Does board demographic diversity affect the dividend payout policy in Turkey?

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Abstract

Purpose – The purpose of this study is to investigate the impact of board demographic diversity on the dividend payout policy in Turkish capital markets.

Design/methodology/approach – Using a sample of 67 non-financial companies listed on Borsa Istanbul 100 index from 2013 to 2018, this study examines the influence of board demographic diversity on dividend payout policies in Turkish capital markets. The authors also create a Demographic Board Diversity Index (DBDI) to estimate the composite cognitive diversity. The authors use dividend payment probability, dividend payout ratio, and dividend yield to measure the dividend policy and employ panel logit and tobit regression models.

Findings – The results indicate that diversity in nationality, experience and educational background play an influential role in encouraging companies to pay high dividends, while gender, tenure and age diversity are insignificant in affecting dividend payments. The findings also suggest that the DBDI positively affects the companies in formulating the dividend payout policies. Finally, the findings show that the family-owned companies with diverse board members have a negative influence on dividend payment intensity.

Originality/value – The results offer valuable insights for companies and policymakers in emerging markets to develop a more refined governance structure accommodating board demographic diversity attributes to mitigate agency conflicts between controlling and minority shareholders through setting up effective dividend payout policies.

Keywords Borsa Istanbul, Board demographic diversity, Dividend policy, Family ownership, Turkey

Paper type Research paper

1. Introduction

Integration in financial markets and social transformation driven by globalization has enormously increased competitiveness in business environment. These developments have also necessitated the integration of different views in the decision-making process of companies, particularly at the board level. Since board of directors plays a significant role in reflecting the expectations of shareholders, the diversity of board members is an essential ingredient in corporate governance to remain competitive and enhance corporate performance (Carter *et al.*, 2003; Khan, 2022).

Since Miller and Modigliani's (1961) propositions on the dividend puzzle, many scholars have suggested different theories on dividend policies, aiming to imply a "one-size-fits-all" strategy without much considering the sensitivity of dividend decisions to board diversity (Baker *et al.*, 2008). Further, earlier studies have searched the impact of board diversity mostly in developed markets. They have mainly focused on gender diversity, although there are studies investigating the influence of nationality, age, and tenure diversity on dividend policy (Ain *et al.*, 2021; Baker *et al.*, 2020; Byoun *et al.*, 2016; Chen *et al.*, 2017; Hamzah and Zulkafli, 2014; McGuinness *et al.*, 2015; Sharma, 2011; Ye *et al.*, 2019). However, there are few studies investigating the effect of gender and nationality diversity on dividend policy in emerging markets and the results are mixed (Ararat *et al.*, 2015; Kagzi and Guha, 2018; Setiawan and Aslam, 2018). In this sense,

it is pivotal to further consider the case of emerging markets, where there are many family-owned companies and high level of ownership concentration since these characteristics creates significant differences in dividend payout practices of companies in emerging versus developed markets (Al-Najjar and Kilincarslan, 2016). Therefore, there is still a gap to fill in the literature focusing on corporate board-level decision making in formulating the dividend payout policy to ensure sustainability of companies in the long run.

This study investigates the impact of board demographic attributes, i.e. gender, nationality, experience, educational background, tenure, and age, on dividend policy for a sample of 67 non-financial companies listed on the Borsa Istanbul (BIST) 100 index from 2013 to 2018. We chose this timeframe to capture the influence of new corporate governance measures introduced by the new Turkish Commercial Law and the Capital Markets Law issued in 2012 (Lewis, 2020).

Turkey offers a promising field for two reasons. First, Turkish capital markets have shown an overwhelming progress since 2003 regarding market performance and regulatory framework changes to comply with the European Union directives and corporate governance standards. Regulatory authorities have made significant amendments in the dividend policy of companies listed on BIST, providing an experimental field to observe the effect of regulatory changes on dividend payments. Second, the companies listed on BIST are mostly family-owned and have high ownership concentration. This is important since controlling shareholders usually attempt to influence board, leading to a decrease in dividend payout (La Porta *et al.*, 2000; Su *et al.*, 2014).

The present study contributes to the emergent literature in four-folds. First, this is the first study investigating a large set of board demographic diversity attributes and dividend policy relationship in Turkey. Second, the study examines the joint effect of board demographic diversity and family ownership on dividend payment to ascertain the validity of our findings. Third, it extends the discussion on the importance of demographic characteristics in improving corporate boards and in protecting minority rights by paying high dividends. Fourth, this study implies the efficacy of corporate governance measures introduced by the new Turkish Commercial Law and Capital Market Law issued in 2012 to protect the interests of minority shareholders.

