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The impact of board composition on corporate financial and social responsibility performance: Evidence from public-listed companies in Turkey

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In an attempt to explain the relationships between principles of good governance, marketing practices and financial performances of companies in Turkey, the authors examined the inter-relationships between board composition characteristics, corporate social responsibility practices and financial performance in this study. The population of this study is Turkish firms that are listed in the Istanbul Stock Exchange (ISE) in 2007 and have a published corporate governance compliance report. Using content and logistic regression analyses, the authors found that smaller board size leads to better financial performance, whereas inside directors and CEO duality lead to worse financial performance. On the other hand, independent directors lead to better corporate social responsibility. By providing evidence from an emerging country, Turkey, this study provided some meaningful insights into the board of directors’ composition, corporate social responsibility practices and the effects of both on the various financial output of a company. Emphasizing the importance of corporate social responsibility practices and board composition characteristics, the current study offered in-depth information to companies that aim to gain a competitive financial advantage in Turkey.

Key words: Turkey, board characteristics, corporate social responsibility, financial performance.

INTRODUCTION

With the growing competition of globalization, strategic decision makers have been faced with the competing interests of external and internal stakeholders such as greater diversity in corporate governance, undertaking more investments in corporate social responsibility and maximizing financial performance. As a result, strategic decision makers today must not only increase their financial performance, but also satisfy the increasing expectations of customers, suppliers and society as a whole. Since these developments have made strategic decision making process more complex, it is necessary to gain a better understanding of how companies can improve their effectiveness to serve both of these goals. As a result, a substantial amount of attention has been paid to inter-relationships between board composition, corporate social responsibility and financial performance.

Despite several notable developments over the years, there remains a lack of clarity about the aforementioned inter-relations because of the following three main reasons;

First, board composition, corporate social responsibility and financial performance have aroused interest in such diverse disciplines as management, marketing, finance and sociology that it leads to different conceptualizations, measurements and thus interpretations of the concept. Second, most of the existing works have only focused on the relation between two of the variables, for example, board composition and financial performance (Anne and Williams, 2003; Dehaene et al., 2001; Kula, 2005); board composition and corporate social responsibility (Coffey and Wang, 1998; Ghazali, 2007; Ibrahim and Angelidis, 1995; Johnson and Greening, 1999; Luoma and Goodstein, 1999; Waddock and Graves, 1997); or corporate social responsibility and financial performance...
variables in the same model but in a different cultural
context, Turkey, with the aim of providing some mean-
ings for future research. Finally, section three summarizes
the research method and analytical strategies in this study
and also presents the key descriptive statistics and
empirical analyses. Conceptual framework, hypotheses
and social responsibility performances and the relation-
ships between corporate social responsibility and
closer inspection of the current literature focusing on
relationships of companies, the current study attempts to
In this context, aiming to explore the aforementioned
factors can influence this situation, such as different
relationships between board structure, corporate social
responsibility and financial performance were examined in this study. The
current study replicates existing links between the three
variables in the same model but in a different cultural
culture. Therefore, additional research is required to further clarify
interrelationships among board structure, corporate financial responsibility and financial performance within a
wider and interdisciplinary scope.

The paper is organized in three sections. The first
section involves the conceptual framework, hypotheses
and research model. The second section introduces the
research method and analytical strategies in this study
and also presents the key descriptive statistics and
empirical analyses. Finally, section three summarizes the
main findings and offers some practical and theoretical
recommendations for future research.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

DEVELOPMENT

The relationship between corporate board
composition and financial performance

Board size is one of the well-recognized dimensions of
board composition examined in the literature. The em-
peratures of obtaining higher market valuations, improved
return on assets (ROA) and return on sales (ROE)
(Yermack, 1996). Similarly, obtaining data from nearly
900 firms, Eisenberg et al. (1998: 35) have provided evi-
dence for “a significant negative correlation between
board size and profitability in a sample of small and
midsize Finnish Firms”. Extending agency theory-based
studies of corporate boards, Cheng’s (2008: 3) results
indicate that “board size is negatively associated with the
variability of monthly stock returns, annual accounting
return on assets, Tobin’s q, accounting accruals, extraordinary items, analyst forecast inaccuracy, R&D
spending, the level of R&D expenditures and the frequency of acquisition and restructuring activities”.

Analyzing the size, composition, functioning and
effectiveness of corporate boards in a sample of 450 non-
financial companies from ten countries that are members
of the OECD, Andres et al. (2005: 197) found “a negative
relationship between firm value and the size of the board
of directors”. Dehaene et al. (2001) analyzed the com-
position of the board of directors in a sample of 122
Belgian companies and concluded that the size of the
board does not enhance the returns of the company.
Using a sample of 350 Forbes 500 firms over the period
moderating effects of the market for corporate control.
Consistent with the complement hypothesis, they found
(2008: 121) “a significant association between smaller
boards and better firm performance before passage of
anti-takeover laws, but a much weaker relation (reduced
by more than one-third) after the takeover restrictions
were in place.”

As shown, most of the studies examining board size
effect on financial performance have confirmed
Yermack’s (1996) findings that board size and financial
performance of a firm were negatively correlated. This
negative relationship can be evaluated as an empirical
support of the agency theory, which has been a dominant
approach in economics and finance literatures (Hermalin
and Weisbach, 2000). In order to explain the underlying
reasons for this negative relationship, the agency theory
poses the idea of organizational psychology. This idea
suggests that as the size of the group increases, commu-
nication and coordination problems increases (Jensen,
1993). As a result, as Lipton and Lorsch (1992) stated,
both the incentives and abilities of the group to control
management decreases (Cheng et al., 2008: 124).

On the other hand, in a developing country like Turkey,
the findings of studies examining the relation between
the board size and financial performance have yielded
contradictory results. Examining 27 Turkish Banks
operating in the market between the years 2001 and
2004, Kaymak and Bektas (2008: 559) found “no support
for the position that large boards reduce performance of
firms in the financial sector”. Similarly, obtaining data
from a sample of 386 mostly small and non-listed stock
ownership companies, Kula (2005: 265) found that as a
variable of board structure, board size had no significant
impact on firm performance. Clearly, many different
factors can influence this situation, such as different
sample structures and unique conditions of the cultural
environment. In order to explore the cross-cultural

(Cochran and Wood, 1984; McGuire et al., 1988; Pava
and Krausz, 1996; McWilliams and Siegel, 2000). This
may cause some degree of inconsistency in the results.
Finally, there are only a few non-US empirical studies
(Ghazali, 2007; Haniffa and Cooke, 2005; Rashid and
Lodh, 2008; Said et al., 2009; Yammeesri et al., 2006). A
closer inspection of the current literature focusing on
Turkey shows that the previously mentioned concepts
have been researched mainly in one domain: manage-
ment.
generalizability of the agency theory, the impact of board size on the financial performances of Turkish companies listed in the Istanbul Stock Exchange (ISE) in 2007 was tested in the present study.

H_{1b}: Smaller board size leads to better financial performance.

In addition to studies of board size, academicians have also widely examined whether the proportion of dependent and independent directors on managerial boards has an impact on financial performance. The independent member definition used in this paper is consistent with CMBT, which defines independent members as the members who have the ability to execute their duties without being influenced under any circumstances. Corporate Governance Principles (CGP) of Turkey (See Title 3.3.5) also presents more detailed conditions of categorization as an independent director. Some studies criticized the CMBT’s definition of independent members (Yildirim Oktem and Usdiken, 2009; Usdiken and Oktem, 2008) for adopting in their boards firms affiliated to family business groups. However, this study only focused on corporate governance compliance reports and did not discuss the basis of corporate governance systems, which are adopted from developed countries. Also, these principles depend on voluntariness in Turkey and it is likely that some principles will not comply with this context.

Based on the agency theory, Davidson and Rowe (2004: 50) defined the traditionally assumed relation between dependent-independent composition of the board and financial performance as “greater independence of board members would lead to better financial decisions” and thereby better financial performance. Although, findings of empirical studies are conflicting (Core et al., 1999; Finegold et al., 2007; Hermalin and Weisbach, 2003), many studies have suggested a statistically significant and positive relationship between the proportion of independent directors and the firm’s performance (Baysinger and Butler, 1985; Daily and Dalton, 1993; Daily and Johnson, 1997; Dehaene et al., 2001; John and Senbet, 1998; Kim and Lim, 2009; Kula, 2005; Lefort and Urzua, 2008; Pearce and Zahra, 1992).

On the other hand, some authors did not find a meaningful relationship between number of independent board members and financial performance (Andres et al., 2005; Ahmed et al., 2006; Anne and Williams, 2003; Dalton et al., 1998; Hermalin and Weisbach, 1991; MacAvoy et al., 1983; Mallette and Fowler, 1992).

Furthermore, some authors found a negative relationship between number of independent board members and firm performance (Agrawal and Knoeber, 1996; Beatty and Zajac, 1994; Kaymak and Bektas, 2008; Klein, 1998; Yermack, 1996). However, as will be further discussed, it must be mentioned that as a part of governance mechanisms, accepted board systems (one or two tier) among countries may lead to different results in terms of the correlation between dependent-independent director composition and the financial performance of the firm. For example, in a two tier board system, additional independent members may not be necessary for an improved decision making process, whereas in a one tier board system, independent directors may contribute to decisions.

According to Corporate Governance Principles (CGP) of Turkey published by Capital Markets Board of Turkey (CMBT), the formation of the board of directors should be structured so as to optimize effect and efficiency. In this context, emphasizing the need for the independence of the board of directors, “it was recommended that the board of directors be constituted of at least two independent members and that at least one third of the members fulfill the criteria for independence”. Moreover, the criteria for independence are detailed in seven subheadings of Item 3.3.5. of the principles (www.cmb.gov.tr/regulations/files/corporate_governance.pdf). Since the CGP of Turkey adopted the view of the agency theory in addressing the formation of the board directors, we propose that a higher proportion of independent directors should lead to better firm performance.

