provides an insight of corporate governance landscape in Turkey. The second subsection reviews the ownership structures, agency problems and executive compensation issues. The third chapter describes the dataset and provides summary statistics of the sample. The fourth chapter explains the modeling approach. The fifth chapter reports and interprets the results, and the final chapter concludes.

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<sup>1</sup> Insider corporate governance systems are found in the countries that adopt civil law traditions.

## 2. LITERATURE REVIEW

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### 2.1 CORPORATE GOVERNANCE<sup>2</sup>

#### *Definitions of Corporate Governance*

There is no commonly accepted definition of corporate governance although its importance in shaping economical landscape of a country cannot be denied is clear.

The narrow view of corporate governance focuses on the classical principal/agent framework which is present in companies with dispersed owners. From this point of view, Shleifer and Vishny (1997) defined corporate governance as follows: *“Corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment”*. This definition is grounded in agency theory with an investor perspective. In this view, corporate governance is about ensuring that the firm is run in the interests of its shareholders (Yurtoglu, 2009). Corporate governance in this narrow view covers three categories of institutional differences: (1) identities of the owners of corporations, and size distribution of their ownership stakes, (2) the governance structure of corporations, (3) the legal and political institutions that affect managerial behavior (Yurtoglu, 2009).

There is another definition of corporate governance with a broader view which also considers other stakeholders of the firm. Corporate governance from a stakeholder perspective which takes into account the employees, suppliers and customers of the firm is defined by Zingales (1998) as follows: *“Governance system is the complex set of constraints that shape the ex post bargaining over the quasi rents generated in the course of a relationship and shape the ex-post bargaining over them”*.

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<sup>2</sup> See Yurtoglu(2008) for an extensive survey.

Allen (2005) made another definition of corporate governance from the stakeholder perspective: *“Corporate governance is concerned with ensuring that firms are run in such a way that society’s resources are used efficiently”*.

From the same point of view, Berglöf and von Thadden (2000) suggested that protection of creditors and strategic equity investors might be more important than the protection of small minority investors for attracting capital.

Firstly Asian crisis and then corporate collapses of Enron and WorldCom in North America and Parmalat, Scandia, etc. in Europe have constituted a mile stone in corporate governance area. Existing corporate governance practices have been put under the spotlights. During the period following these collapses, corporate governance re-attracted substantial attention. In addition to growing research and literature, OECD published its Corporate Governance Principles as a blueprint for the reforms needed. Starting with the Sarbanes-Oxley Act (2002) in the USA, the reforms in order to improve the corporate governance standards spread all over the world.

Additionally, the higher degrees of economical globalization and increasing need for external financing induced the companies to adopt good corporate governance practices in order to attract investors and reach capital at low costs. One of the most important consequences of the increasing economic integration of the world’s economies is an increase in the strength of competition. Due to trade liberalization, liberalization of financial markets and advances in the information and communication technologies, companies must not only compete with other within their country, but with firms from around the world (Gugler, Muller and Yurtoglu, 2004).

### ***Corporate Governance Regimes***

There are different corporate governance regimes. Although there is some literature suggesting that individual firms can distinguish themselves by some voluntary mechanisms, such as cross-listing in another country with stricter and better corporate governance regime, it is widely accepted that firms in a country are not independent of the corporate governance system of that country. La Porta, Lopez-de-Silanes, Shleifer and Vishny (1997, 1998) emphasized significant differences between civil law and common law systems with respect to shareholder protection. Degree of protection offered to shareholders and enforcement of contracts are also of great importance for

corporate governance. From this point of view, it can be suggested that corporate governance regimes of a country is substantially influenced by (and related to) its law tradition and legal origin.

Common law system is adopted by Anglo-Saxon countries in which the firms exhibit dispersed ownership structures. One exception to this is Hong Kong with its concentrated ownership structure. USA, UK and former British colonies adopt common law systems.

Civil law system, though derived from different legal origins, is present in non-Anglo-Saxon countries. La Porta, Lopez-de-Silanes, Shleifer and Vishny (LLSV) made a classification within civil law system according to legal origins such as French, German and Scandinavian systems. According to LLSV, French system offers the lowest protection to shareholders amongst others whereas Scandinavian system provides the strongest shareholder protection.

As suggested by LLSV, also widely accepted, the common law systems offer outside and minority shareholders greater protection against expropriation by managers than do the civil law systems.

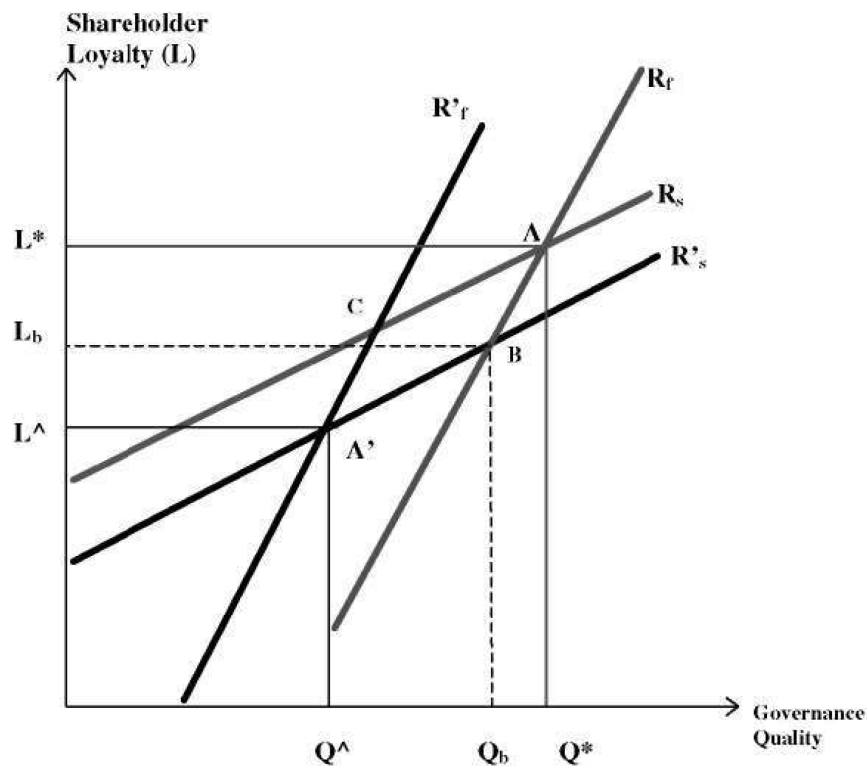
It can be suggested that the corporate governance regime in the USA has been even more Anglo-Saxon after the corporate collapses of Enron and WorldCom. The direction of the convergence of corporate governance regimes is towards Anglo-Saxon system. The corporate governance guidelines that had been issued in European countries, though being only recommendary, brought these countries with French and German legal origins closer to the Anglo-Saxon system. Moreover, many companies in the continental Europe commit themselves to stricter shareholder protection by cross-listing in New York and London stock exchange.

In addition to above mentioned research, there is an extensive literature on the relationship between good corporate governance practices and macroeconomic performance. Ararat and Ugur, in their paper in 2006, inspected the reverse causality between macroeconomic performance and good corporate governance practices. They investigated in depth the macroeconomic situation in Turkey before 2001 and the phases of improvement of Turkish economy that started in 2001. They reported that the transition from a discretion policy to a rule-based economic policy has a substantial effect in economical performance which in turn leads to improvement of corporate governance landscape of Turkey.