The remainder of the study is organized as follows: Section 2 provides the theoretical framework and develops the hypotheses. Section 3 presents the data and methodology and defines the variables. Section 4 shows the empirical findings, and finally, the last section concludes and discusses the implications.

2. Theoretical framework and hypotheses development

2.1 Theoretical framework

Scholars build taxonomies to represent diverse aspects of board. Some authors support agency theory, claiming the importance of board monitoring function, while some others suggest resource dependency perspective, arguing that board members are essential resources with their networks to external parties, i.e. regulators, financial companies, suppliers (Salancik and Pfeffer, 1978). This section provides a theoretical framework using agency theory and resource dependence theory to examine board demographic diversity and dividend policy relationship.

2.1.1 Agency theory. The agency theory implies a conflict of interest between the principal (shareholders) and agent (management). The shareholders look for the agent to serve their interests (Harjoto and Jo, 2011; Jensen and Meckling, 1976). This conflict takes place between the majority and minority shareholders (principal-principal) in emerging markets (Young *et al.*, 2008). The minority shareholders want that majority shareholders should take decisions in their best interest. On this respect, there are two distinctive claims explaining board

effectiveness and dividend payout dynamics (La Porta *et al.*, 2000). First, shareholders may accept low dividends when they feel comfortable, along with growth opportunities and strong governance measures due to board diversity. However, such a situation will be unlikely if the rights of shareholders are not protected. Second, the dividend is an alternative option for protecting the rights of minority investors. Hence, it becomes critical for companies to develop boards having diverse members that encourage the distribution of high dividends to manage concerns on the expropriation of minority rights, reducing agency costs (Easterbrook, 1984; Rozeff, 1982).

Dividend policy becomes more important when companies have free cash flows that may lead to agency problems (Chae *et al.*, 2009; Jensen, 1986). In this case, companies with diverse boards tend to distribute excess cash as dividends to shareholders (Byoun *et al.*, 2016; Sun *et al.*, 2017). Therefore, a strong board with demographic diversity is likely to safeguard minority shareholders and decrease agency conflict by encouraging companies to pay dividends to meet the expectations of shareholders (Adams and Ferreira, 2009; Carter *et al.*, 2003).

In emerging markets, agency problems are more prevalent due to weak investor protection, lack of adequate disclosure, weak corporate governance mechanisms, concentrated and family ownership structures (La Porta *et al.*, 2000). Prior studies highlight the importance of board diversity ameliorating agency issues raised for dividend payment (Pucheta-Martínez *et al.*, 2016; Rajput and Jhunjhunwala, 2019; Pahi and Yadaw, 2019). Hence, demographic board diversity is expected play a vital role in smoothing conflict between the majority and minority shareholders.

2.1.2 Resource dependence theory. An organization requires resources for survival. Resource dependency theory (RDT) implies that a company relies on other companies for resources to maintain its sustainability. The board of directors plays a vital role in getting the required resources from external parties, i.e. suppliers, customers, communities. Hence, diverse boards offer heterogeneous human and social capital in the form of expertise, reputation, and experience (Hillman and Dalziel, 2003). In this context, board members provide essential resources through (1) strategic expertise and guidance, (2) channels of communication to external organizations, (3) support from significant sources, (4), and legitimacy (Salancik and Pfeffer, 1978).

A diverse board also facilitates effective usage of resources and enhances competitive advantages by serving as a bridge between numerous shareholders to increase firm value (Pfeffer and Salancik, 2003). Moreover, diverse boards bring wise solutions to the challenging issues, like dividend payment (Broadbridge and Hearn, 2006). High dividends to shareholders convey a positive signal to existing and potential investors that help sustain long-run competitive position and access to external resources (Salancik and Pfeffer, 1978). Therefore, companies should blend the skill sets, experience, knowledge, and expertise of board members to produce a favorable environment and wisely formulate strategic policies, including dividend payout decision (Hillman *et al.*, 2007).

2.2 Hypotheses development
The following sub-sections develop hypotheses on the relationship of each board demographic attribute, i.e. gender, nationality, experience, education, tenure, age, and dividend payout policy.