H_{1b}: A higher proportion of independent board members leads to better financial performance.

In examining the impact of board composition on financial performance, insider-outsider director ratio is also an extensively used classification in the literature. In fact, consistent with the traditional two way classification, classifying directors as inside and outside directors has its roots in the 1940 Investment Company Act, which used the terms “interested directors” and “disinterested directors” (Davidson and Rowe, 2004: 52). Another terminology of this classification is affiliated and non-affiliated directors rather than “insiders” and “outsiders”, respectively. Davidson and Rowe (2004: 52) defined inside directors as “directors who are also fund executives and serve in at least one of the following categories: Management of the fund and management of the investment advisor” and defined outside directors as “directors who are not fund executives”. Officers and employees on managerial boards were typical examples of insider directors (Cohen, 1977). Gilson (1990) has categorized outside directors further into two subcategories according to their degree of independence: grey outsiders and pure outsiders, also known as “affiliated outsiders” and “independent outsiders”, respectively. Affiliated directors are defined as “individuals who have a close relationship with the firm or the CEO and have a required disclosure on the proxy statement of their relationship” (Tugle, 2004: 19) and may include relatives of insider directors and consultants of the company (e.g., attorneys and bankers). Independent outsiders are people who do not have “any present direct business relationship with the corporation on whose board they serve” (Cohen, 1977: 837).
In examining the impact of insider-outsider director proportion on financial performance, unfortunately, the previous literature does not offer consistent findings. Although many of the studies suggest a positive relationship between outsider-dominated boards and the performance of the company (Daily and Dalton, 1993; Hill and Snell, 1988; Pearce and Zahra, 1992; Schellenger et al., 1989; Krivogorsky, 2006), some studies found no significant relationship between the proportion of inside/outside directors and company performance (Bamhart and Rosenstein, 1998; Bhagat and Black, 1999; Daily and Johnson, 1997; Dalton et al., 1998; Dulewicz and Herbert, 2004; Hermelin and Weisbach, 1991; Klein, 1998; Krivogorsky, 2006; Malette and Fowler, 1992; Rosenstein and Wyatt, 1997). Moreover, some studies support a negative relationship between the previously mentioned variables (Bhagat and Black, 2002; Klein, 1998; Rose, 2005). For example, Rose's (2005) findings, which depended on a two-tier board structure in Denmark, proposed that the proportion of inside directors has an inverse relationship with financial performance. However, the findings of the aforementioned studies have been largely grounded on stewardship theory, suggesting “a reliance on a preponderance of inside directors”, which is opposite to the agency theory (Dalton et al., 1998: 270). For a successful decision making process, stewardship theory claims that a significant proportion of dependent directors is required in managerial boards. The rationale of this claim is based on the idea that dependent directors can better understand not only the business processes but also the environmental factors. Therefore, they can govern their businesses more successfully than independent directors (Donaldson, 1990; Donaldson and Davis, 1991). However, this literature is relevant for the one-tier managerial board system, in which the same person “holds the function of CEO and chairman” (Dehaene et al., 2001: 386). As Dalton and Kesner (1987) stated, in 80% of US companies, the CEO is also the chairman of the board. Contrary to the one-tier managerial board system, which is largely based on the Anglo-American model, the two-tier board system has a separated leadership structure. This indicates that the CEO and chairman functions are performed by different persons. As Dehaene et al. stated (2001), in a one-tier board system, a large number of independent members may contribute to the decision process and better financial performance. On the other hand, in a two tier board system, additional independent members may not be needed for a better performance. Consequently, if the insider proportion of the board has some impact on firm performance, this impact can be both positive and negative according to levels of managerial ownership (Haniffa and Hudaib, 2006: 1044; Himmelberg et al., 1999).

Although the Turkish governance system exhibits “its own country-specific characteristics with a harmonization of Anglo American and Continental Europe mechanisms” (Gonencer, 2007: 146), it still carries most of the elements of an insider system country, with a highly concentrated and centralized ownership structure (Demirag and Serter, 2003: 48). Supporting Demirag and Serter’s idea, Kula (2005: 265) stated that “families, directly or indirectly, own more than 70% of all traded companies and retain majority control in Turkey”. Therefore, based on the evidence that the increasing rate of insider ownership initially leads to a better financial performance but after a certain point leads to decreases (McConnell and Servaes, 1990; Morck et al., 1988; Stulz, 1988), our next hypothesis is:

\[ H_0: \text{A higher proportion of inside board members leads to worse financial performance.} \]

Another approach in examining the impact of board structure on performance of the firm is through CEO duality. The CEO duality concept is used in determining whether CEO and chairman roles are performed by different persons. If CEO and chairman functions are performed by same person, then there is a CEO-Chairman Duality. This structure is also known as the one-tier board system, as previously mentioned.

From an agency theory perspective, duality can decrease the effectiveness of monitoring activities (Desender, 2009) and, therefore, it may weaken the financial performance of the firm (Donaldson and Davis, 1991). By contrast, stewardship theory claims that CEO duality creates a clear leadership role for the firm and, therefore, it may lead to better firm performance (Kiel and Nicholson, 2003).

The findings of previous studies are conflicting in terms of the relationship between duality and the performance of the company (Finegold, et al., 2007). Some of the studies were in favor of duality, suggesting that CEO duality may improve corporate performance (Daily, 1995; Daily and Dalton, 1994; Dehayene et al., 2001; Donaldson and Davis, 1991; Kiel and Nicholson, 2003; Kula, 2005; Tian and Lau, 2001), while others implied that duality has a negative impact on firm performance (Coles et al., 2001; Kaymak and Bektas, 2008; Rechner and Dalton, 1991), as consistent with the agency theory. In contrast, some other studies did not observe a relationship between CEO duality and company performance (Daily and Dalton, 1992, 1997; Baliga et al., 1996; Brickley et al., 1997; Rechner and Dalton, 1989; Tanrioven et al., 2006; Weir and Liang, 2000). Boyd (1995) emphasizes that the effects of duality on a company cannot be predicted according to agency or stewardship theories, but rather, outcomes can be differentiated among various industries and in certain conditions.

In terms of board leadership structure, Turkey exhibits “extended duality” characteristics. In Turkey, “board members may be granted special powers that enables a member to make decisions in the absence of other board members.
members” (Kaymak and Bektas, 2008: 559). Kula (2005)
named these individuals “duly empowered members”.
When empowered members are present on the board,
duality may also exist in Turkish managerial boards. In
accordance with this situation, Kaymak and Bektas
(2008) adjusted the definition of duality for the unique
Turkish legal context and they found strong support for
the agency theory approach. Consistent with their
findings, our next hypothesis is:

**H₁₀**: Existence of CEO duality leads to worse financial
performance.

Another approach focuses on the impact of board
committee structures on company performance. As a
source of decision making in a specific area, board
committees can be more effective than full boards.
Therefore, as an important mechanism of corporate
governance, the presence of committees on boards is
expected to have a significant role in company outcomes.
The presence and structure of board committees have
been widely studied in the literature. For example, Klein
(1998) found that having more insiders on finance and
investment committees is positively associated with not
only the financial, but also the stock market performance
of the company (Finegold et al., 2007). Dechow et al.
(1996) found evidence that “firms manipulating earnings
are less likely to have an audit committee”. Investigating
the extent to which audit committee composition and
institutional investor holdings are related to the incidence
and nature of firms’ bankruptcy filings, Daily (1996) found
that there is no significant relationship between affiliated
director representation on audit committees and the
incidence of bankruptcy. However, audit committees
were associated with the nature of bankruptcy filing.

Having the responsibility of overseeing the financial
reporting process and ensuring the objectivity of the
external audit (Uzun et al., 2004: 36), audit committees
may have strategic significance in terms of the financial
performance of the company. In Turkey, audit commit-
tees are compulsory for listed companies according to
the CGP of CMB; “Turkish Commercial Law allows
boards to distribute responsibilities among one or more
members or any sub-committee (Art. 319), though board
committees are not obligatory” (Kula, 2005: 268). On the
other hand, in accordance with the Principles of the
OECD, CGP of CMB encourages company boards to
establish an audit committee responsible for the
supervision of their financial and operational activities
(OECD, 2006; www.cmb.gov.tr/regulations/files/corporate_governance.p
df). “The CMB Principles do not, however, contain any
specific guidance about the processes the audit
committee should adopt to implement this objective, nor
do they specifically call for the audit committee to report
on its activities in this regard on an annual basis” (OECD,
As a result, this OECD Principle “has been
assessed as **partly implemented** because: (a) board
members and key executives are not required to disclose
on a timely basis to the board that they have a material
interest in a contract or other matters affecting the
company; and (b) enforcement mechanisms and
remedies do not seem to operate effectively to encourage
adherence to legal requirements or the CMB's
recommendations” (OECD, 2006). Consequently, in order
to explore the possible effects of an audit committee on
the financial performance of the company, our next
hypothesis is:

**H₁₁**: The existence of an audit committee leads to better
financial performance.

**The relationship between corporate board
composition and corporate social responsibility
performance**

According to the primarily cited definition of Carroll (1979;
1991), Corporate Social Responsibility (CSR) encom-
passes the economic, legal, ethical and philanthropic
expectations that society has of organizations at a given
point in time. “Furthermore, these four categories or
components of CSR might be depicted as a pyramid. To
be sure, all of these kinds of responsibilities have always
existed to some extent, but it has only been in recent
years that ethical and philanthropic functions have taken
a significant place” (Carroll, 1991:40).