Ararat and Ugur (2003) developed a model to explain how poor public governance and macroeconomic instability affect corporate governance quality. In this model, the authors made some behavioural assumptions both from the perspective of firms and shareholders. According to their model, the shareholders value the corporate governance standards of the companies they invest. On the other hand, the companies value the loyalty of shareholders. Both parties are subject to some costs due to their behaviours; the cost of complying with good corporate governance standards for the firms and cost of loyalty to the shares of a firm for the shareholders. Consequently, the firms have an incentive to minimize the cost of corporate governance whereas; the shareholders have an incentive of investing in other firms' shares. Under these assumptions, the authors draw the reaction functions for each level of firm - shareholder commitment. The authors investigated these behavioural assumptions and the resulting reaction functions of the two parties under two circumstances. Firstly, they modeled the case that shareholder loyalty and corporate governance quality are complementary, meaning that both parties reward an increase in the other's behavior. The reaction functions of any given level of commitment are shown in Figure 1.

FIGURE 1:

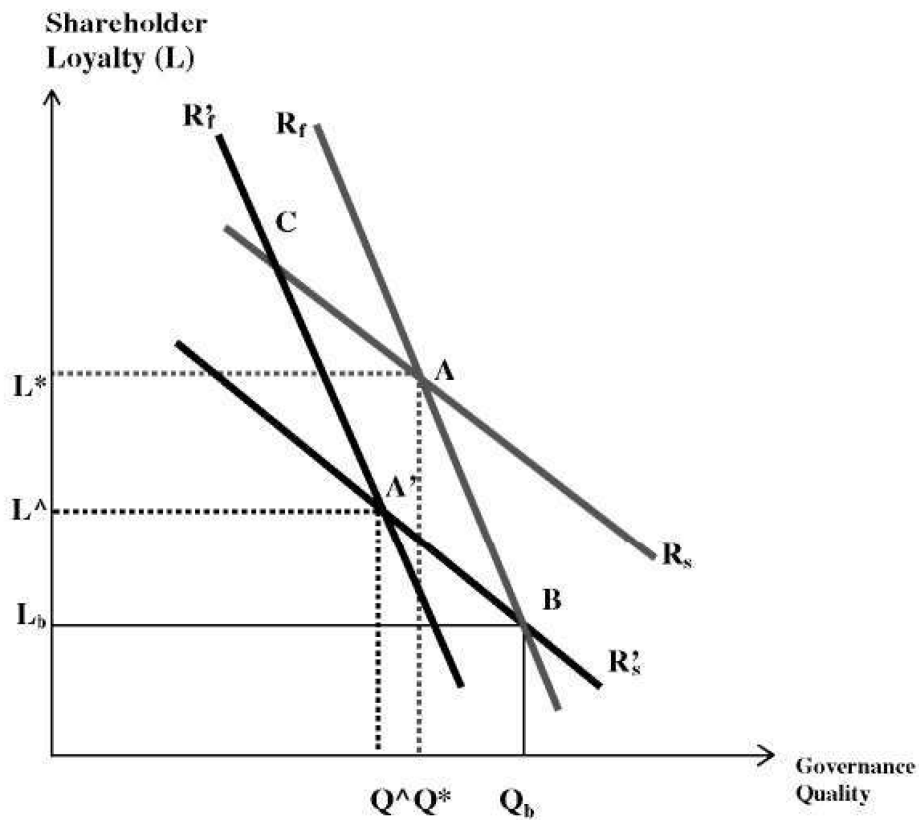


The slope of reaction functions of both parties have positive slopes reflecting that the shareholders will increase their loyalty to the firm if there is an increase in corporate governance standards, and the firm will increase its corporate governance standards if there is an increase in the shareholder loyalty. The equilibrium shareholder loyalty ( $L^*$ ) and corporate governance quality ( $Q^*$ ) is obtained at point A. The authors afterwards assumed that there is a crisis in the economy. The crisis has its first impact on the level of shareholder loyalty caused by the international investors selling the shares of the firm and investing in other countries followed by further sales by the local investors. Therefore, the reaction function of the shareholders shifts downwards to  $R'_s$ . The new equilibrium, though being temporary, is at point B. Secondly, the firms react to this decrease in shareholder loyalty and the reaction function of the firms shift left to  $R'_f$ . The final equilibrium is obtained at point A' indicating lower shareholder loyalty and consequent lower corporate governance quality.

As mentioned before, the authors also modeled the case that shareholder loyalty and corporate governance quality are substitutional. In this case, both parties free-ride on each other's efforts, meaning that the shareholders decrease their loyalty when there is an increase in the corporate governance quality of the firms they invest in and on the other hand the firms have an incentive to decrease their corporate governance quality when there is an increase in shareholder loyalty. Therefore, the reaction functions of the both parties have a negative slope. Applying the same logic to this case, the reaction functions and the equilibrium level of commitment are shown in Figure 2. The initial equilibrium shareholder loyalty and corporate governance quality is at point A. In the case of substitutional shareholder loyalty and corporate governance commitment, the firms increase their corporate governance quality when the shareholders reduce their loyalty to the shares of the firms in the times of a crisis. Consequently, the reaction function of the shareholders shifts left and the temporary equilibrium is obtained at point B referring to a lower shareholder loyalty level and a higher level of corporate governance quality. In this case, the firms increase their corporate governance quality in order to offset the negative effects of reduced loyalty and to attract the shareholders to invest in their firms. However, keeping up with high levels of commitment to corporate governance causes costs to the firms. Therefore, after a while the firms also reduce the quality of corporate governance and the reaction function of the

firms shifts left and the final equilibrium is obtained at point A' that refers to lower shareholder loyalty and consequently lower corporate governance quality.

FIGURE 2:



Source: Ugur and Ararat (2003)

The authors suggest that the regulatory corporate governance reforms introduced by governments would not be incentive-compatible for the firms since in case of an introduction of a mandatory corporate governance code, the firms would have to commit higher levels of corporate governance quality which will cause a rightwards shift of the reaction function of the firms to  $R_f$ . The consequent equilibrium point would then be B, referring a high level of corporate governance quality despite a lower shareholder loyalty when compared to pre-crisis equilibrium (point A). Ugur and Ararat (2003) suggested that, under this circumstance the firms would have an incentive to deviate from mandatory corporate governance standards mainly by providing

poor quality disclosure in case of a dispersed ownership structure and by engaging in tunneling in case of concentrated ownership structure. Consequently, the authors claimed that although the reaction function of the firm might be at  $R_f$ , its actual reaction function would gradually shift to the left until  $R'_f$  coincides with the pre-reform function  $R_f$ .

### ***Corporate Governance in Turkey***

Turkey belongs to the French origin of civil law tradition. As is mentioned, French origin corporate governance system, amongst other systems within civil law tradition, provides the weakest protection to minority shareholders.

From its foundation in 1923 until the reforms to establish pro-market policies in 1980, Turkish state was the main player in the economy. Since the private sector did not have the sufficient resources, the state was involved in the economy, subsidizing the private sector.

In 1980, import substitution policies were replaced by an export-led stabilization and structural adjustment program (Ararat, Yurtoglu, 2007). The liberalization of capital market took place over 1980-1989 period. Within this process, The Capital Market Law (CML) was enacted in 1981 and the Capital Market Board<sup>3</sup> (CMB) was established in 1982, and finally, Istanbul Stock Exchange<sup>4</sup> (ISE) was reopened in 1986.

A discretionary policy framework, economical crisis and macroeconomical instability prevail over 1990 – 2000 period. The 1999 and 2000 economical crisis put these discretionary policies under the spot lights and starting from 2002 there had been changes in the effectiveness of regulatory authorities, disclosure and transparency rules that apply to companies, and the enforcement of laws.

The return to a rule-based macroeconomical policy framework and the increased probability of economic stability increased the feasibility of corporate governance reforms (Ugur and Ararat, 2003).

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<sup>3</sup> CMBT is a semi-governmental agency in charge of oversight of Istanbul Stock Exchange.

<sup>4</sup> ISE is owned by its members and governed by its general assembly.

Corporate governance reforms started with the launch of Corporate Governance Guideline<sup>5</sup> by the Capital Markets Board of Turkey (CMBT) in 2003. The Guideline was prepared with an inspiration from the Corporate Governance Principles which were issued by OECD after the corporate scandals in North America and Europe.