2.2.1 Gender diversity. The women presence on board improves monitoring and mitigates agency conflicts due to their socio-psychological and cognitive features (Adams and Ferreira, 2009; Huse and Solberg, 2006). They are more risk-averse in taking strategic decisions, including financial ones (Pucheta-Martinez *et al.*, 2016). They usually ask hard questions that develop deliberations on board (Baranchuk and Dybyig, 2009). Studies held on women

presence on board and dividend policy relationship reveal mixed results. Most of the studies identified a positive and significant relationship between these constructs, particularly in developed markets (Byoun *et al.*, 2016; Chen *et al.*, 2017; Pucheta-Martinez and Bel-Oms, 2016). In emerging markets, the results are mixed. Saeed and Sameer (2017) reported a negative relationship in India, Russia, and China, while McGuinness *et al.* (2015) identified an insignificant relationship in China. Using a sample of 131 non-financial Spanish listed companies from 2003 to 2017, Garcia-Meca *et al.* (2022) suggest that female board members play a different role with controlling shareholder, depending on what family ties exist. Women directors that have family connections with controlling shareholder exhibit an inverse relationship with dividends, while female directors with no family ties tend to have a positive relationship. Based on preceding arguments, we propose the following hypothesis:

H1. There is a positive association between women presence on board and dividend payout policy.

2.2.2 Nationality diversity. Nationality diversity is important since board directors from different countries have diverging knowledge, ideas, experiences, and values that affect the strategies and performance of companies (Daniel *et al.*, 2013; Van Veen and Marsman, 2008). Foreign directors on boards could (1) provide social, business, and political connections, (2) shape company's future plans, (3) promote trustworthiness in the eyes of stakeholders, and (4) indicate efficient monitoring, mitigating concerns on minority rights (Ararat *et al.*, 2010; Setiawan and Aslam, 2018). Thus, one may expect a positive association between nationality diversity and dividend policy in decreasing agency problems as reported by Pucheta-Martínez and López-Zamora (2017) and Setiawan and Aslam (2018). Thus, we propose the following hypothesis:

H2. There is a positive association between nationality diversity on board and dividend payout policy.

2.2.3 Experience diversity. Complex business environment necessitates diverse experience and views on board (Anderson *et al.*, 2011). Board members from different business and socio-economic environment bring extensive knowledge and experiences and help companies take better decisions in producing favorable outcomes. Board experience diversity improves monitoring and leads to less free-riding behavior (Post and Byron, 2015). Experience heterogeneity also produces valuable prospects that can provide advantages to companies in resource allocation, and policy formulation, including dividend payments. However, there may be cases where board members with diverse expertise may generate disputes and delay decision-making in boards due to reduced collaboration and increasing communication costs (Baranchuk and Dybvig, 2009). Despite this argument, human capital theory implies that directors with expertise in different fields aid the board to function better, which may also influence dividend policy decisions (Singh, 2007). Therefore, we propose the following hypothesis:

H3. There is a positive association between experience diversity on board and dividend payout policy.

2.2.4 Educational diversity. Educational diversity implies the composition of board of directors with different educational backgrounds such as human resources, finance, legal, media (Hart, 1995; Rose, 2007). It helps companies in effective decision-making, policy formulation, strategic transformation, and agency conflict resolutions (Dahlin *et al.*, 2005). Board members with diverse educational levels also form different social networks and may easily manage boundary-spanning exercises, i.e. approaching other social groups to get information. However, different viewpoints denoted by board members with diverse educational backgrounds may hinder inside communication. Few studies that explored the

influence of educational diversity on dividend payout reported mixed results (Mirza and Malik, 2019; Pucheta-Martínez and Bel-Oms, 2016). Therefore, we propose the following hypothesis:

H4. There is a positive association between educational diversity on board and dividend payout policy.

2.2.5 Tenure diversity. Market participants are interested in the tenure of board members, claiming that boards with long-serving members are unresponsive to shareholders' interests (Institutional Shareholder Services (ISS), 2020). After sitting on boards for many years, long-tenured board directors may lose their objectivity. On the other side, young directors are likely to be more energetic and high risk-takers. They may experience fewer challenges than long-tenured directors, but they may be less successful in advising due to the limited business knowledge and historical background (Pozen and Hamacher, 2015). Hence, blending long- and short-tenured directors may improve monitoring, and help companies formulate right policies, including dividend payout ones (Liu and Sun, 2005; Setiawan and Aslam, 2018).

Notwithstanding its functional significance, the literature presents limited insights into how the tenure of board members influences corporate performance. Some studies imply that long-tenured directors may improve monitoring, but may expropriate minority shareholders (Hamzah and Zulkafli, 2014; Liu and Sun, 2005). Public firms usually justify that long-tenured board members are appraised due to their experience and institutional memory (Dulewicz and Herbert, 2004). However, in recent years, market players claim that extended tenure of board members weakens board independence (ISS, 2020). Drawing on these arguments, we propose the following hypothesis.

H5. There is a positive association between tenure diversity on board and dividend payout policy.