As is known, the evolution of marketing has not only
created a shift in the scope of marketing from a product-
focused to a consumer-focused approach, but has also
widened the scope of it in a way that has involved
different stakeholders. This goes beyond the consumers
and includes all groups in the society experiencing
indirect effects of marketing mix. This new marketing
perspective, which attracted intensive attention in the
marketing literature (Fill, 1995; Gronroos, 1997; Kitchen
and Schultz, 2002; Kotler and Jaworski, 1990; Kotler and
Lee, 2005; Maignan and Ferrel, 2004; Sen and Bhat-
attacharya, 2001), highlights the interrelationships
between customer, business, society and environment.
As a result, the progress on the marketing approach
makes corporate social responsibility an important issue
for good governance and necessitates a stakeholder view
in order to balance and meet the expectations of all
stakeholders.

Since the board of directors is the authorized body in
collective decision making, it is also the main unit in
terms of socially responsible decisions. Although there
are growing numbers of studies in the literature exa-
mining the relationship between CSR and characteristics
of board of directors (Arora and Petrovna, 2009; Ayusa
and Argadona, 2007; Ayuso et al., 2007; Bartkus et al.,
2002, Graaf and Herkstroter, 2007; Cofey and Wang,
1998; Dunn and Sainty, 2009; Harrison and Freeman,
1999; Louma and Goodstein, 1999; McKendell et al.,
1999; McGuire et al., 2003; McGuire et al., 2001; Miller
and Triana, 2009; Said et al., 2009; Werbel and Carter, 2002), there are no empirical findings from Turkey. Therefore, in order to explore the possible relationships between the characteristics of the board of directors and socially responsible behaviors of companies in Turkey, the effect of board size on CSR was explored first. According to the agency theory, large boards result in communication and coordination problems and the decreased management ability of the board. However, based on the assumption that large boards, compared to smaller boards, may involve more shareholders with different interests who attempt to protect their own wealth, our next proposition is:

$H_{2a}$: Larger board size leads to better corporate social performance.

In this context, the findings of several authors (Said et al., 2009; Dunn and Sainty, 2009; Louma and Goodstein, 1999) support our proposition.

As an important element of corporate governance, we also examined the effect of the proportion of independent directors on corporate social responsibility performance. The literature mainly suggests that, consistent with the resource dependency theory, independent boards can be more effective in terms of enhancing corporate image and ensuring shareholders’ interests (Coffey and Wang, 1998; Dunn and Sainty, 2009; Ibrahim and Angelidis, 1995; Johnson and Greening, 1999; Wang and Dewhirst, 1992; Webb, 2004; Zahra et al., 2003), although it also includes some contrary results (Chapple and Ubbasaran, 2007; McKendall et al., 1999; Wang and Dewhirst, 1992). Therefore, not following the agency theory logic and expecting that a higher percentage of independent directors results in greater concern for social responsibility, our next proposition is:

$H_{2b}$: A higher proportion of independent board members leads to better corporate social performance.

Among others, insider/outside proportion is a widely examined dimension in the literature. Empirical evidence mainly supports the idea that outsider members are more effective in providing corporate social perspectives since they are more conscious about the environmental dynamics and the different demands of various stakeholders than insider members “who are assumed to be more preoccupied with economic utilities” (Coffey and Wang, 1998: 1597). For example, Ibrahim and Angelidis (1995) and Ibrahim et al. (2003) found that outside directors are more conscious about philanthropic components of corporate responsibility than insiders. Similarly, Johnson and Greening (1999) and Zahra et al. (1993) found a positive relationship between outside director representation and corporate social performance. Webb (2004) also suggests that socially responsible firms tend to utilize more outsiders in their boards. However, the findings above are in contrast to some other studies. Chapple and Ubbasaran (2007) did not find a relationship between CSR activities and outsiders/insiders proportion on the board. McKendall et al. (1999) found a similar result for the proportion of inside directors to outside directors and environmental law violations. Wang and Dewhirst (1992) found that inside and outside directors do not differ in their stakeholder orientation. Coffey and Wang (1998) found that there is a positive relationship between percentage of stock owned by insiders and charitable behaviors. Therefore, additional studies are needed to increase the generalizability of the results. Consistent with the proposition above and based on the expectation that insider directors are less likely to protect different stakeholders’ interests no matter whether they are minority shareholders or not, our next hypothesis is:

$H_{2c}$: A higher proportion of inside board members leads to worse corporate social performance.

Although CEO duality may play a significant role as a determinant of corporate social responsibility, it has not been widely studied in the literature. Bartkus et al. (2002) examined CEO duality and corporate philanthropy and found that CEO duality was equally common among groups of firms with different philanthropy levels. Said et al. (2009) also investigated CEO duality and CSR performance and did not find any evidence that companies with CEO duality were less likely to have a lower extent of corporate social disclosure. As previously mentioned, CEO duality occurs when the same person performs as both the CEO and board chairman. Since “Corporate Social Responsibility largely utilizes the stakeholder theory which broadens the beneficiaries of the corporation to include groups and individuals who can affect or be affected by the achievement of that organization’s objectives (Freeman, 1984) and suggests that the primary objective of the company activity should be to create and maximize value for all stakeholders” (Ararat and Gocencoglu, 2006: 1), we can expect that combining decision powers in one person through CEO duality is not a desired situation in terms of protecting all stakeholders’ wealth. Similar to the study by Said et al. (2009), our next proposition is:

$H_{2d}$: Existence of CEO duality leads to worse corporate social performance.

In order to create a broader governance perspective concerning the interests of multiple stakeholders, the corporate governance committee may play a significant role in terms of the integration of CSR issues into board structure (Ayuso et al., 2007). According to Luoma and Goodstein (1999), the existence of a committee that is composed of stakeholders, or that is dedicated to CSR, is strategically important for integrating stakeholders’ interests to collective decision making.

As Graaf and Herkstroter (2007) stated, clients, shareholders and employees can participate in this committee and can make recommendations regarding people who are important for the company and integrate these
recommendations into company policy.

Similarly, the Corporate Governance Principles in Turkey suggest a corporate governance committee established by the Board of Directors to monitor the company’s compliance with corporate governance principles, perform improvement studies and offer any possible suggestions to the board.

According to this report, as a fundamental function of the board of directors, they “should work in close cooperation and liaison with members of the corporate governance committee and shareholder relations department, created there under”. Moreover “the majority of the corporate governance committee should comprise of independent members.

The chief executive officer/general director should not hold a position at this committee. (www.cmb.gov.tr/regulations/files/corporate_governance.pdf). The main responsibilities of this committee are detailed in five subheadings of Item 5.7.2. (www.cmb.gov.tr/regulations/files/corporate_governance.pdf). Although there are some studies in the literature examining the relationship between different dimensions of committees (e.g., the composition of committees and membership of committees and CSR) (Dunn and Sainty, 2009; Miller and Triana, 2009; Said et al., 2009, Surroca and Tribo, 2008), examinations of the relationship between the existence of corporate governance committees and CSR (Ayuso et al., 2007) are relatively limited. Thus, in accordance with the suggestions of several authors (Ayuso et al., 2007; Graaf and Herkstroter, 2007; Luoma and Goodstein, 1999) and associations (Corporate Governance Principles in Turkey), our next proposition is:

H09: The existence of a corporate governance committee leads to better corporate social performance.

Furthermore, having the responsibility of overseeing the financial reporting process and ensuring the objectivity of the external audit (Uzun et al., 2004: 36), the audit committee may also have strategic significance for the social performance of the company. In order to explore the possible effects of the existence of an audit committee on corporate social performance, our next hypothesis is:

H10: The existence of an audit committee leads to better corporate social performance.

The relationship between corporate social responsibility and corporate financial performance

Many studies have examined the relationship between corporate social responsibility and corporate financial performance. These studies have been published in journals in various areas such as management, accounting, governance and ethics (Callan and Thomas, 2009). However, they differ widely in terms of methodological, conceptual and theoretical orientations. In this context, there are several studies that have reviewed the literature in this area (Griffin and Mahon, 1997; Margolis and Walsh, 2003; Orlitzky et al., 2003; Pava and Krausz, 1996). Margolin and Walsh (2003) conducted an intensive search and classification of the 127 articles published between 1972 and 2002. In their literature review, they found that the majority of results pointed to a positive relationship between corporate financial performance and social performance (Margolin and Walsh, 2003). On the other hand, the results of these studies have been mixed. For example, Boyle et al. (1997), Vance (1975) and Wrights and Ferris (1997) found a negative relationship, while others such as Alexander and Buchholz (1978), Aupperle et al. (1985), Folger and Nutt (1975) and Teoh et al. (1999) did not find a relationship.

There are many differences in the results of the studies. The methodology of this body of work varies widely among different studies. According to Salzmann et al., (2005: 29), quantitative analyses in this area are based on three different methodologies: portfolio analyses, which compare the performance of constructed model portfolios with a benchmark index; event studies, which assess the impact of good or bad environmental or social incidents on companies' share prices; multivariate analyses, which examine associations between different measures of CSR and CFP and also control for the influence of some potential moderating factors.

As Jackson and Parsa stated (2009: 14), “the relationship between CSR and financial performance is further complicated by the fact that there is a lack of consensus in the measurement methodologies and tools used to evaluate the link between CSR initiatives and a firm’s financial performance”. Studies have used a wide array of methodologies and variables to measure variables. Conducting a meta-analysis of 52 studies (yielding a total sample size of 33,878 observations), Orlitzky et al. (2003) classified the construct of CSP measurement into two main categories: internal measures (e.g., content analysis of annual reports and disclosures to the public reflecting the company’s self-evaluation for CSR) and external measures (e.g., reputational indices of KLD and Fortune rankings, or the use of social audits or observable outcomes reflecting the perceptions of important groups including stakeholders). They also stated that (Orlitzky et al., 2003) there are three main measures of CFP: market-based (investor returns) measures such as price per share or share price appreciation; accounting-based (accounting returns) measures such as the firm’s return on assets (ROA), return on equity (ROE), or earnings per share (EPS); and perceptual (survey) measures, which collect primary data from defined respondents. All of the measures for both of the constructs have advantages as well as disadvantages and the possible reason for using a variety of measures for the constructs is convenience. On the other hand, as
the numbers of studies have accumulated over time, we might expect that better measures can be developed. In this context, the measurement discussion appears to be ongoing (Salzman et al., 2005).