CMBT's Guideline is voluntary that includes more than 100 provisions as recommendations for the good governance of the listed companies on a "comply or explain" approach. The provisions can be classified under four groups such as; shareholders' rights, disclosure and transparency, boards, and stakeholder relations.

With the adoption of the Guideline by the CMBT, the International Financial Reporting Standards (IFRS) became an optional standard for the companies listed on Istanbul Stock Exchange.

As a consequence of the above mentioned improvements, the European Commission recommended in 2004 that the European Union can start accession negotiations with Turkey. As is also mentioned by Ugur and Ararat (2006), European Commission reported "Economic stability and predictability have been substantially improved since the 2001 economic crisis. Persistently high levels of inflation have come to historic lows, political inference has been reduced, and the institutional and regulatory framework has been brought closer to international standards. Thus, an important change towards a stable and rule-based economy has taken place."

Although , it is strictly recommended by the CMBT that the voluntary Guideline should be taken seriously, there were no sufficient references to the Guideline in the 2003 annual reports of the listed companies. In order to induce the adaptation of the Guideline and improve the compliance, CMBT announced that starting from 2004, all listed companies are obliged to add a "Corporate Governance Compliance Report" to their annual report. The CMBT prepared a standard report template.

Another effort of the CMBT to improve the governance standards of the listed companies was the announcement of a "Corporate Governance Index" to differentiate the companies that comply with the Guideline. ISE was responsible for the construction of this index. ISE, in 2005, announced that

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<sup>5</sup> Corporate Governance Guideline was ammended in 2005.

the “Corporate Governance Index” would be launched as soon as five companies meet the requirement criteria. In order to be considered as “qualified”, the companies should receive a corporate governance score of 6 out of 10. It was also announced, to increase the incentive of the companies, that the “qualified” companies are subject to a discount of 50% on the listing fees. The “Corporate Governance Index” was launched on 31<sup>st</sup> August 2007, however. Currently, 32 firms are listed under this index of the ISE. The companies should have a corporate governance score of 7 out of 10 and the qualified companies are entitled to a 50% discount for the first two years, 25% discount for the next two years and 10% for the coming years.

Despite the improvements, the legislative framework was a major obstacle for real reform. Turkish Commercial Law has not been revised since it was enacted in 1957. The government decided in 1999 to have the Commercial Law rewritten. A committee that consists of 45 members was established for this purpose. The draft was submitted to the Parliament in 2005. It was expected to be enacted by 2006 but the new Commercial Law was blocked by the opposition party in the Parliament. Finally, it was enacted on the 13<sup>th</sup> of February 2011. The new Commercial Code includes roughly all the articles in the Guideline and it is mainly based on equality, accountability and transparency. International Financial Reporting Standards (IFRS) become mandatory for all joint stock companies, also for the ones that are not open to public.

## **2.2. OWNERSHIP STRUCTURE AND EXECUTIVE COMPENSATION**

### ***Ownership Structure and Executive Compensation in Anglo-Saxon and Non-Anglo-Saxon Countries***

In Anglo-Saxon countries, most of the firms exhibit the features that Berle and Means modeled in 1932. The ownership is distributed among a large number of dispersed shareholders and the managers own too little of their company’s shares in “Berle and Means’ Corporation”. Separation of ownership and management created an “agency problem” due to the conflict of interests between owners (dispersed shareholders) and the managers. The owners try to maximize their wealth (shareholder value), whereas the managers have an incentive to minimize their efforts. Moreover, it is difficult for the dispersed shareholders to monitor the actions of the managers due to information

asymmetries and cost of monitoring. Under these conditions, managers might take the advantage of the fact that their actions will not be observed strictly by the shareholders; they might use their discretion for their private benefits and hence distort the benefits of the shareholders and finally hurt firm's performance. For example, they may fail to distribute the excessive cash although there is no profitable investment opportunity for the firm (Jensen, 1986). Being not the only one, executive compensation is one of the ways that managers can expropriate shareholders' wealth. Due to power relationships with the directors, the CEOs may enjoy attractive pay packages that are above their performance.

The optimal contracting approach which has been the primary framework to explain executive compensation recognizes the compensation arrangements as a remedy to the "agency problem". According to optimal contracting approach, the managers should be compensated in accordance with their performance and it suggests that tying pay to performance functions as an incentive mechanism to align the conflicting interests of shareholders and managers.

In optimal contracting approach, the boards are assumed to make such pay arrangements that provide the managers the effective incentives to maximize shareholder value. However, whether the boards are really working for the favor of shareholders is questionable due to a number of reasons.

In their paper in 2000, Bebchuk et al. introduce another approach to executive compensation. Their approach is "managerial power" approach which claims that the CEOs in widely-held companies have substantial power to determine their own pay. Bebchuk et al. attribute this discretion to the importance of the CEOs role for the re-appointment of the directors to the board and their effect on the compensations of the directors. It is worth mentioning here that the 2001 compensation for each Enron director is \$380,619, the seventh highest director compensation in the USA, as reported by The New York Times. Some other studies also suggest that CEOs have enough discretion to select new board members when ownership is dispersed (Mace, 1971; Lorsch and MacIver, 1989; Shivdasani and Yermack, 1999).

Accordingly, it is not surprising that the directors would like to build up a good relationship with the possible future CEO by not opposing their pay packages. Under these circumstances, the objectivity of the board of directors in

monitoring management is arguable. Shivdasani and Yermack report that when CEOs are involved in selecting directors, they choose directors who are less likely to monitor.

In their work where they modeled CEO and director compensation, Brick, Palmon, and Wald found a positive relationship between CEO and director compensation. They hypothesized that this positive relationship could be due to unobserved firm complexity because in that case high levels of skills and effort by both CEO and the directors are of vital importance. Since the relationship they found between excess compensation and firm performance is negative, they attributed this excess compensation to mutual back scratching and cronyism.

In the framework of optimal contracting approach, sensitivity of pay to performance is of great importance although evidence suggests that the relationship between pay and performance is weak even in the Anglo-Saxon countries. Jensen and Murphy (1990) report striking evidence on the weakness of compensation arrangements. They find that remuneration of the executives increases by only \$3.25 for every \$1000 change in shareholder wealth. More recently, Hall and Liebermann (1998) report \$25 increase in executive compensation for every \$1000 change in shareholder wealth suggesting higher pay-performance sensitivity, not being a substantial improvement though. These findings show that the performance is not a key determinant of executive compensation in large firms in US and UK, but there other factors affecting the level and composition of pay at the top. Within the framework of the above evidence, it can be suggested that managerial power approach is more consistent with the reality.

Non-Anglo-Saxon countries which belong to different legal origins of civil law tradition, exhibit concentrated ownership structures. The classical agency problem seen in Anglo-Saxon countries therefore does not exist due to the fact that large shareholders have the interest and ability to monitor the actions of managers. Many studies, however, show that the benefits of large shareholders may be more than offset by the private benefits of control that are not shared by minority shareholders (Yurtoglu, Haid; 2005), partly because families keep the majority control and coincide with the management in such countries. Owner-managers are so common and boards of the companies include family members or those who are related to controlling group. Consequently, this situation creates its own agency problem. The agency



problem in non-Anglo-Saxon countries is therefore, between the controlling shareholders (families) and minority shareholders.

Bebchuk et al. included family firms in their managerial power approach and he suggested that there are more lucrative ways of rent extraction in such firms than executive compensation such as tunneling of resources between firms that belong to a business group and differentiating of cash-flow and control rights.

The one-share-one-vote principle is based on the natural idea that shareholders who contribute equal amounts to the capital of a corporation should have equal rights to influence decisions (Yurtoglu, 2009). Violation of one-share-one vote principle is very frequent especially in civil law countries that offer weak protection to minority shareholders. Pyramidal structures, dual-class shares and cross-shareholdings are the main devices that the dominant shareholders use to increase their voting rights in excess of their cash-flow rights and hence establish the control of the firms.