2.2.6 Age diversity. Board age heterogeneity implies productivity and experience that produce synergy in companies (Morrow-Howell *et al.*, 2001). Young directors are more productive, flexible, receptive to new ideas and technologies, and high risk-takers, while aged directors have rich experience and robust networks that help companies capitalize on valuable resources (Mishra and Jhunjhunwala, 2013; Salancik and Pfeffer, 1978). There are mixed results on the influence of age diversity on firm value. Ali *et al.* (2014) and Talavera *et al.* (2018) affirm a negative association between age diversity and firm performance, while other studies indicated a positive relationship (Darmadi, 2011; Hassan and Marimuthu, 2016; Kagzi and Guha, 2018; Kim and Lim, 2010; Mirza and Malik, 2019). The positive results are usually attributed to the resource dependence prospect, claiming that age diversity leads to access to more resources, and thus, improves decision-making (Mahadeo *et al.*, 2012). Given the mixed evidence, we propose the following hypothesis:

H6. There is a positive association between age diversity on board and dividend payout policy.

3. Data and methodology
3.1 Data sample
The data sample in this study covers 67 non-financial companies listed on the BIST 100 Index for the years 2013–2018. We chose this period because the Turkish government incorporated new corporate governance measures by the new Turkish Commercial Law and Capital Markets Law issued in 2012 (Lewis, 2020). We exclude financial and utility companies due to their different regulations and unique financial information disclosure requirements. The sample comprises 402 firm-year observations from eleven industries. Table 1 displays the

Industry	No. of companies	Sample (%)
1. General industrials	14	20.90
2. Automobiles and parts	07	10.45
3. Construction and materials	05	07.46
4. Foods and beverages	05	07.46
5. Electronic and hardware equipment	05	07.46
6. General retailers	03	04.48
7. Travel and leisure	03	04.48
8. Telecommunications and media	03	04.48
9. Industrial metals and engineering	10	14.93
10. Chemicals and pharmaceuticals	06	08.96
11. Miscellaneous	06	08.96
Total firms	*67*	*100.00*

Table 1.
Sample distribution
across industries

distribution of companies across industries, while Table 2 shows the number of companies that paid no dividends during the sample period and those that make consecutive dividend payments over the years.

We obtain the data from different sources. We use the Thomson Reuters Eikon DataStream database to collect the financial data and the data for dependent variables, i.e. dividend payout ratio (DPOR) and dividend yield (DY). We get hand-collected data for board demographic attributes, i.e. gender, nationality, experience, educational level, tenure, age, and control variables (board size, independent board membership, CEO duality, firm age, firm size) from the companies' annual reports, official websites, and Public Disclosure Platform (PDP) (http://kap.gov.tr), Reuters, MarketScreener, Bloomberg, and LinkedIn.

3.2 Definitions and measurements of variables
3.2.1 Dependent variables. We use three different measures as a proxy for dividend policy. The first one is the likelihood of dividend payment dummy variable (PDP). It denotes whether a company pays cash dividends or not. When a company pays cash dividend, it is indicated as "1" and "0" otherwise. We also employ two variables to measure the intensity of cash dividend payments: dividend payout ratio (DPOR) and dividend yield (DY). DPOR is estimated by the ratio of dividend per share to net income, while DY is computed by taking the ratio of dividend per share to price per share.

3.2.2 Independent variables. Board of directors is the most important decision-making authority in companies and plays a vital role in enhancing corporate performance (Carroll and Buchholtz, 2014). Hence, the diversity of board members characterized by demographic attributes may influence corporate strategies, including dividend policies (Byoun *et al.*, 2016; Heyden *et al.,* 2015; Hillman, 2015; Post and Byron, 2015). In this study, we use the following board demographic attributes as independent variables to measure their influence on the dividend policies of Turkish companies.

		Consecutive dividend payments (in years)							
	Zero dividend payments	1	2	3	4	5	6	Total firms
No. of firms	19	5	4	6	4	3	26	67
No. of firms (%)	28.36	7.46	5.97	8.95	5.97	4.48	38.81	100

Table 2.
Consecutive dividend
payments of
Turkish firms

(1) Gender diversity

Gender diversity/female board membership (FemBrd) is estimated by the ratio of female board members to the total board members.

(2) Nationality diversity

Nationality diversity (foreign director membership) is defined by the ratio of the foreign board members to the total board members.

(3) Experience diversity

Experience diversity (DivExp) is calculated by using the Blau index (Blau, 1977). This index assumes that director expertise consists of five categories: (1) financial, (2) consulting, (3) legal, (4) management, and (5) other expertise. The higher the index, the higher the diversity.