In addition to using alternative methodologies and variables, there is also a debate about the direction of relationship between CSR and CFP. Shareholder theory predicts a negative relationship between CSR and CFP. This suggests that in order to maximize financial performance, companies should invest only in rational areas rather than allocating financial resources to social goals, which increase the costs of the company. On the other hand, stakeholder theory claims a positive relationship between them based on the idea that satisfying the interests of various stakeholder groups can result in improved productivity, growing market share and enhanced reputation.

The majority of previous researches show a generally positive relationship between CSR and CFP (Aupperle and Van Pham, 1989; Orlitzky et al., 2003; Peloza and Papania, 2008). In their literature review, Margolis and Walsh (2003: 274) found that nearly half of the results (54 of 109) pointed to a positive relationship between corporate social performance and financial performance when corporate social performance was used as an independent variable in predicting financial performance. Similarly, Pava and Krausz (1996: 324) observed that of the 21 studies, 12 reported a positive association between CSR and financial performance. As Callan and Thomas stated, although there is a debate concerning the direction of the relationship between CSR and CFP, at both the theoretical and empirical levels, “some consensus is beginning to form” (2009: 63). In this context, following the majority of research findings and consequently stakeholder theory, we hypothesize a positive direction between the variables.

Another debate is about the direction of causality, since in 1984, Cochran and Woods suggested that the causality of the CSR-CPF relationship should be investigated. In their literature review, Margolis and Walsh (2003) defined CSR as the independent variable of the CSP-CPF relationship. On the other hand, existing research findings seem to imply bidirectional causality. Waddock and Graves defined this simultaneous relationship as a type of ‘virtuous circle’, which means that “a firm’s CSR affects its future performance and a firm’s history of financial performance contributes to its current CSR involvement” (Luo and Bhattacharya, 2006: 5). Waddock and Graves (1997) have explained this bidirectional relationship based on two main theories: slack resources theory and good management theory.

Highlighting reverse-causality (McGuire et al., 1988), the slack resources theory implies that better financial performance results can create some opportunities for companies to behave more responsibly to social concerns and, thus, better CFP financial performance can be a predictor of better CSP. On the other hand, good management theory claims that socially responsible behavior is a necessity for improving good relationships with different stakeholders. Behaving with such a consciousness has been recognized by all stakeholders, including customers and consequently leads to increased sales or reduced stakeholder management costs. Thus, better CSR leads to better CFP (Waddock and Graves, 1997). Cheng et al.’s (2006) findings support this notion.

As Nelling and Webb stated (2009), empirical evidences (Waddock and Graves, 1997; McGuire et al., 1990; Hillman and Keim, 2001) support the existence of a virtuous circle. Similarly, the meta-analysis conducted by Orlitzky et al. (2003) showed that the mentioned relationship tends to be bidirectional and simultaneous. Based on these findings, we propose two hypotheses to test the causality, assuming that CSR is “both a predictor and consequence of firm financial performance” (Waddock and Graves, 1997: 307).

\[ H_{3a}: \text{Improved CSR leads to better financial performance.} \]

\[ H_{3b}: \text{Better financial performance leads to improved CSR.} \]

**METHODOLOGY**

**Sample selection and data**

As an initial attempt to test the aforementioned relationships as a whole in a different cultural context, a population was preferred over sample selection. Turkish firms that were listed in the Istanbul Stock Exchange (ISE) in 2007 and also published a corporate governance compliance report constituted the population of this study. Since publishing a corporate governance compliance report is not mandatory for listed companies in Turkey, it can be evaluated as a good indicator of legitimization or institutionalization of corporate governance principles in Turkey. An examination of the general trend of publishing reports demonstrates that reports reached their maximum number in 2007. Besides offering maximum data to the research, year 2007 is accepted as a reference point in terms of the legitimization of corporate governance principles in Turkey.

The accounting rules of bank and insurance companies (as well as some holding companies) differ from other companies according to uniform bookkeeping instructions. Therefore, these companies were excluded from the population due to the difficulty as well as duality in calculating some financial variables. In addition, four companies from the sample were also excluded due to the lack of relevant data in their compliance reports. Consequently, the population consists of 165 firms that were listed in the ISE; published a relevant corporate governance compliance report and used the same bookkeeping method in obtaining their financial data. Stock market information was obtained from ISE (www.ise.com.tr).

There are two primary sources of data: companies’ financial statements and Corporate Governance Principles Compliance Reports. Data of the financial performance of the companies were obtained from two main financial statements: balance sheets and income statements. Compliance reports were used to obtain both board structure and corporate social responsibility data.

**Research model and variables**

The research model was based on three main propositions. First, the board composition affects financial performance. Second, the board composition affects corporate social responsibility
performance. Third, corporate financial and social responsibility performances affect each other reciprocally. Figure 1 summarizes the model and variables.

As shown in Figure 1, board composition was measured with five different dimensions. Data of these dimensions were all obtained from published compliance report subheadings below Part Four: Board of Directors, Title 18. The Structure and Formation of the Board of Directors and Independent Members; Title 19. Qualification of Board Members. Board size shows the number of people on the board. Following the CMBT statement (2005: 49), the proportion of independent members represents the percentage of independent directors. Therefore, the “independent or inside” member definition is that of CMBT. Similarly, the proportion of inside members shows the percentage of inside directors to totals.

Since different coding schemas used by different authors affect the direction of potential relationships (Muth and Donaldson, 1998), findings are mixed, especially for CEO Duality (Rhoades et al., 2001). In the current study, CEO Duality data was coded as a binary variable. If the CEO and general manager positions were held by the same person, then it was accepted that there was a CEO Duality and this was coded with a score of “one” and otherwise, it was coded as “zero”. A similar procedure was followed for the existence of audit and corporate governance committees and these were coded as “one” for presence and “zero” for absence of the mentioned committee on the board. More detailed information about obtaining data by content analysis and processes are presented in subsequent paragraphs.

In the process of obtaining the financial performance of the firms, various methods were used. Accounting measures of financial performance have been criticized as being easy for the manager to manipulate (Cochran and Wood, 1984). In contrast, market-based measures are typically viewed as somewhat more robust, given that they are not subject to direct manipulation by management (Muth and Donaldson, 1998). Therefore, in the present study, both accounting and market-based measures were used. Presenting how profitable a company's assets are in generating revenue, net return on assets (Return on Assets, ROA) was calculated as the ratio of net profit to total assets. Similarly, measuring the firm's efficiency in using investment funds to create increased earnings, return on equity (Return on Equity, ROE) was calculated as the ratio of net profit to equity. Return on sales (Return on Sales, ROS) is the ratio of net profit to net sales. Debt ratio (DEBT) shows the ratio of total debts (both short- and long-run) to total assets. Finally, as a market-based variable, following Kim and Lim’s (2009) study, Tobin’s Q was calculated as shown below:

\[
\text{Tobin's Q} = \frac{\text{Market value (Equity)} + \text{Book value (Assets)}}{\text{Book value (Assets)}}
\]

The corporate social responsibility performance of the firms was obtained from the corporate governance compliance reports by content analysis. As a research methodology, content analysis has its roots in the study of mass communications in the 1950s (White and Marsh, 2006: 22). However, today, it is a widely used scientific method in a variety of disciplines. Content analysis consists of summarizing the results of quantitative analysis of messages that are created or presented (Neuendorf, 2002: 10). It is unobtrusive and context-sensitive in nature and accepts unstructured material (Krippendorff; 1980), thus making content analysis a particularly appropriate tool for analyzing disclosure reports. Also, the literature shows that content analysis is a widely used methodology for analyzing disclosures (Abeysekera and Guthrie, 2005; Guthrie et al., 2004; April et al., 2003).

In terms of the analysis process, the procedures recommended by Neuendorf (2002) were followed. According to these procedures, at the first stage, the content that will be examined is defined. In the current study, the Corporate Governance Compliance Reports of Turkish Companies listed in the Istanbul Stock Exchange (ISE) in 2007 were analyzed in order to explore possible relationships between the corporate social responsibility performance and financial performances as well as the size and nature of the board.

The second step consists of portraying the variables that will be used in the study and defining these variables in a conceptual frame. The variables analyzed in the Corporate Governance Compliance Reports are namely board size, proportion of independent board members, proportion of inside board members,
presence of CEO duality, presence of audit and corporate governance committees and corporate social responsibility. The presence of CEO duality and presence of an audit committee on the managerial board were defined using a dichotomous procedure developed by Cerf (1981), with a score of "one" given if a given item was present in the disclosure and a score of "zero" if it was not present in the disclosure. On the other hand, to measure corporate social responsibility, a corporate social performance index was developed for the current study. There is an overabundance of measures of corporate social responsibility in the literature. In the last years, multidimensional measurements have received greater general acceptance than one dimensional measures. As Callan and Thomas (2009) stated, two of the more prominent multidimensional measures are the Fortune ratings data and indexes formed from social attributes provided by KLD (Kinder, Lydenberg and Domini) Research and Analytics, Inc. Within the literature, KLD data are superior to Fortune data (Chand, 2008; Sharfman, 1996; Waddock and Graves, 1997) because they offer more objective data and focus on socially responsible behavior rather than good management (Callan and Thomas, 2009). Since there are no KLD data in Turkey, we utilized content analysis to obtain CSR data. In parallel with the contemporary classification of KLD, the corporate social responsibility variable was analyzed in five sub-areas: community relations, employee relations, environment, product, treatment of women and minorities. Although KLD’s classification has three additional variables (military contracts, nuclear power and South Africa), none of them can be found in the reports; therefore, the corporate social responsibility variable was coded into five different categories. Then, an index was computed for each firm by calculating an arithmetic average of the scores. Since the weighted average method for the forming index is criticized by various authors such as Kennely (2000), Mitchell et al. (1997), Waddock and Graves, following Hillman and Keim (2001), Peters and Mullen (2009) and Waddock and Graves (2000), every dimension was considered equally important and every category was weighted equally.