These violations in East Asian countries are mainly achieved through pyramidal structures and cross-shareholdings. Pyramids are frequently used in all European countries. Cross-holdings are very rare and used only in Austria, Germany, Italy, Norway and Sweden (Yurtoglu, 2009).

Interestingly, dual-class shares and cross-shareholdings are present in the UK. Deviations from one-share-one-vote principle is less common yet present in North America (Gompers, Ishii and Metrick, 2008; Villalonga and Amit, 2007).

Existing empirical work suggests that deviations of control rights from cash-flow rights distorts the incentives of large shareholders and leads to several inefficiencies from the point of view of minority shareholders including lower firm value (La Porta et al., 2002 and Claessens et al., 2002), lower dividends (Faccio et al., 2001 and Gugler and Yurtoglu, 2003), shareholder wealth reducing investment performance (Gugler, Mueller and Yurtoglu, 2004a) and inferior operating performance (Volpin, 2002).

Gomez-Mejia, Larrazza-Kintana and Makri (2003) investigated the determinants of executive compensation in family-controlled public corporations observing a sample of 253 family-controlled companies and they reported that family-member CEOs of family controlled firms receive lower total income than outsider CEOs. They also found a negative relationship

between ownership concentration of the family and pay of family-member CEOs in such corporations.

Firth, Fung and Rui (2005) examined the effect of firm performance on the level of executive compensation in a sample of 549 Chinese listed companies over the period from 1998 to 2000. Chinese listed firms exhibit concentrated ownership structures and in the vast majority of these firms the dominant shareholders have substantial controlling power gained through board representation and voting rights in excess of cash-flow rights. These dominant shareholders in Chinese listed firms are frequently state and local or regional governments. SOEs and private blockholders are other important owner identities. Another prominent feature of Chinese firms is that they do not have compensation committees or outside compensation consultant firms. Similar to Turkish case, the compensation reported in the annual reports of the listed companies is the total amount paid to the board of directors and components of the compensation is not reported. Two regression analyses are used, one to explain the level of pay and one to explain the changes in pay. The authors found a sharp increase in CEO pay over the considered period and they reported small pay sensitivities. They found differences in pay-for performance sensitivities for different ownership identities. They report that the pay does not depend on performance when the State is the controlling shareholder, suggesting that the State does not have profit objectives. There is a positive pay-performance relation in case of SOECGs and private blockholders as dominant shareholders. They attribute this positive relationship to the fact that SOECGs are based on profitability and private blockholders have profit objectives. The authors also observed significant pay-for-performance sensitivities in the presence of foreign investors as controlling shareholders.

Haid and Yurtoglu in their paper in 2006 examined the relationship between ownership structure and executive compensation in Germany. They analysed a sample of listed German companies from 1987 to 2003. The authors found that there is a substantial increase in average executive compensation and that the German companies pay a significant amount of their earnings to the executives as compensation. In their sample of firms, they reported that the impact of firm size on executive compensation is much more important than firm performance. The authors suggested that besides concentration level, the identities of the owners are also of great importance for the determination of executive pay and they reported that in Germany executive compensation

is lower in the presence of banks as block owners whereas, it is higher when the company is controlled by families. After examining the impact of ownership concentration at the direct level, the authors also investigated the effects of ownership concentration at the ultimate level and they reported that increases in the size of German companies lead to higher levels of executive pay when there is a divergence from one-share-one-vote principle. Moreover, they found that the relation between pay and performance is substantially weak if the voting rights deviate from cash-flow rights. Finally, the authors investigated the relationship between changes in executive pay and changes in shareholder wealth and they found that pay-for-performance sensitivities are low and it is further reduced as the ownership concentration increases.

Cheng and Firth in their paper in 2005, investigated the effects of ownership structure and corporate governance characteristics on the level of compensation paid to top management in a sample of 336 firms listed on the Stock Exchange of Hong Kong from 1994 to 1999. In particular, they examined the effects of board composition, presence of institutional investors. Beside the compensation of the CEO, the authors also investigated how the remuneration of executive directors and the five highest paid employees are influenced by the above mentioned characteristics of the firm. As is also suggested by the authors, Hong Kong features a family-dominated business environment, and the directors own large proportion of equity capital. In accordance with their hypothesis, the authors found that the direct compensation paid to top management is lower when the directors have large ownership in the firm. They attributed this result to the fact that the directors would need less direct compensation because they already receive high levels of income from their large shareholdings. As mentioned before, the authors also empirically tested for the influence of institutional investors on the level of executive pay. They reported that the presence of institutional investors restrain not only the pay of CEO but also the level of compensation paid to executive directors and the five highest paid employees. The reason of their finding is most probably due to the monitoring and oversight functions of institutional shareholders. In contrast of what they hypothesized, the authors found a positive relationship between the number of non-executives on board and pay level of top executives. As an interpretation to this finding, they suggested that the non-executives owe their positions to the CEOs and that they try to set a higher benchmark for executive positions in general. As a

result of their empirical tests, the authors reported no significant evidence about the effect of non-executive directors and institutional shareholders on pay-for-performance sensitivity.

Cheung, Stauratitis, and Wong (2005) analysed the relationship between ownership structure and managerial compensation using a sample of 412 publicly traded companies in Hong Kong during the period 1995-1998. They found a positive relationship between managerial pay and managerial ownership up to 35% in small firms while this relationship turns out to be negative when the ownership of the CEO exceeds 35%. The positive relationship between managerial pay and managerial ownership exists only up to 10% managerial ownership in the large companies.

Cohen and Launterbach in their paper in 2007 investigated the differences in pay between owner and non-owner CEOs in Israel by analysing a sample of 124 publicly traded firms. Different from previous research, they focused only on firms with concentrated ownership structures. The dominant shareholders in the firms they examined hold at least the 50% of the voting rights. The authors compared the pay levels of the CEOs with ties to controlling shareholder (owner CEOs) and the pay levels of the professional CEOs that have no connections with dominant shareholder (non-owner CEOs). They firstly hypothesized and then empirically proved that the owner CEOs receive higher compensation than non-owner CEOs. Moreover, they found that the owner CEOs receive 50% higher pay than their professional counterparts and they also reported a lower pay-for-performance sensitivity for the owner CEOs. The authors additionally distinguished these closely held companies as the firms that are controlled by a family and the firms that are controlled by a partnership of a few individuals. They investigated the compensation of owner CEOs in family firms and firms controlled by a few individuals. They hypothesized that the owner CEOs in family firms would receive lower pay than the owner CEOs in partnership firms. However, they found no significant difference between family and partnership owner CEOs. The regression models also control for firm size, firm industry and some CEO-specific characteristics. The compensation data is the total direct pay. Overall, their results provide evidence that is consistent with the exploitation view which suggests that owner CEOs extract private benefits from the firm in the form of inflated pay and reduced pay-for-performance sensitivity which leads to expropriation of minority shareholders.

In their paper in 2006, Orbay and Yurtoglu investigated the effects of corporate governance structures on the corporate investment performance. They primarily focused on the impact of divergence from one-share-one-vote principle which constitutes a prominent agency cost observed in the firms with large shareholders. In order to determine the effects of deviations of cash-flow rights from voting rights on the investment performance, they worked with a sample of 218 firms listed on Istanbul Stock Exchange from 1990 to 2003. In their research, the authors also provide an extensive insight about the ownership structures of Turkish firms. As the performance measure, the authors used the ratio of a firm's returns on investments to its costs of capital. Orbay and Yurtoglu in this paper reported poor investment performance for the firms that are listed on the ISE. According to their findings, 1 Lira invested in Turkish companies generates assets worth 0.94 Lira (Orbay and Yurtoglu,2006). They attributed this poor performance to the existence of agency costs in the corporate governance structure of Turkish listed firms. Considering the effects of divergence from one-shar-one-vote principle and business group membership, the authors reported different impacts. According to their results, deviations from one-share-one-vote causes poor investment performance and it lowers the market value of the firm whereas, business group membership improves both the investment performance and the market value of the firm.