(4) Educational diversity

Educational diversity (DivEdu) is estimated by referring to each board member's educational level. In this study, the education of board members is categorized into four levels: Intermediate, Bachelor, Master, and Doctorate. We calculate educational diversity by using the Blau index, taking the qualifications of directors into account. The higher the index, the higher the diversity.

(5) Tenure diversity

Tenure diversity is calculated by using the Blau index and by checking the number of years a director serves on board. We classify the tenure of board members into six levels: less than 1 year; 1–5 years; 6–10 years; 11–15 years; 16–20 years; more than 20 years. The higher the index, the higher the diversity.

(6) Age diversity

Age diversity (DivAge) is calculated by using the Blau index, referring to different age brackets of board members. They are categorized into six brackets: less than 40 years; 40–49 years; 50–59 years; 60–69 years; 70–79 years; more than 80 years. The higher the index, the higher the diversity.

(7) Demographic Board Diversity Index

Demographic Board Diversity Index (DBDI) is the accumulation of the Blau diversity values of board members' demographic attributes (Ararat *et al.*, 2015). It is calculated by summing the diversity factors derived by the Blau index. DBDI is appropriate because it accounts for each category of attributes in a more standardized way. The Blau index considers that each category is pro-rata standardized for this variable to come up with a composite diversity.

3.2.3 Control variables. We use board characteristics, i.e. board size, board independence, CEO duality, and firm-specific factors, i.e. firm age, firm size, leverage, firm profitability, as control variables to assess the influence of board demographic diversity on dividend policies.

3.2.3.1 Board characteristics.

(1) Board size (BrdSize)

Board size shows the total number of board members. Although there is no ideal board size, large boards are usually expected to influence decision-making positively, including dividend policy.

(2) Board independence (IndDir)

Board independence is calculated by the ratio of independent board members to the total board members.

(3) CEO Duality

When CEO is appointed as the chairman of the board, it is called CEO duality. It is a binary variable taking the value of "1" if there is CEO duality and "0" otherwise.

3.2.3.2 Firm-specific factors.

(1) Firm age (FirmAge)

Firm age shows the number of years the company has been operating since its establishment.

(2) Firm size (FSize)

Firm size is calculated by taking the lagged total assets.

(3) Leverage (Lev)

Leverage is computed by the ratio of total debt to total assets.

(4) Firm profitability (ROA)

Return on Assets (ROA) serves as a proxy for firm profitability. It indicates how well a firm uses its assets.

Table 3 shows the definition and measurement of the variables, and Figure 1 provides the conceptual framework of the study aligned with the hypotheses.

3.3 Research methodology

We employ a balanced panel data analysis and use logit, and tobit estimation models to test our hypotheses by running the following equations. Logit model captures the effect of paying or not-paying dividends, while the tobit model examines the intensity of dividend payment.

$$
\begin{aligned}
\text{DividendPayment}_{i,t} = {} & \alpha + \beta_1 \text{FemBrd}_{i,t-1} + \beta_2 \text{Foreign}_{i,t-1} + \beta_3 \text{DivExp}_{i,t-1} \\
& + \beta_4 \text{DivEdu}_{i,t-1} + \beta_5 \text{DivTen}_{i,t-1} + \beta_6 \text{DivAge}_{i,t-1} + \beta_7 \text{BrdSize}_{i,t-1} \\
& + \beta_8 \text{IndDir}_{i,t-1} + \beta_9 \text{Duality}_{i,t-1} + \beta_{10} \text{FirmAge}_{i,t-1} + \beta_{11} \text{FSize}_{i,t-1} \\
& + \beta_{12} \text{Lev}_{i,t-1} + \beta_{13} \text{ROA}_{i,t-1} + \sum_{j=1}^{n} \beta_j \text{YEAR}_{j,i,t} \\
& + \sum_{k=1}^{n} \beta_k INDUSTRY_{k,i,t} + e_{i,t}
\end{aligned} \tag{1}
$$

$$
\begin{aligned}
\text{DividendPayment}_{i,t} = {} & \alpha + \beta_1 \text{DBDI}_{i,t-1} + \beta_2 \text{BrdSize}_{i,t-1} + \beta_3 \text{IndDir}_{i,t-1} + \beta_4 \text{Duality}_{i,t-1} \\
& + \beta_5 \text{FirmAge}_{i,t-1} + \beta_6 \text{FSize}_{i,t-1} + \beta_7 \text{Lev}_{i,t-1} + \beta_8 \text{ROA}_{i,t-1} \\
& + \sum_{j=1}^{n} \beta_j \text{YEAR}_{j,i,t} + \sum_{k=1}^{n} \beta_k \text{INDUSTRY}_{k,i,t} + e_{i,t}
\end{aligned} \tag{2}
$$