The third step involves defining units of judgment. The two most widely used measurement tools in content analysis studies are coding and context units (Budd et al., 1967: 33-36). Context units are the source of units for measuring variables and surround the coding unit (Steinfield et al., 2005: 205). In the present study, Corporate Governance Compliance Reports were chosen as context units.

Forming a basis for reporting analysis, coding units are the smallest segment of content counted and scored (Okazaki and Rivas, 2002: 383). A coding unit can be described as the specific part of a context unit where researchers look for codes attached to “chunks” of words, phrases, sentences or whole paragraphs of varying size, connected or unconnected to a specific setting (Coffey and Atkinson, 1996: 27-28), in order to identify meaningful data and set the stage for interpreting and drawing conclusions. In this context, the content of three subtitles of the report was chosen as coding units: Part Three: Stakeholders, Title 17. Social Responsibility; Part Four: Board of Directors, Title 18. The Structure and Formation of the Board of Directors and Independent Members; Title 19. Qualification of Board Members.

In the process of calculating the CSR indexes of firms, only the information presented below Part Three: Stakeholders, Title 17. Social Responsibility were analyzed, although there are other titles on the report regarding corporate social responsibility such as shareholder relations, voting rights and minority rights, public disclosure and transparency, relations with customers and suppliers and human resources policy.

However, in providing insights into our general understanding of the companies’ current perceptions of CSR practices, only the information offered below Title 17. Corporate Social Responsibility was coded. By doing so, standardized data were used, which provide better generalizability of results and simpler coding.

In the coding scheme stage, the human coding process was preferred. The sampling stage of content analysis serves to ensure generalizability. As mentioned previously, in order to generalize the results, a census was preferred over the sampling method. At the next step, rather than developing a coding (categorization in other words) scheme, many content analysis studies use the coding schemes devised by other researchers.

Since using the same coding scheme across studies allows for easy comparisons among the studies (White and Marsh, 2006: 32), the coding scheme of KLD, which has been widely used in academic research (Graves and Waddock, 1994; Hillman and Keim, 2001; Johnson and Greening, 1999; Muralidhar, Brown, Janney and Paul, 2001; Sharfman, 1996; Turban and Greening, 1997; Waddock and Graves, 1997), was used in the present study.

In order to maximize inter-coder reliability and to ensure the reliability of the measurement, some precautionary measures such as a pilot coding session for the two authors of this study (acting as coders) and a discussion about the existing literature about CSR were taken.

Then, each coder assigned disclosure content to coding categories independently. In order to determine the extent to which coders evaluate the context units in the same way, the coded data were compared. For discrepancies, the coding units were analyzed again and differences were resolved.

Consequently, data obtained from this analysis are used in hypothesis testing.

Also, in order to assess several significant variables in company practices, the following three control variables were used in the model: proportion of shares owned by controlling shareholders, free float and the sector operated.

As an important corporate control mechanism, three measures of ownership concentration were used as control variables: proportion of the most shares directly owned by the controlling shareholders (CONCENT1), proportion of the second shares directly owned by the controlling shareholders (CONCENT2) and proportion of the third shares directly owned by the controlling shareholders (CONCENT3).

As an additional indicator of ownership concentration, a free float level variable was used in the model. As the portion of listed share capital traded on the market, it was calculated as the proportion of publicly held amount of capital to total proprietorship (FREEFLOAT). Finally, in the process of hypothesis testing, sector was used as a control variable. The sector variable was also coded as a binary variable (SECTOR), including manufacturing and services sectors.

Ordinary least squares regression analysis was utilized to estimate the relationship between the variables of the research model. SPSS 13.0 was used for statistical analyses in the present study.

**FINDINGS**

Table 1 presents a summary of the descriptive statistics of the variables. The mean corporate social responsibility performance of the firms (CSP) was 0.44, indicating a nearly average level. The proportion of most of the shares directly owned by the controlling shareholders (CONCENT1) was 51%, while the proportion of second and third controlling shareholders (CONCENT2, CONCENT3) was 19 and 21%, respectively. Of the 165 companies, data are available for only 129 and 100 companies (observation column in Table 1) in terms of the proportion of second (CONCENT2) and third controlling shareholders (CONCENT3), respectively.
Table 1. Descriptive statistics.

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Observation</th>
<th>Mean</th>
<th>Median</th>
<th>Std. deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP</td>
<td>165</td>
<td>0.4400</td>
<td>0.5000</td>
<td>0.25490</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>CONCENT1</td>
<td>165</td>
<td>0.5140</td>
<td>0.5100</td>
<td>0.22754</td>
<td>0.00</td>
<td>0.98</td>
</tr>
<tr>
<td>CONCENT2</td>
<td>129</td>
<td>0.1892</td>
<td>0.1540</td>
<td>0.18014</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>CONCENT3</td>
<td>100</td>
<td>0.2145</td>
<td>0.0605</td>
<td>0.53591</td>
<td>0.00</td>
<td>4.82</td>
</tr>
<tr>
<td>FREEFLOAT</td>
<td>163</td>
<td>0.3237</td>
<td>0.3072</td>
<td>0.18358</td>
<td>0.00</td>
<td>0.91</td>
</tr>
<tr>
<td>ROA</td>
<td>162</td>
<td>0.0506</td>
<td>0.0524</td>
<td>0.13910</td>
<td>-0.84</td>
<td>0.49</td>
</tr>
<tr>
<td>ROE</td>
<td>160</td>
<td>0.0335</td>
<td>0.1001</td>
<td>0.45093</td>
<td>-3.90</td>
<td>0.54</td>
</tr>
<tr>
<td>TOBINQ</td>
<td>163</td>
<td>4.1276</td>
<td>0.8322</td>
<td>39.05392</td>
<td>0.11</td>
<td>499.43</td>
</tr>
<tr>
<td>ROS</td>
<td>160</td>
<td>0.2493</td>
<td>0.0457</td>
<td>2.51969</td>
<td>-1.53</td>
<td>31.79</td>
</tr>
<tr>
<td>DEBT</td>
<td>162</td>
<td>0.4608</td>
<td>0.4054</td>
<td>0.33990</td>
<td>0.02</td>
<td>3.47</td>
</tr>
<tr>
<td>BOARDSIZE</td>
<td>165</td>
<td>6.4970</td>
<td>7.0000</td>
<td>1.91790</td>
<td>3.00</td>
<td>12.00</td>
</tr>
<tr>
<td>CEO DUAL</td>
<td>165</td>
<td>0.2061</td>
<td>0.0000</td>
<td>0.40571</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>INDEPDIR</td>
<td>165</td>
<td>0.0640</td>
<td>0.0000</td>
<td>0.13691</td>
<td>0.00</td>
<td>0.78</td>
</tr>
<tr>
<td>INDIR</td>
<td>165</td>
<td>0.2345</td>
<td>0.1667</td>
<td>0.25097</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>AUDITCOM</td>
<td>165</td>
<td>0.9333</td>
<td>1.0000</td>
<td>0.25020</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>GOVERCOM</td>
<td>165</td>
<td>0.2303</td>
<td>0.0000</td>
<td>0.42231</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>SECTOR</td>
<td>165</td>
<td>0.7636</td>
<td>1.0000</td>
<td>0.42614</td>
<td>0.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

CSP: Corporate social responsibility performance, CONCENT1: Proportion of the most shares directly owned by the controlling shareholders, CONCENT2: Proportion of the second shares directly owned by the controlling shareholders, CONCENT3: Proportion of the third shares directly owned by the controlling shareholders, FREEFLOAT: Proportion of publicly held amount of capital to total proprietorship, ROA: Return on assets, ROE: Return on equity, ROS: Return on sales, TOBIN’s Q: [Market value (Equity) + Book value (Assets)-Book value (Equity)]/ Book value (Assets), DEBT: Ratio of total debts (both short and long run) to total assets, BOARDSIZE: Board size, CEODUAL: Existence of CEO duality, INDEPDIR: The proportion of independent directors, AUDITCOM: Existence of an audit committee, GOVERCOM: Existence of a governance committee, SECTOR: Sector operated.

Results indicate that concentration of ownership was high among Turkish firms. Moreover, not only were the majority of shares held by controlling shareholders, but only 32% of the shares were publicly held or in free float (FREEFLOAT). Therefore, Turkey exhibits a high level of ownership concentration, which implies that controlling shareholders perform as owners of the firms (Ararat and Gocencoglu, 2006: 16). Descriptive statistics demonstrate that firms’ profitability in terms of return on assets (ROA) and equity (ROE) was low, with an average of 5 and 3%, respectively. On the other hand, return on sales (ROS) indicates a better profile, with 25%. The mean of Tobin Q (TOBINQ) was approximately 4, suggesting that firms had used their assets efficiently such that the market value of firms was quadruple the book value of the firm’s assets. Showing total debts to total assets, the debt ratio of the companies (DEBT) exhibited high levels of average debt, with a mean of 46%.