### ***Ownership Structure in Turkey***

Turkey belongs to the civil law tradition of French origin which provides weak protection for the (minority) shareholders against the expropriation. A very prominent feature of corporate governance landscape in Turkey is its highly concentrated ownership structure with the largest direct shareholder holding on average 47% of the equity capital (Yurtoglu; 2003). Some literature consider concentrated ownership as a disciplining mechanism for the managers, by aligning the interests of both parties, especially in the countries with weak shareholder rights. Nevertheless, due to the complex ownership structures the Turkish firms exhibit, it is difficult for the (minority) shareholders to distinguish whether the disciplining or the entrenchment effect prevails in Turkey.

Holding companies at the direct level, and families at the ultimate level are the most frequently observed ownership identities in Turkey.

The following table provides information about the concentration of direct ownership in a sample of 218 firms listed in the Istanbul Stock Exchange (ISE):

**FIGURE 3:**

**Panel A: Direct Ownership**

Identity	Number	Largest Shareholder			CR3 (the sum of the largest three shareholders)			Dispersed		
		Mean	Median	Std.Dev.	Mean	Median	Std.Dev.	Mean	Median	Std.Dev.
Holding Company	96	47.62	46.23	17.66	65.80	68.84	15.31	30.59	27.90	14.35
Non-financial companies	47	47.84	44.38	17.20	67.31	66.89	14.60	28.85	26.10	13.71
Financial companies	5	49.25	51.00	13.09	58.62	55.96	11.81	39.20	40.79	14.07
Families	42	34.11	28.20	22.64	52.22	54.10	24.20	38.33	29.30	25.96
Foreign companies	20	67.77	69.28	19.22	81.20	83.98	13.38	17.50	16.03	13.45
State	5	67.25	65.76	29.93	70.02	65.76	26.27	22.98	25.00	20.29
Miscellaneous	3	63.87	83.16	34.02	68.42	83.85	27.37	31.22	15.44	27.68
Total	218	47.63	45.47	21.07	64.89	67.23	18.85	30.54	26.11	17.96

Source: Yurtoglu (2003)

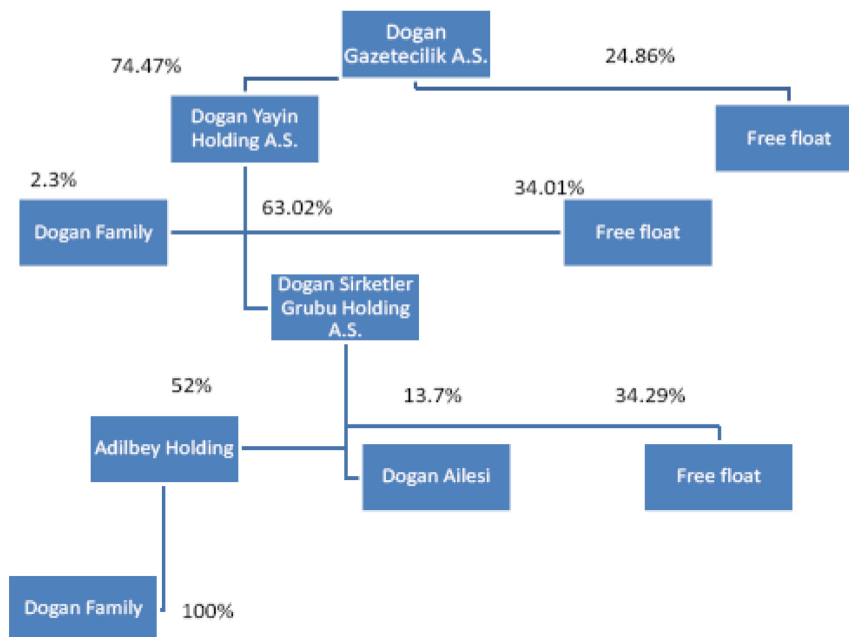
Holding companies are the most frequent owners at the direct level with a mean ownership of 47,62%. Holding companies in Turkey legally house the business groups<sup>6</sup> (BGs). They contain some financial and industrial companies that belong to the same business group. Most of the holding companies are controlled by families at the ultimate level.

Another feature of Turkish corporate structure is deviation of cash-flow rights from control(voting) rights. Dominant shareholders in Turkey often establish control over their firms despite relatively small cash-flow rights. Dual-class shares, pyramidal structures and cross-ownership are used in order to increase control rights in excess of cash-flow rights. In addition to these devices, some control-enhancing corporate charter provisions are used by Turkish companies such as preferential treatment of the controlling owners in the design of board of directors and board supervisors, preferential treatment of the controlling owners in the determination of the dividend policy and preferential treatment of the controlling owners in case of liquidation among different classes of shares (Yurtoglu; 2003).

<sup>6</sup> Business groups were not legally represented in the Turkish Commercial Code. The new Commercial Law recognizes and regulates the BGs in Turkey.

Among these devices, pyramidal structures are the most commonly used ones. Yurtoglu, Ararat and Orbay (2010) provide an example about pyramidal ownership structure.

**FIGURE 4:**



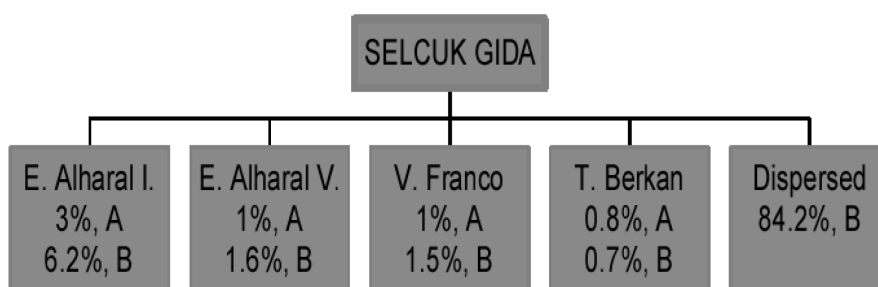
As seen in the figure, Dogan Gazetecilik has one controlling shareholder at the direct level, Dogan Yayin Holding having the 74.47% of the shares. The authors investigated further the owners of this direct shareholder (Dogan Yayin Holding). They found that Dogan family owns 2.3% of Dogan Yayin Holding and the largest shareholder is Dogan Şirketler Grubu Holding A.Ş. with an ownership of 63.02%. Dogan Şirketler Grubu A.Ş. is owned by Adilbey Holding (52%), Dogan Family (13.7%). Since Adilbey Holding is totally owned by Dogan Family, the ultimate owner of Dogan Gazetecilik A.Ş. is Dogan Family. The voting rights of Dogan family amount to 74.47% and the cash-flow rights amount to 32.54% which is substantially lower than voting rights.

Another common device used in Turkey to decrease cash-flow rights below voting rights is issuing dual-class shares that provides different amount of voting rights for different classes.

Yurtoglu (2003), in his paper in which he examined implications of corporate governance for minority shareholders in Turkey, provide an example for the use of dual-class shares in Turkey. The following figure is the ownership structure of Selcuk Gida.

**FIGURE 5:**

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



Selçuk Gıda has two classes of shares. While having the identical face values, A-Shares carry 50 voting rights whereas B-Shares carry only one voting right. Dispersed owners own no A-Shares. The four largest shareholders own all A-Shares. After necessary calculations are made, Yurtoglu reports that in total A-Shares carry 78.18% of the voting rights and B-Shares carry only 21.82% of the voting rights. The voting rights of Alharal family in Selçuk Gıda is 53.85% although their cash-flow rights are only 11.8%.