Dividend Payment$_{i,t}$ is a proxy for PDP, DPOR, and DY. We apply logit regression estimation when the dependent variable's outcome is binary (PDP), i.e. either the company pays dividend "1" or does not pay dividend "0". We employ tobit regression model for the intensity of dividend payment by using DPOR and DY. The tobit model, also called a censored regression model, is designed to estimate linear relationships between variables when there is either left- or right-censoring in the dependent variable. The dependent variables, i.e. dividend payout

Variable	Code	Measurement	Source
Dependent variables			
Dividend payout (dummy)	PDP	"1" if the company pays dividends and "0" otherwise	DataStream
Dividend payout ratio	DPOR	Cash dividend to net income	DataStream
Dividend yield	DY	Cash dividend to stock price	DataStream
Independent variables			
Board diversity			
Gender	FemBrd	Female members to total board members	Annual report
Nationality	Foreign	Foreign members to total board members	Annual report
Experience	DivExp	Blau Index for board member expertise with 5 categories: financial, consulting, legal, management, other expertise	Annual report, Bloomberg, MarketScreener, Reuters, LinkedIn
Education level	DivEdu	Blau Index for the educational level of board members in four categories: Intermediate, Bachelor, Master, Doctorate Degree	Annual report, Bloomberg, MarketScreener, Reuters, LinkedIn
Tenure	DivTen	Blau Index for the tenure of board members in six categories: less than 1 year, 1–5 years, 6–10 years, 11–15 years, 16–20 years, more than 20 years	Annual report, Bloomberg, MarketScreener Reuters, LinkedIn
Age	DivAge	Blau Index for the age of board members in six categories: less than 40 years, 40–49 years, 50–59 years, 60–69 years, 70–79 years, more than 80 years	Annual report, Bloomberg, MarketScreener, Reuters, LinkedIn
Demographic board diversity index	DBDI	DBDI = FemBrd + Foreign + Blau DivExp + Blau DivEdu + Blau DivTen + Blau DivAge	
Family ownership	Family	"1" if family, spouse, and children own at-least 10% of the shares, "0" otherwise	Annual report
Control variables			
Board characteristics			
Board size	BrdSize	Number of board members	Annual report
Board independence	IndDir	Independent board members to total board members	Annual report
CEO duality	Duality	"1" if a CEO is on the board, "0" otherwise	Annual report
Firm-specific factors			
Firm age	FirmAge	Firm age	Annual report
Firm size	FSize	Lagged total assets	DataStream
Leverage	Lev	Total debt to total assets	DataStream
Firm profitability	ROA	Net income to total assets	DataStream

Table 3.
Definitions and
measurements of the
variables

ratio (DPOR) and dividend yield (DY), may either be zero or positive. Thus, the data are censored in the lower tail of the distribution. In the literature, any estimation of dividend behaviour using data on individual companies, that have this censoring characteristic, necessitates the use of the tobit model (Al-Malkawi and Bhatti, 2020; Kim and Maddala, 1992).

If we consider $i = 1, 2,\ldots, 67$ firms as panels and time period $t = 1, 2,\ldots, 6$ years (2013–2018), then the most appropriate regression model for the DPOR and DY can be expressed as in Equation (3) and (4):

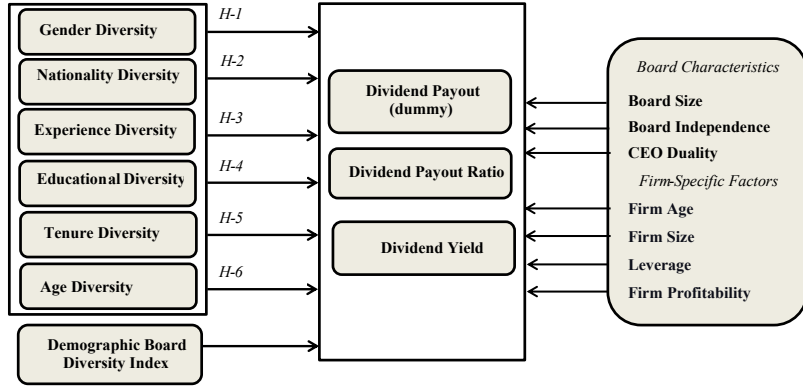$$y_{it}^* = x_{it}^{'}\beta + \alpha_i + \varepsilon_{it} \tag{3}$$

Figure 1.
Conceptual framework

$$y_{it} = \begin{cases} = 0 \ if \ \ y_{it}^* = 0 \\ = y_{it}^* \ if \ \ y_{it}^* > 0 \end{cases} \tag{4}$$

Moreover, the corresponding logit model for the dividend payment decision (PDP) can be expressed as in Equation (5):

$$y_{it} = \begin{cases} = 0 \ if \ \ y_{it}^* = 0 \\ = 1 \ if \ \ y_{it}^* > 0 \end{cases} \tag{5}$$

We also include one-year time lag values for the regressors (independent and control variables) to handle the endogeneity issue, following the prior studies (Al-Najjar and Kilincarslan, 2016; Baker and Kilincarslan, 2019; Rajput and Jhunjhunwala, 2019).