Results also show that board size (BOARDSIZE) ranged from 3 (minimum) to 12 (maximum) board directors, with approximately six members. In 20.6% of the firms, the General Manager and Chairman positions were held by same individual (CEODUAL), demonstrating that CEO duality is not widely used in Turkey. The proportion of independent directors in board size (INDEPDIR) was approximately 6.4%, whereas the proportion of insider directors in board size (INDIR) was 23%. Thus, the proportion of independent directors in the board of directors was quite low.

Although, the proportion of insider directors in the overall board was higher, the board of directors were primarily composed of directors who were not insiders or independent, but rather non-executive and affiliated outside directors such as family business groups or members of other boards operating in the same holding constitution. Descriptive statistics reveal that 93% of the firms had an audit committee (AUDITCOM), whereas only 23% of them had a corporate governance committee (GOVERCOM). In terms of sector operated (SECTOR), approximately 76% of the companies operated in the manufacturing sector, while the remaining companies operated in the services sector.

Table 2 reveals a number of significant correlations among the variables. As shown, the highest Pearson correlation coefficient was between the proportion of inside directors (INDIR) and CEO duality (CEODUAL) (r: 0.414). Gujarati (1995: 335) and Kennedy (1999: 187) suggested that collinearity should not be considered harmful unless the correlation coefficient exceeds 0.8 or 0.9. Since the highest Pearson correlation in this study is below the cut-off point of 0.80, multicollinearity does not appear to be a serious problem in interpreting the regression results. In order to measure the degree to which the variance of the regression coefficients was
Table 2. Correlation coefficients between the variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
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<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CSP</td>
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<tr>
<td>2. CONCENT1</td>
<td>-0.001</td>
<td></td>
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<tr>
<td>3. CONCENT2</td>
<td>0.067</td>
<td>-0.119</td>
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<tr>
<td>4. CONCENT3</td>
<td>0.037</td>
<td>-0.083</td>
<td>0.257(**)</td>
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<tr>
<td>5. FREEFLOAT</td>
<td>0.014</td>
<td>-0.392(**)</td>
<td>-0.044</td>
<td>0.065</td>
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<tr>
<td>6. ROA</td>
<td>-0.003</td>
<td>-0.098</td>
<td>0.112</td>
<td>0.025</td>
<td>-0.132</td>
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<tr>
<td>7. ROE</td>
<td>0.003</td>
<td>-0.205(**)</td>
<td>-0.001</td>
<td>-0.099</td>
<td>-0.052</td>
<td>0.644(**)</td>
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<tr>
<td>8. ROS</td>
<td>0.171(*)</td>
<td>-0.108</td>
<td>0.070</td>
<td>0.050</td>
<td>0.052</td>
<td>0.159(*)</td>
<td>0.078</td>
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<tr>
<td>9. DEBT</td>
<td>-0.083</td>
<td>0.081</td>
<td>-0.050</td>
<td>-0.056</td>
<td>-0.093</td>
<td>-0.342(**)</td>
<td>-0.263(**)</td>
<td>-0.124</td>
<td></td>
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<tr>
<td>10. TOBINQ</td>
<td>-0.136</td>
<td>-0.046</td>
<td>0.005</td>
<td>-0.025</td>
<td>-0.051</td>
<td>-0.013</td>
<td>0.009</td>
<td>-0.005</td>
<td>0.048</td>
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<tr>
<td>11. BOARDSIZE</td>
<td>0.074</td>
<td>0.013</td>
<td>0.069</td>
<td>0.131</td>
<td>-0.111</td>
<td>0.185(*)</td>
<td>0.149</td>
<td>0.024</td>
<td>-0.235(**)</td>
<td>0.105</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>12. INDEPDIR</td>
<td>0.101</td>
<td>0.028</td>
<td>-0.016</td>
<td>0.022</td>
<td>0.125</td>
<td>-0.020</td>
<td>0.050</td>
<td>-0.040</td>
<td>-0.077</td>
<td>-0.037</td>
<td>0.302(**)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>13. INDIR</td>
<td>0.122</td>
<td>-0.046</td>
<td>-0.045</td>
<td>-0.055</td>
<td>0.050</td>
<td>-0.126</td>
<td>-0.071</td>
<td>0.142</td>
<td>0.112</td>
<td>-0.022</td>
<td>0.037</td>
<td>0.181(*)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>14. CEODUAL</td>
<td>-0.045</td>
<td>-0.097</td>
<td>-0.085</td>
<td>-0.109</td>
<td>0.121</td>
<td>-0.041</td>
<td>0.036</td>
<td>0.153</td>
<td>0.076</td>
<td>-0.041</td>
<td>-0.179(*)</td>
<td>0.043</td>
<td>0.414(**)</td>
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</tr>
<tr>
<td>15. AUDITCOM</td>
<td>0.080</td>
<td>-0.027</td>
<td>0.101</td>
<td>0.197(*)</td>
<td>0.007</td>
<td>-0.010</td>
<td>-0.050</td>
<td>0.020</td>
<td>-0.009</td>
<td>0.022</td>
<td>0.146</td>
<td>-0.019</td>
<td>-0.094</td>
<td>-0.014</td>
<td></td>
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</tr>
<tr>
<td>16. GOVERNCOM</td>
<td>0.121</td>
<td>-0.039</td>
<td>0.034</td>
<td>0.058</td>
<td>0.155(*)</td>
<td>-0.021</td>
<td>0.004</td>
<td>-0.042</td>
<td>0.025</td>
<td>-0.043</td>
<td>0.197(*)</td>
<td>0.098</td>
<td>-0.043</td>
<td>-0.136</td>
<td>0.146</td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed). CSP: Corporate social responsibility performance, CONCENT1: Proportion of the most shares directly owned by the controlling shareholders, CONCENT2: Proportion of the second shares directly owned by the controlling shareholders, CONCENT3: Proportion of the third shares directly owned by the controlling shareholders, FREEFLOAT: Proportion of publicly held amount of capital to total proprietorship, ROA: Return on assets, ROE: Return on equity, ROS: Return on sales, TOBINQ: [Market value (Equity) + Book value (Assets)-Book value (Equity)]/Book value (Assets), DEBT: Ratio of total debts (both short and long run) to total assets, BOARDSIZE: Board size, CEODUAL: Existence of CEO duality, INDEPDIR: The proportion of independent directors, INDIR: The proportion of inside directors, AUDITCOM: Existence of an audit committee, GOVERNCOM: Existence of a governance committee, SECTOR: Sector operated, flew inflated by multicollinearity problems, the Variance Inflation Factor (VIF) was computed and demonstrated acceptable levels (Hair et al., 2007). Kolmogorov–Smirnov test p-values indicated that most of the dependent and independent variables were normally distributed, except CONCENT1 and FREEFLOAT. The variables that were not normally distributed were transformed by square of variables.

Table 3 shows the estimation results of models with board composition variables as the independent variable and financial performance and corporate social responsibility variables as the dependents.

As shown in Model 1, board composition characteristics were estimated against return on assets (ROA). Results show that ROA had a statistically positive relationship with board size (BOARDSIZE, p<0.05), suggesting a decrease in board size in order to obtain a better return on assets, consistent with the predictions in H1a. As another significant finding, free float (FREEFLOAT) was negatively related to return on assets (ROA, p<0.1), implying that high proportions of free float (FREEFLOAT) leads to worse financial performance in terms of ROA.

Results of Model 2 revealed that return on equity (ROE) was negatively associated with the proportion of inside directors (INDIR, p<0.001). Partially supporting H1c, this result implies that increasing the proportion of inside directors caused a decrease in ROE.

In Model 3, debt ratio (DEBT) was positively related to the proportion of inside directors (INDIR, p<0.001) and negatively related to board size (BOARDSIZE, p<0.05). This indicates that the proportion of inside directors (INDIR) increased DEBT ratio, partially supporting H1c. On the other hand, a decrease in the board size (BOARDSIZE) decreased the ratio of gross debt (DEBT), thus supporting H1a.

In Model 4, leadership duality (CEODUAL) was
Table 3. The impact of corporate board’s composition on financial and social responsibility performances.