As is shown in both examples above, Yurtoglu (2003) in a sample of 218 firms, tracked the ownership patterns to reach the ultimate shareholders and the true fraction of voting rights they own. Figure 4 displays his findings.



**FIGURE 6:**

Panel B Ultimate Ownership								
Identity	N	Voting Rights			Cash Flow Rights			Mean
		Mean	Median	Std.Dev.	Mean	Median	Std.Dev.	
Families	173	66.10	66.23	21.54	54.04	56.61	22.84	7.47
Foreign companies	21	67.30	70.00	20.73	65.31	68.56	19.67	1.04
State	7	65.83	55.62	22.57	65.83	55.62	22.57	1.00
Miscellaneous	17	65.35	65.57	19.42	42.56	34.49	22.84	2.18
Total	218	66.15	66.30	21.20	54.61	55.92	22.98	6.23

**Source: Yurtoglu (2003)**

The mean control rights of the total sample is 66 percent although the cash-flow rights amounts to only 54 percent.

Families are the most frequent owners at the ultimate level. They ultimately control 173 firms out of a sample of 218 firms whereas, at the direct level they control only 42 firms in the same sample. Similar to the total sample, the control rights of the families are 66 percent despite having only 54 percent cash-flow rights.

According to Yurtoglu (2003), the firms have lower valuation ratios if there is a deviation of cash-flow rights from control rights.

Yurtoglu reports in his works in 2000 and 2003 that ownership concentration and deviations of voting rights from control rights have a negative effect on ROA, market-to-book ratio and dividend pay-out ratios of listed companies in Turkey.

Orbay and Yurtoglu (2006) report significantly better investment performance for companies that do not deviate from one-share-one vote by using pyramidal ownership structures, dual-class shares and other devices that enhance the control power of large shareholders beyond their cash flow rights.

## 3. DATA DESCRIPTION AND SUMMARY STATISTICS

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The compensation data is collected from the notes that are attached to the financial tables of the companies which were available until 2008 on the website of ISE. Beginning from 2009, this information is available on the website of Public Disclosure Platform.

The data used for the performance, size and ownership concentration is collected from the financial statements of the companies.

The raw dataset consists of the observations of 305 companies during six years, from 2003 to 2008. Out of 305 firms, 102 have compensation observations for only three or less years. Since compensation is the dependent variable, it would not be meaningful to work with too many missing observations. In order to be able to present solid results, I worked with the companies that have compensation data for at least 4 years. After the elimination of the firms with missing compensation data, the final sample consists of 203 firms.

In Turkey firms do not disclose remuneration on an individual basis. Additionally, not all the companies display the components of pay. Therefore, compensation data in the sample is the total compensation paid to executive management.

Return on Assets (ROA) is used as an accounting measure of performance and total assets is used as measure of firm size.

The companies are broadly grouped in three industries. The sample is dominated by manufacturing firms.

Standard descriptive statistics about compensation, size, performance and ownership concentration data can be found in Table 1, providing means and standard deviations.

Compensation shows a clear and substantial upward trend over time except year 2007. The mean compensation increases from 1.211.994 TRL to 2.722.590 TRL over the six-year period. Highest compensations are paid in the finance sector.

Return on Assets (ROA) is used as a measure of firm performance. The mean ROA of the sample firms has an upward trend except year 2005 till 2007. Then in 2008, it decreases sharply to -1,01%. This decrease might be due to the 2008 crisis. ROA is highest for the manufacturing firms in the sample.

The mean size of the sample companies which is measured by total assets, increases from 737.000.000 TRL to 2.030.000.000 TRL. The largest companies are present in the finance sector.

Concentration level stays stable over time. The ownership concentration is substantially high with a mean of 49,25 %. The highest concentration levels are found in the manufacturing sector.

## 4. MODELING APPROACH

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The models of executive compensation generally take the form as follows (Yurtoglu, Haid, 2005):

$$\ln(C_{i,t}) = \alpha_i + \beta P_{i,t-1} + \gamma \ln(S_{i,t-1}) + \mu_{i,t} \quad (1)$$

$i = 1, \dots, N$  and  $t = 1, \dots, T$

where,

$C_{i,t}$  stands for executive compensation

$P_{i,t-1}$  represents lagged performance of the company (ROA)

$S_{i,t-1}$  is a measure of lagged firm size. (total assets)

$\mu_{i,t}$  is the stochastic error term and it is assumed to have the usual properties.

The time lag of 1 year is used because executive compensation is determined generally by size and performance levels of the previous year.

I started with the full model by estimating equation (1) including all industries and years. By including all industries and years, it is assumed that the pay function is homogeneous across different industries and years.

As a second step, homogeneity across industry groups is tested by estimating equation (1) for different industry groups.

Then, I study the stability of regression coefficients over time by estimating regression (1) for each year separately.

Later on, equation (1) is estimated by including various explanatory variables such as ownership structure and some firm-specific measures.

## 5. RESULTS

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As explained in the previous section, I estimated equation (1) including all industry and year dummies, thereby constraining slope parameter to be equal across industries and time. The first two rows of Table 2 report the estimated size and performance elasticities for the full model. The estimates have been obtained by OLS regression and robust regression. In both OLS and robust regression methods, performance and size coefficients are significantly positive. Size and performance have a statistically significant and positive impact on the total compensation paid to executives.

As a second step, I check whether the assumption of a common slope parameter, in other words the assumption that the pay function is homogeneous for different industries, is correct or not. If there is heterogeneity between the industries in the way that compensation reacts to performance, then the assumption of a common slope parameter will produce biased estimates(Yurtoglu, Haid, 2005).

As reported in Table 2, size coefficients for all the three industries are significantly positive. As the size of the firm increases, the level of total compensation increases as well. Both size and performance affect the compensation positively in the manufacturing sector; the coefficients are highly significant.

In finance industry, however, only size has a substantial positive effect on compensation. Significance of performance coefficient is very low yet positive for the OLS method; it is even negative when I run a robust regression. In the finance industry, performance of the firm is not a very important determinant of compensation.

Performance has a slightly insignificant positive effect on compensation for the utilities sector even when checked for both estimation methods. Size coefficient is highly significant and positive.

We can clearly say that there is heterogeneity between industries. Therefore, by assuming a common slope parameter I cannot produce solid results.

Lastly, I check for the heterogeneity across time. Since my observations are from year 2003 to 2008, it was not logical to generate subgroups for time

periods. That is why, I estimated equation (1) separately for each year. I have no output for the year 2003 because, I used one year lagged values of performance and size measures. Over five years-period, size has a significantly positive effect on compensation. Nevertheless, apart from year 2008, performance coefficient is significant only for year 2006, though positive for all years. In 2008, performance coefficients for both estimates are large and significantly positive.

Since the natural logarithm of size measure is used, the elasticity of size is its coefficient. Elasticity of ROA denoted by E is obtained by multiplying the coefficient of ROA and the related mean return on assets (ROA), separately for each year and industry. The performance elasticity is 5% for the full model and highest for the year 2006.

Consequently, it is obvious that compensation is heterogeneous across industries and time. Therefore, assuming a common parameter by restricting the slope parameter to be equal for all industries and years is an unrealistic assumption.

### ***IMPACT OF DIRECT OWNERSHIP***

Ownership concentration, in the literature, is accepted as an important determinant of executive compensation. That is why; a further explanatory variable is introduced to the model. Turkish companies exhibit a highly concentrated ownership structure. As mentioned in the summary statistics, the mean ownership at the direct level is equal to %49,25 in the sample firms. As an additional variable, percentage ownership of the largest direct shareholder is used. All industry and year dummies are included in the regression. By performing this regression, the impact of ownership concentration on the total executive compensation can be observed.