Further, each board diversity attribute is measured by using Blau's (1977) index of heterogeneity as in Equation (6):

$$1 - \sum_{i=1}^{n} p_i^2 \tag{6}$$

where p_i^2 is the proportion of a board in group i. Blau's index has been used as an optimal measure of diversity to capture variations within the board (Ararat *et al.*, 2015). A higher index implies a more diversified board. For gender diversity, Blau's index can range from 0 when there is only one gender on board to 0.50 when there are equal numbers of men and women on board. For educational diversity, Blau index can range from 0 to 0.75 as it contains four education categories i.e. intermediate, bachelor, master, and doctorate. When the board equally represents all education categories, the value could take 0.75, otherwise the value would close to zero.

4. Empirical results
4.1 Descriptive analysis
Table 4 displays the summary of the descriptive statistics. The mean dividend payout dummy (PDP) shows that 57% of the comapnies have paid dividend from 2013 to 2018. The mean values for DPOR and DY are 25.2 and 2.3%, respectively. Among the explanatory variables, gender diversity (FemBrd) has a mean of 11.4%, while the share of foreign directors on board is 8.1% on average. Experience diversity on board accounts for 0.621, indicating

	Mean	Median	S.D	Min	Max	Skewness	Kurtosis
PDP	0.572	1.000	0.495	0.000	1.000	−0.292	1.085
DPOR	0.252	0.121	0.304	0.000	0.961	0.914	2.500
DY	0.023	0.009	0.035	0.000	0.247	2.433	11.238
FemBrd	0.114	0.091	0.126	0.000	0.556	1.137	4.121
Foreign	0.081	0.000	0.165	0.000	0.727	2.128	6.487
DivExp	0.621	0.625	0.116	0.198	0.793	−1.036	4.431
DivEdu	0.422	0.462	0.169	0.000	0.667	−1.010	3.356
DivTen	0.449	0.486	0.186	0.000	0.741	−0.866	3.248
DivAge	0.634	0.658	0.126	0.000	0.815	−1.508	5.720
BrdSize	8.090	8.070	0.264	3.000	18.00	0.176	2.677
IndDir	0.303	0.333	0.139	0.000	1.000	1.165	11.625
Duality	0.820	1.000	0.384	0.000	1.000	−1.670	3.789
FirmAge	40.766	43.000	18.396	3.000	85.000	0.080	2.643
Fsize	6.497	6.510	0.705	4.699	8.569	0.185	2.761
Lev	0.295	0.297	0.183	0.000	0.846	0.317	2.612
ROA	0.076	0.068	0.091	−0.263	0.945	3.095	26.582

Table 4.
Summary of
descriptive statistics

that the boards are highly composed of members with multi-faceted expertise. The mean for educational diversity is 0.422, while it is 0.449 for tenure diversity. Finally, the mean for age diversity is 0.634, indicating fair age heterogeneity on board.

As to control variables, the average board size and share of independent board members is 8.09 and is 30.3%, respectively. CEO duality is 82% on average, indicating the predominance of CEOs acting in dual roles and being highly influential in decision making on dividend payments. The firm age is 40.76 years on average, while the mean value for leverage and firm profitability is 29.5 and 7.6%, respectively.

Table 5 shows the Pearson correlation matrix for the sample. None of the correlations between the predictor variables has a value above 0.70, indicating no multicollinearity (Gujarati, 2003). Table 6 provides the variance inflation factor (VIF) scores for the variables, which are far lower than the cut-off value of 10, suggesting that multicollinearity is not a concern for our models.

4.2 Estimation results

Table 7 shows the results of logit and tobit regression estimation models. The findings indicate that the FemBrd is positive but insignificant, not holding up the first hypothesis (H1). One likely reason may be that the positive influence of female members on board becomes weak in family-owned companies where families usually control the boards. Moreover, when most of the women board members belong to controlling families then they may tend to serve the interests of families, and this impairs their independent decision-making. This result is in line with the findings of earlier studies (Ararat and Yurtoglu, 2021; Chen *et al.*, 2017; Djan *et al.*, 2017; Eluyela *et al.*, 2019; Garcia-Meca *et al.*, 2022; Nguyen *et al.*, 2015). Another striking finding in Table 7 is that nationality diversity (Foreign) is positive and significantly ($p < 0.05$) related to dividend payments (DPOR), supporting our second hypothesis (H2). Foreign directors bring new ideas, views, and experiences to take better decisions, mitigating agency conflicts, and empowering the board to behave more independently in dividend payments. Our finding endorses earlier works (Ararat *et al.*, 2010; Setiawan and Aslam, 2018).