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.055 (0.878)</td>
<td>0.289 (2.717) **</td>
<td>0.540 (3.522) ***</td>
<td>0.152 (1.403)</td>
<td>0.280 (2.199)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>BOARDSIZE</td>
<td><strong>0.011 (1.824)</strong></td>
<td>0.000 (-0.036)</td>
<td><strong>-0.032 (-2.124)</strong></td>
<td>0.003 (0.262)</td>
<td>-0.009 (-0.617)</td>
<td></td>
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</tr>
<tr>
<td>INDEPDIR</td>
<td>-0.041 (-0.502)</td>
<td>0.34 (0.259)</td>
<td>-0.100 (-0.513)</td>
<td>0.083 (0.549)</td>
<td>0.622 (3.443) ***</td>
<td></td>
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</tr>
<tr>
<td>INDIR</td>
<td>-0.072 (-1.390)</td>
<td><strong>-0.314 (-3.390)</strong>*</td>
<td>0.366 (2.910) ***</td>
<td>-0.014 (-0.153)</td>
<td>0.018 (0.166)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CEODUAL</td>
<td>0.019 (0.597)</td>
<td>0.036 (0.675)</td>
<td>-0.008 (-0.101)</td>
<td><strong>-0.100 (-1.695)</strong></td>
<td>0.053 (0.772)</td>
<td></td>
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</tr>
<tr>
<td>AUDITCOM</td>
<td>-0.027 (-0.546)</td>
<td>-0.055 (-0.725)</td>
<td>0.068 (0.648)</td>
<td>-0.018 (-2.222)</td>
<td>0.172 (1.732) **</td>
<td></td>
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</tr>
<tr>
<td>GOVERNCOM</td>
<td>-0.020 (-0.437)</td>
<td>0.063 (1.002)</td>
<td>-0.017 (-3.334)</td>
<td>0.004 (0.070)</td>
<td>0.009 (0.846)</td>
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</tr>
<tr>
<td>CONCENT1</td>
<td>-0.70 (-1.486)</td>
<td>-0.108 (-1.282)</td>
<td>0.139 (1.234)</td>
<td>-0.146 (-1.605)</td>
<td>0.142 (0.965)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>CONCENT2</td>
<td>-0.148 (-1.120)</td>
<td>0.001 (0.088)</td>
<td>0.009 (0.846)</td>
<td>0.009 (0.846)</td>
<td>0.009 (0.846)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONCENT3</td>
<td>-0.127 (-1.659) *</td>
<td>-0.156 (-1.234)</td>
<td>-0.139 (-0.752)</td>
<td>-0.429 (-3.572)</td>
<td>-0.151 (-1.041)</td>
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</tr>
<tr>
<td>FREEFLOAT</td>
<td>-0.032 (-0.708)</td>
<td>0.383</td>
<td>0.469</td>
<td>0.379</td>
<td>0.079</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SECTOR</td>
<td>1.852 **</td>
<td>1.914 **</td>
<td>2.629 ***</td>
<td>2.346 **</td>
<td>1.871 **</td>
<td></td>
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</tr>
<tr>
<td>Obs.</td>
<td>160</td>
<td>122</td>
<td>160</td>
<td>94</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>0.280</td>
<td>0.383</td>
<td>0.369</td>
<td>0.469</td>
<td>0.379</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted- R²</td>
<td>0.079</td>
<td>0.147</td>
<td>0.136</td>
<td>0.220</td>
<td>0.144</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-Ratio</td>
<td>1.852 **</td>
<td>1.914 **</td>
<td>2.629 ***</td>
<td>2.346 **</td>
<td>1.871 **</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*p<0.1; **p<0.05; ***p<0.001. Note: Tobin’s q as a dependent variable was not included on Table 3 since there was no meaningful relationship along all the independent and also control variables.

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negatively related to return on sales (ROS, p<0.10), indicating that the separation of the positions of chairman and general manager contributed to a firms’ financial performance, partially supporting Hypothesis 1d.

Model 5 presents the test results of the second hypothesis (H2). The results revealed that social responsibility performance (CSP) had a statistically significant positive relationship with proportion of independent directors (INDEPDIR, p<0.001), which is consistent with the expectations in H2b. Also, the existence of audit committee (AUDITCOM, p<0.10) exhibited a significantly positive relationship with social responsibility performance (CSP), supporting H2f.

The test results support only H1a, H1c, H1d, H2b and H2f. However, the support is relevant for only one dimension of both the dependent and independent variables. A general evaluation of the first and second hypotheses shows that most of the relationships were not supported by the regression results. Therefore, the findings do not provide powerful support for our expectations. In order to examine the interrelationship between corporate social responsibility and financial performance, these two variables were tested as both dependent and independent variables, similar to Waddock and Graves’ study (1997). Table 4 shows the test results in which CSR was analyzed as an independent variable. As shown in Table 4, Corporate Social Responsibility Performance (CSP) did not have a significant impact on ROA, ROE or ROS (in Models 6, 7 and 9) while it was negatively related to Tobin’s Q (TOBINQ, p<0.10, in Model 8). This indicates that Corporate Social Responsibility Performance (CSP) led to lower rates of Tobin’s Q. Showing that CSR led to worse financial performance in terms of Tobin’s Q, the results did not support the expectations in H3a. On the other hand, the results also revealed that free float rate (FREEFLOAT) had a significant negative relationship with both Return on Assets (ROA, p<0.001, in Model 6) and return on sales (ROS, p<0.001, in Model 9). The results also revealed that the proportion of the most shares directly owned by the controlling shareholders (CONCENT1) had a negative effect on both Return on Equity (ROE, p<0.001, in Model 7) and Return on Sales (ROS, p<0.10, in Model 9). As presented in Table 5, Models 10 and 11 test the effects of Financial Performance (FP) on Corporate Social Responsibility Performance (CSR). ROS had a positive effect on CSP (ROS, p<0.05, in Model 10) while Tobin’s Q had a negative effect on CSP (TOBINQ, p<0.10, in Model 11). This indicates that high market value caused a low corporate social responsibility and high return on sales (ROS) and led to better corporate social responsibility. As shown, the results are contradictory for H3b. Furthermore, there were no relationships among ownership concentration (CONCENT), free float rate (FREEFLOAT) and corporate social responsibility performance (CSP).

CONCLUSION AND DISCUSSION

The current study has revealed a number of interesting findings that have implications for scholars and...
Table 4. The impact of corporate social responsibility on financial performance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model: 6 (Dependent: ROA)</th>
<th>Model: 7 (Dependent: ROE)</th>
<th>Model: 8 (Dependent: TOBINQ)</th>
<th>Model: 9 (Dependent: ROS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.061 (2.259)**</td>
<td>0.221 (2.287)**</td>
<td>19.947 (2.363)**</td>
<td>0.102 (1.811)*</td>
</tr>
<tr>
<td>CSP</td>
<td>0.039 (0.974)</td>
<td>0.002 (0.013)</td>
<td>-21.173 (-1.744)*</td>
<td>0.021 (0.245)</td>
</tr>
<tr>
<td>CONCENT1</td>
<td>-0.049 (-1.133)</td>
<td>-0.461 (0.3051)**</td>
<td>-12.361 (-0.930)</td>
<td>-0.151 (-1.671)*</td>
</tr>
<tr>
<td>CONCENT2</td>
<td>0.007 (0.104)</td>
<td></td>
<td></td>
<td>0.147 (1.009)</td>
</tr>
<tr>
<td>CONCENT3</td>
<td>0.004 (1.070)</td>
<td></td>
<td></td>
<td>0.001 (0.060)</td>
</tr>
<tr>
<td>FREEFLOAT</td>
<td>-0.160 (-2.860)**</td>
<td>-0.305 (-1.229)</td>
<td>-17.824 (-0.835)</td>
<td>-0.475 (-4.035)**</td>
</tr>
<tr>
<td>SECTOR</td>
<td>0.015 (0.708)</td>
<td></td>
<td></td>
<td>0.047 (1.017)</td>
</tr>
</tbody>
</table>

Obs. 95 158 161 94  
R² 0.346 0.242 0.163 0.432  
Adjusted- R² 0.119 0.059 0.027 0.187  
F-Ratio 1.990* 3.194** 1.437 3.327***

*p<0.01; **p<0.05; ***p<0.001. Note: The ratio of debt (DEBT) as a dependent variable was not included on Table 4 since there was no meaningful relationship along the independent and also control variables. CSP: Corporate social responsibility performance, CONCENT: Proportion of the most shares directly owned by the controlling shareholders, FREEFLOAT: Proportion of publicly held amount of capital to total proprietorship, ROA: Return on assets, ROE: Return on equity, ROS: Return on sales, TOBIN's Q: [Market value (Equity) + Book value (Assets)-Book value (Equity)]/ Book value (Assets), DEBT: Ratio of total debts (both short and long run) to total assets, BOARDSIZE: Board size, CEODUAL: Existence of CEO duality, INDEPDIR: The proportion of independent directors, INDIR: The proportion of inside directors, AUDITCOM: Existence of an audit committee, GOVERCOM: Existence of a governance committee, SECTOR: Sector operated.

Table 5. The impact of financial performance on corporate social responsibility.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model: 10 (Dependent: CSP)</th>
<th>Model: 11 (Dependent: CSP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coef. t-Stud.</td>
<td>Coef. t-Stud.</td>
</tr>
<tr>
<td>Constant</td>
<td>0.405 (9.176)**</td>
<td>0.432 (9.592)**</td>
</tr>
<tr>
<td>TOBINQ</td>
<td></td>
<td>-0.001 (-1.735)*</td>
</tr>
<tr>
<td>ROS</td>
<td>0.018 (2.310)**</td>
<td></td>
</tr>
<tr>
<td>CONCENT1</td>
<td>0.069 (0.697)</td>
<td>0.047 (0.473)</td>
</tr>
<tr>
<td>CONCENT2</td>
<td>0.054 (0.353)</td>
<td>0.035 (0.224)</td>
</tr>
<tr>
<td>FREEFLOAT</td>
<td>0.015 (0.111)</td>
<td>-0.017 (-0.122)</td>
</tr>
</tbody>
</table>

Obs. 122 125  
R² 0.346 0.242  
Adjusted- R² 0.119 0.059  
F-Ratio 1.436 0.866

*p<0.01; **p<0.05; ***p<0.001. Note: ROA, ROE and DEBT as independent variables were not included on Table 5 since there was no meaningful relationship with dependent variable (CSP). CSP: Corporate social responsibility performance, CONCENT: Proportion of the most shares directly owned by the controlling shareholders, FREEFLOAT: Proportion of publicly held amount of capital to total proprietorship, ROA: Return on assets, ROE: Return on equity, ROS: Return on sales, TOBIN's Q: [Market value (Equity) + Book value (Assets)-Book value (Equity)]/ Book value (Assets), DEBT: Ratio of total debts (both short and long run) to total assets, BOARDSIZE: Board size, CEODUAL: Existence of CEO duality, INDEPDIR: The proportion of independent directors, INDIR: The proportion of inside directors, AUDITCOM: Existence of an audit committee, GOVERCOM: Existence of a governance committee, SECTOR: Sector operated.
practitioners investigating corporate governance issues in an international context. The legal framework and the structural context in Continental European countries differ strongly from those in the Anglo-Saxon business world. Therefore, the corporate governance discussion in Continental European countries should be based on country-specific research. On the other hand, emerging markets are also an important consideration for corporate governance issues as an example of country-specific research. The first purpose of this paper was to empirically assess the effects of board composition on firms’ financial and social responsibility performances in the context of high ownership concentration in Turkey. Secondly, the interrelationships between corporate social responsibility and financial performance were also researched.