Regression 1 in Table 3 reports the estimation results. Both size and performance have a statistically significant and positive effect on total compensation. Ownership concentration variable is insignificant both in the OLS and robust regression models. Ownership concentration has an insignificant positive effect on executive compensation.

To further investigate the effect of ownership concentration on compensation, I introduce the interaction of performance and ownership

concentration, and the interaction of size and ownership concentration to the model, including all year and industry dummies. The results are displayed in the second regression of Table 3.

The interaction of performance and ownership concentration has a significantly negative effect; more importantly, the coefficients of ROA and ROA\*LS has nearly the same magnitude but with opposite signs. If the ownership concentration is high, the impact of performance on total compensation decreases.

SIZE\*LS has a positive coefficient. If the ownership concentrated, then the effect of size on compensation increases insignificantly.

### ***IMPACT OF DEVIATIONS FROM ONE-SHARE-ONE VOTE***

As I have previously explained in detail that deviation from one-share-one-vote principle is very frequently observed in the Turkish companies. One common device to differentiate control rights from cash-flow rights is issuing shares with multiple voting rights. In order to observe the effect of deviations of one-share-one-vote principle on compensation, I included a dummy variable in the model which takes on 1 if the firm has class of shares with multiple voting rights and zero otherwise. The estimates are displayed in Table 4. As is seen on the table, the presence of shares with multiple rights has a significant negative effect on the level of total compensation. Deviations from one-share-one-vote principle decrease the pay of executives.

I interact deviation variable (DEV) with performance and size variables respectively to further explain the impact of deviation on compensation. The results are reported in the second regression of Table 4. ROA\*DEV variable is insignificantly positive. SIZE\*DEV variable is significantly positive implying that in the firms where control rights deviates from cash-flow rights, compensation decreases when size of the firm increases.

## 6. CONCLUSION

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In a sample of 203 stock market-listed Turkish companies, I analysed the impact of ownership concentration on the level of total compensation paid to executives. By the estimation of Equation (1) for the full model, I found that both performance and size of the companies have a statistically significant impact on the total compensation paid to executives. When the equation is estimated separately for each industry, the impact of company size on compensation is still highly significant and positive whereas, the effect of company performance on compensation is significant for only manufacturing firms. Yet, company performance has an insignificant impact on the compensation for finance and utilities sectors.

Elasticity of pay-for-performance is higher in manufacturing and utilities industries whereas, it is substantially lower in finance industry that has the lowest level of ownership concentration.

Overall, with the provided results, it can be suggested that size is a more important determinant of executive pay than performance in Turkish companies. It is also evident in the sample; the firms with the largest mean size pay the highest mean compensation levels; these firms are found in finance industry. However; the manufacturing firms that have the highest mean ROA pay the lowest mean compensation. The evidence provided in this paper that size is a more important determinant of pay than performance is also consistent with the findings of many researchers who investigated the determinants of executive compensation. For example, Yurtoglu and Haid also reported similar evidence for the German stock-listed companies.

Although it is accepted to be a very important determinant of compensation in the literature, I find only a moderating effect of ownership concentration at the direct level. The ownership percentage of the largest direct shareholder is used as a measure of ownership concentration at the direct level. It has an insignificant positive effect on compensation whereas, its effect turns out to be significantly negative when it is interacted with performance suggesting that as the ownership concentration reaches higher levels, the effect of performance on executive compensation decreases.

Effect of deviation from one-share-one-vote principle on compensation is controlled only for the case of shares with multiple voting rights. It has a significantly negative effect on the level of total executive compensation.



When investigated more detailed, it is found that in the firms where control rights are increased in excess of cash-flow rights, the compensation decreases when there is an increase in company size and executive compensation increases with an increase in company performance.

A more comprehensive research can be conducted when some unfavourable data situations in Turkish listed companies change. In near future hopefully, the companies disclose the fixed and performance-related components of executive compensation in their annual reports. Also disclosure of executive compensation on an individual basis and disclosure of CEO-specific characteristics such as education, age and experience are of great importance to enable a more expanded research for the determinants of executive compensation in Turkey.

With the new Turkish Commercial Code that had been approved by the Turkish Parliament on the 13<sup>th</sup> January 2011, most of the principles in Corporate Governance Guideline (launched by CMBT) are now mandatory. According to the new Code, the companies have to disclose their ultimate owners as well. This will ease to understand the complex ownership structures of the Turkish companies and also enables to conduct more solid research.

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**TABLE 1: SUMMARY STATISTICS**

Year	Compensation		ROA		Size		LS	
	Mean	SD	mean	SD	Mean	SD	mean	SD
2003	1.211.994,00	1925481	4,23%	10,14%	737.000.000,00	3.500.000.000,00	49,25%	28,53%
2004	1.367.312,00	2065222	4,98%	8,64%	911.000.000,00	4.280.000.000,00	49,25%	28,53%
2005	2.600.601,00	5589162	4,92%	9,18%	1.240.000.000,00	6.390.000.000,00	49,25%	28,53%
2006	3.098.328,00	6328158	5,46%	10,35%	1.490.000.000,00	7.560.000.000,00	49,25%	28,53%
2007	2.750.113,00	4597199	5,87%	9,86%	1.690.000.000,00	8.660.000.000,00	49,25%	28,53%
2008	2.722.590,00	3940459	-1,01%	<b>22,21%</b>	2.030.000.000,00	10.600.000.000,00	49,25%	28,53%
Manufacturing	2.070.443,00	2.980.988,00	4,36%	10,71%	491.000.000,00	1.170.000.000,00	54,40%	27,02%
Finance	2.883.537,00	7.264.138,00	3,08%	19,56%	4.430.000.000,00	15.000.000.000,00	37,96%	29,09%
Utilities	2.378.419,00	3.943.319,00	4,33%	8,92%	515.000.000,00	1.410.000.000,00	46,10%	28,90%

**TABLE 2: ESTIMATED SIZE AND PERFORMANCE ELASTICITIES**

Estimation Method	SAMPLE	Constant	Performance	E	Size	ADJ. R2	N
OLS	Full	0,958	1,303	0,05	0,686	0,57	791
		2,16	3,60		30,39		
Robust Regression	Full	1,546	1,115	0,05	0,664		791
		4,11	3,62		34,61		
OLS	Manufacturing	1,284	1,554	0,07	0,664	0,60	506
		2,47	4,21		24,66		
Robust Regression	Manufacturing	1,326	1,385	0,06	0,666		506
		2,63	3,86		25,48		
OLS	Finance	0,083	0,295	0,01	0,700	0,55	157
		0,08	0,23		13,41		
Robust Regression	Finance	2,035	-0,794	-0,02	0,623		157
		3,40	1,10		20,93		
OLS	Utilities	0,682	1,588	0,07	0,703	0,43	128
		0,47	1,54		9,17		
Robust Regression	Utilities	0,725	1,668	0,07	0,707		128
		0,46	1,50		8,55		
OLS	2004	1,442	0,448	0,02	0,645	0,54	160
		1,54	0,60		13,06		
Robust Regression	2004	2,007	0,367	0,02	0,625		160
		2,10	0,48		12,42		
OLS	2005	1,040	1,146	0,06	0,685	0,52	131
		0,92	1,10		11,54		
Robust Regression	2005	1,349	1,112	0,05	0,684		131
		1,66	1,49		16,10		
OLS	2006	-0,933	2,785	0,15	0,737	0,57	133
		0,83	2,78		12,76		
Robust Regression	2006	0,461	1,565	0,09	0,690		133
		0,51	1,94		14,86		
OLS	2007	0,790	0,318	0,02	0,702	0,57	187
		0,87	0,44		14,87		
Robust Regression	2007	1,340	0,730	0,04	0,674		187
		1,66	1,13		16,10		
OLS	2008	1,003	2,040	-0,02	0,686	0,59	180
		1,15	2,84		15,13		
Robust Regression	2008	1,559	1,687	-0,02	0,660		180
		2,13	2,82		17,43		

The absolute values of t-statistics are reported below the coefficients.