In accordance with our hypotheses, small boards (BOARDSIZE) increased financial performance by causing an increase in return on assets (ROA, Table 6) and a decrease in the ratio of gross debt (DEBT, Table 6). Although these findings are contrary to studies that did not find a significant relationship between board size and financial performance in Turkey (Kaymak and Bektas, 2008; Kula, 2005), the results have generally yielded support for agency theory-based research of corporate boards (Yermack, 1996; Eisenberg et al., 1998; Cheng, 2008; Cheng et al., 2008; Andres et al., 2005).

Secondly, we have found that a higher presence of insiders (INDIR) on the board was negatively associated with ROE (Table 6) and positively associated with debt ratio (DEBT, Table 6). This result provides support for agency theory as opposed to the stewardship theory (Donaldson, 1990), in which insiders and managers act as good stewards in managing corporate assets.

Thirdly, we found that when the acting chairman of the board is the CEO, firms exhibited lower levels of performance in terms of return on sales (ROS, Table 6). This finding supports the agency theory approach, in which duality (CEO/DUAL) is negatively associated with firm performance. This finding suggests that the strict Anglo-American form may lead to a lower level of financial performance in Turkey. On the other hand, an underlying reason for this finding may be the proposition of CMB that the CEO and chairman position should be separated. With respect to financial performance, there was no significant relationship between financial variables and the proportion of independent directors in board size (INDEPDIR, Table 6), as consistent with the results of several studies (Andres et al., 2005; Finegold et al., 2007; Ahmed et al., 2006; Anne and Williams, 2003; Dalton et al., 1998). At this point, it should be noted that Turkey has a special board composition structure with regard to independent directors. Most of the firms in Turkey did not have independent board members and the reason was “no need for independent directors” or “different independence condition”. For example, independence refers to “salaried, professional, long-standing ties and well experienced”, especially in compliance reports to comply or explain principles. We also think that Yildirim-Oktem and Usdiken (2009) guided to independent directors proposed by CMB not to be implemented in board of firms affiliated to family business groups. They also (Yildirim-Oktem and Usdiken, 2009: 7) proposed that independence principles are perceived as “affiliated outside directors” in family business groups. Interestingly, the current regression results did not yield a significant effect of board composition on the market value of the company (Tobin’s Q).

With regard to H2, an important finding of this study is that increasing the proportion of independent directors on the board (INDEPDIR, Table 6) led to better Corporate Social Performance (CSP). This is consistent with the resource dependence theory, which posits that independent boards enhance corporate image and ensure shareholders’ interest (Ibrahim and Angelidis, 1995; O’Neill et al., 1989; Coffey and Wang, 1998). Also, an audit committee (AUDITCOM, Table 6) led to better corporate social performance instead of financial performance. The link between financial and social responsibility performance shows that financial performance had a greater effect on corporate social responsibility in the same year. As a result, higher financial performance led to greater freedom to invest in positive social responsibility, supporting the slack resources theory. Therefore, financial performance (ROS, Table 6) increased a firm’s corporate social responsibility, suggesting that the stakeholder theory claims a positive relationship between FP and CSP. On the other hand, firms that have weak financial performance may have little ability to make social investments. This relationship was negatively affected by ownership concentration (CONCENT1, in Models 7 and 9, Table 4) and the ratio of free float (FREEFLOAT, in Model 6, Table 4). Interestingly, high market value (TObINQ, Table 6) did not lead to high social responsibility and it is valid for the reverse (Table 6) in the same year. These findings show a negative reciprocal relationship between corporate social responsibility and Tobin’s Q. Waddock and Graves’ (1997) finding shows that corporate social performance (CSP) is positively associated with both prior and future financial performance. However, it is not possible to research this effect in our population since it involves only one year of observation (2007). A potential underlying reason for this result is found in one of the main limitations of our study: the endogeneity problem, which was also discussed by Hermelin and Weisbach (2003). There is no doubt that an extension of the data for subsequent years may change this result. Similarly, using
Table 6. The hypotheses summarized.

<table>
<thead>
<tr>
<th>A. Board composition variable</th>
<th>Specific hypotheses</th>
<th>Empirically supported?</th>
<th>Financial performance</th>
<th>ROA</th>
<th>ROE</th>
<th>ROS</th>
<th>DEBT</th>
<th>TOBINQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Board size</td>
<td>H1a: Smaller board size leads to better financial performance</td>
<td>Partially</td>
<td>(+)**</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>(+)**</td>
<td>0</td>
</tr>
<tr>
<td>2. Proportion of independent board members</td>
<td>H1b: A higher proportion of independent board members leads to better financial performance</td>
<td>Not supported</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. Proportion of inside board members</td>
<td>H1c: A higher proportion of inside board members leads to worse financial performance</td>
<td>Partially</td>
<td>0</td>
<td>(+)**</td>
<td>0</td>
<td>0</td>
<td>(+)**</td>
<td>0</td>
</tr>
<tr>
<td>4. Existence of duality</td>
<td>H1d: Existence of CEO duality leads to worse financial performance</td>
<td>Partially</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>(+)*</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Existence of audit committee</td>
<td>H1e: The existence of audit committee leads to better financial performance</td>
<td>Not supported</td>
<td>0</td>
<td>0</td>
<td>0</td>
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| B. Board composition variable | | | | | | | | |
|------------------------------| | | | | | | | |
| 1. Board size                | H2a: Larger board size leads to better corporate social performance | Not supported         | 0                    | 0   | 0   | 0   | (+)** | 0     |
| 2. Proportion of independent board members | H2b: A higher proportion of independent board members leads to better corporate social performance | Supported             | (+)**                | 0   | 0   | 0   | 0     | 0     |
| 3. Proportion of inside board members | H2c: A higher proportion of inside board members leads to worse corporate social performance | Not supported         | 0                    | 0   | 0   | 0   | 0     | 0     |
| 4. Existence of duality      | H2d: Existence of CEO duality leads to worse corporate social performance | Not supported         | 0                    | 0   | 0   | 0   | 0     | 0     |
| 5. Existence of audit committee | H2e: The existence of corporate governance committee leads to better corporate social performance | Supported             | (+)**                | 0   | 0   | 0   | 0     | 0     |
| 6. Existence of corporate governance committee | H2f: The existence of audit committee leads to better corporate social performance | Not supported         | 0                    | 0   | 0   | 0   | 0     | 0     |

| C. Corporate social responsibility performance (CSP) | H3a: Improved CSR leads to better financial performance | Not supported         | 0                    | 0   | 0   | 0   | 0     | (-)*  |
| D. Financial performance (FP) | H3b: Better financial performance leads improved CSR. | Partially             | 0                    | 0   | 0   | 0   | (+)** | 0     |

A + indicates an expected (both positive or negative) significant relationship, a – indicates an unexpected significant relationship, and 0 indicates an insignificant relationship.

an econometric analysis with panel data can solve this problem and may present more meaningful results. However, the nature of the data does not allow us to handle this problem. First, since publishing a Corporate Governance Compliance Report is not mandatory for listed companies in Turkey, it is difficult to find a sufficient number of companies that published the same reports in the same previous years. This leads to another
limitation: a small population. Moreover, using content analysis, we utilized categorical data derived from published corporate governance reports, since there is no continuous data for corporate social responsibility and some board composition characteristics in Turkey. The difficulty of obtaining previous years’ data and the categorical nature of the data have restricted the study in terms of overcoming the endogeneity problem as well as the statistical analysis selection process.

As another limitation, Ghazali (2007) proposed that disclosure in annual reports should not be regarded as a complete measure of corporate involvement in social activities. Because a company may have other channels of communicating its social contributions, such as through company newsletters, websites and newspapers, an opportunity arises for future research on CSR to study multiple channels of corporate communication.

Despite its limitations, the present study provides valuable contributions to the area. First, it is the first study to address the interrelationships between board structure, financial and social responsibility performance on listed firms in Turkey.

This study also contributes to the literature by providing evidence that board size, inside directors and CEO duality are important determinants of financial performance and that the proportion of independent directors is an important determinant of corporate social responsibility performance.

Exploring the relationships among the mentioned variables in Turkey, this study represents a starting point in improving our understanding about how board structures differ from the Anglo-Saxon and Continental European system with regard to functionality and operationalization.

An important practical suggestion of the current study is that organizational theory cannot be considered detached from the cultural context and institutional settings specific to it. As a simple example, recent US reforms are mandatory in nature. On the other hand, UK reforms are voluntary and arguably more effective than a mandatory approach because firms are able to choose board structures that are most appropriate for their own needs (Guest, 2008). This is also the case for Turkey, which received its own code, denoted the ISE report in 2004. The report contains various recommendations that aim to improve listed firms’ corporate governance structure and the reforms have been voluntary in Turkey. In summary, since organizational theory should not be analyzed without reference to the effects of the cultural context, academicians should be careful when comparing the results of studies from different countries. Such efforts toward globally mixed findings in the West and emerging economies lead scholars to draw upon other theoretical approaches such as institutional theory (Young et al., 2008). Furthermore, countries should be careful not to unconsciously copy the Anglo-American and Continental European systems as this may result in difficulties on the system.

Perhaps the most outstanding future research topic is how corporate governance principles are institutionalized and legitimized in Turkey. Scott’s (2001) three pillars of institutionalization (regulative, normative and cognitive) aid in the understanding of how this reform is institutionalized and legitimated. Another future research is a comparison between listed and non-listed firms in terms of board structure and financial and social responsibility performance. Also, CEO duality is a country-specific matter and it may be important to determine how “duly empowered members” affect firms’ financial and social responsibility performance in listed and non-listed firms.

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