**TABLE 3: EFFECT OF OWNERSHIP CONCENTRATION**

	Regression1		Regression 2	
	OLS	Robust	OLS	Robust
Constant	0,962	1,588	0,924	1,536
	2,13	4,14	2,01	3,92
PERFORMANCE	1,305	1,119	2,712	2,231
	3,59	3,62	4,15	4,01
SIZE	0,684	0,661	0,681	0,658
	29,06	32,98	28,04	31,78
LS	0,055	0,102		
	0,42	0,91		
ROA*LS			-3,257	-2,605
			2,59	-2,43
SIZE*LS			0,011	0,013
			1,51	2,02

The absolute values of t-statistics are reported below the coefficients .



**TABLE 4: EFFECT OF DEVIATION FROM ONE-SHARE-ONE-VOTE PRINCIPLE**

	Regression 1		Regression 2	
	OLS	Robust	OLS	Robust
<b>Constant</b>	0,320	2,010	0,286	1,983
	0,54	4,18	0,49	4,12
<b>ROA</b>	0,956	1,199	0,745	0,948
	2,11	3,24	1,52	2,37
<b>SIZE</b>	0,69	0,625	0,692	0,627
	24,30	26,94	24,36	27,03
<b>DEV</b>	-0,22	-0,271		
	2,12	3,21		
<b>ROA*DEV</b>			1,412	1,572
			1,16	1,58
<b>SIZE*DEV</b>			-0,017	-0,021
			2,55	3,77

The absolute values of t-statistics are reported below the coefficients.

## ENGLISH SUMMARY

The remunerations paid to top executives of stock market-listed companies have been under investigation especially since some corporate debacles such as Enron in the USA and Parmalat in Italy. Executive compensation issue attracted great attention both from academia and media. Amongst the questions asked, the most important ones are how executive compensation is arranged, whether performance is a key determinant of pay or the top managers of large companies are paid over their abilities, experience and performance. There is already a high number of research papers and newspaper articles about the determinants of pay at the top. Nevertheless, most of the research investigates the issue for the companies in the USA and the UK, so-called Anglo-Saxon countries. There is much less research focusing on the determinants of executive compensation in developing countries where the executive compensation as an “agency problem” has a different nature due to concentrated ownership structures and dominance of business groups that are mainly controlled by families.

Turkey exhibits most of the features that are common also in other developing countries such as high levels of ownership concentration, weak minority shareholder protection and presence of business groups. That is why, investigating the determinants of executive compensation in Turkey also provides an insight about the nature of executive compensation issue in developing countries.

Besides some information about corporate governance regimes and ownership structures present in the world, the thesis provides a more detailed examination of corporate governance environment ownership structure and evidence of determinants of executive compensation in Turkey.

The analysis relies on an unbalanced panel dataset of 203 companies listed on the Istanbul Stock Exchange from 2003 to 2008. The results suggest that firm size is a more important determinant of executive compensation than firm performance in Turkish firms. The results also suggest that the effect of firm performance on the level of compensation decreases as the ownership concentration of the company increases.

## ZUSAMMENFASSUNG:

Die Vergütung von Top-Managern börsennotierter Unternehmen ist spätestens seit den Skandalen um Enron in den USA und Parmalat in Italien ein besonders interessantes Thema sowohl für die akademische Forschung als auch für die mediale Berichterstattung.

Diese Arbeit beschäftigt sich in diesem Zusammenhang vor allem mit den Fragen, welche Formen die Vergütung von Vorständen annehmen kann, in wie weit das finanzielle Gebaren der Gesellschaft dabei eine Rolle spielt und ob die gerade bei großen Gesellschaften die Vergütung der Manager im Verhältnis zur deren Fähigkeit, Erfahrung und Leistung liegt.

Obwohl bereits eine hohe Anzahl wissenschaftlicher Publikationen über die Determinanten der Manager-Vergütung zur Verfügung stehen, konzentrieren sich diese hauptsächlich auf Unternehmen im englisch-sprachigen Raum. Bei weitem weniger werden selbige Determinanten für Gesellschaften in Schwellenländern oder sogar Entwicklungsländern beleuchtet, wobei gerade dort die Natur der Vorstands-Vergütung anders gelagert ist, da die Eigentümerstruktur konzentrierter ist oder eben noch weiter gehend das Unternehmen von einzelnen Familien(-Klans) kontrolliert wird.

Im Speziellen beschäftigt sich diese Arbeit mit der Vergütung von Spitzen-Managern in der Türkei, die wie in anderen Schwellenländer auch eine hohe Eigentümerkonzentration und einen eher schwachen Schutz von Minderheitseigentümern aufweist. Die Arbeit beginnt mit einem kurzen theoretischen Abriss über die existierenden Corporate-Governance Regime und Eigentümerstrukturen ohne sich vorerst auf ein bestimmtes Land festzulegen. Dem folgt eine detailliertere Analyse am Beispiel der Türkei. So werden dann in einem weiteren Schritt ein Panel-Datensatz von 203 Unternehmen, die an Börse in Istanbul notiert sind, über einen Verlauf von fünf Jahren (2003-2008) ökonomisch untersucht.

Die Ergebnisse lassen vermuten, dass die Unternehmensgröße eine entscheidendere Rolle hinsichtlich der Manager-Vergütung einnimmt als die Unternehmensperformance. Des weiteren weisen die Ergebnisse dieser Studie darauf hin, dass der Effekt der Unternehmensperformance auf die Vergütung der Top-Manager mit steigender Eigentümerkonzentration abnimmt.

## CURRICULUM VITAE

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Name: TUGBA GÜLEN

Date of Birth: 12nd of APRIL 1981

Nationality: TURKEY

### EDUCATION:

Date (start – end): 10.2007 – 04.2011

Type of education: Master in Economics, University of Vienna, Vienna

Date (start – end): 2006.10 – 2007.07

Type of education: Vienna University of Economics and Business, Vienna/Austria

Date (start – end): 2006.03 – 2006.06

Type of education: German Language Course, University of Vienna , Vienna/Austria

Date (start – end): 1999.10 – 2003.10

Type of education: Bachelor of Science in Public Finance, Istanbul University, Istanbul/Turkey

Date (start – end): 1992 – 1999

Type of education: High School Diploma, Burak Bora Anatolian High School  
Main Subject: Mathematics Istanbul/Turkey

Date (start –end): 1987 – 1992

Type of education: Primary school education

## WORK EXPERIENCE:

Date (start – end): 2008.09 – 2009.09

Employer: International Atomic Energy Agency, Vienna/Austria

Position or function: Full-time Internship, Budget and Finance Department

Date (start – end): 2005.10 – 2006.03

Employer: Bagdat & Etiler Magazine, Istanbul/Turkey

Position or function: Accounting and Advertisement Responsible

Date (start – end): 2004.11 – 2004.012

Employer: Garanti Securities, Istanbul/Turkey

Position or function: Full-time internship, Research Department

Date (start – end): 2004.08 – 2004.10

Employer: Sarrafoglu Textile - Spasso Trendline, Istanbul/Turkey

Position or function: Accounting and Stock Management Responsible

Date (start – end): 2003.08 – 2003.09

Employer: Bosch and Siemens Home Appliances Group, Istanbul/Turkey

Position or function: Full-time internship, Budget and Controlling Department

Date (start – end): 2002.06 – 2002.09

Employer: Arcelik - LG, Kocaeli/Turkey

Position or function: Full-time internship, Budget and Finance Department

Date (start – end): 2001.08 – 2001.09

Employer: Sisecam Camtas – Duzcam A.S., Istanbul/Turkey

Position or function: Full-time internship, Sales Accounting Department

#### LANGUAGE KNOWLEDGE:

English: Fluent

German: Advanced

Turkish: Mother tongue