The experience diversity (DivExp) is positive and significantly ($p < 0.05$) associated with the dividend payout (DPOR and DY), supporting the third hypothesis (H3). Experience diversity is quite important in business environment to solve problems that ultimately reduce

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1) PDP	1.00															
(2) DPOR	0.63*	1.00														
(3) DY	0.53*	0.64*	1.00													
(4) FemBrd	−0.02	−0.06	−0.01	1.00												
(5) Foreign	0.18*	0.24*	0.18*	−0.27*	1.00											
(6) DivExp	0.05	0.10*	0.13*	0.01	−0.11*	1.00										
(7) DivEdu	0.14*	0.06	0.11*	0.02	0.21*	−0.08	1.00									
(8) DivTen	0.09	0.06	0.03	0.14*	0.01	0.05	−0.05	1.00								
(9) Divage	0.12*	0.06	0.03	0.26*	0.14*	−0.08	0.17*	0.12*	1.00							
(10) BrdSize	0.20*	0.17*	0.13*	−0.09	0.31*	−0.02	0.28*	0.09	0.38*	1.00						
(11) IndDir	−0.02	−0.11*	−0.06	−0.05	−0.05	0.08	0.11*	−0.02	0.06	−0.06	1.00					
(12) Duality	0.01	−0.13*	−0.14*	0.01	−0.18*	0.01	0.01	−0.03	−0.03	−0.03	0.04	1.00				
(13) FirmAge	0.26*	0.14*	0.14*	0.13*	0.04	0.07	−0.06	0.11*	−0.14*	−0.02	−0.17*	−0.01	1.00			
(14) Fsize	0.21*	0.10*	0.08	0.05	0.17*	0.05	0.05	0.23*	0.19*	0.36*	0.06	−0.08	0.05	1.00		
(15) Lev	−0.27*	−0.15*	−0.09	0.08	0.11*	0.03	−0.01	0.04	0.18*	0.10*	−0.04	−0.05	−0.07	0.16*	1.00	
(16) ROA	0.29*	0.19*	0.14*	−0.08	0.09	0.06	0.10*	−0.06	−0.02	0.02	−0.04	0.09	0.05	−0.12*	−0.23*	1.000

Note(s): $*p < 0.05$

Variables	VIF	Tolerance
FemBrd	1.32	0.7548
Foreign	1.34	0.7438
DivExp	1.05	0.9541
DivEdu	1.17	0.8561
DivTen	1.10	0.9101
DivAge	1.42	0.7063
BrdSize	1.52	0.6562
IndDir	1.09	0.9194
Duality	1.05	0.9485
FirmAge	1.13	0.8837
FSize	1.28	0.7830
Lev	1.12	0.8891
ROA	1.12	0.8891

Table 6.
Variance inflation
factor (VIF)

	Logit PDP	Tobit DPOR	Tobit DY
FemBrd	4.517 (5.452)	0.171 (0.402)	0.030 (0.038)
Foreign	2.275 (4.291)	0.693** (0.344)	0.040 (0.032)
DivExp	1.392 (5.024)	0.772* (0.426)	0.087** (0.042)
DivEdu	5.358* (3.250)	0.803*** (0.303)	0.073*** (0.028)
DivTen	2.037 (3.244)	0.204 (0.266)	0.020 (0.025)
Divage	0.695 (3.563)	0.434 (0.347)	0.004 (0.035)
BrdSize	0.749 (2.662)	0.071 (0.220)	0.013 (0.020)
IndDir	1.384 (4.046)	−0.496 (0.368)	−0.029 (0.033)
Duality	0.945 (1.939)	0.059 (0.156)	−0.001 (0.014)
FirmAge	0.090** (0.040)	0.008** (0.003)	0.001** (0.000)
Fsize	3.043** (1.276)	0.206** (0.088)	0.020*** (0.008)
Lev	−11.377*** (3.283)	−1.169*** (0.292)	−0.124*** (0.027)
ROA	1.481 (2.675)	0.043 (0.379)	0.041 (0.039)
Cons	−26.647*** (9.636)	−2.153*** (0.725)	−0.206*** (0.065)
Observations	335	335	335
Wald χ^2	24.22	57.79	68.35
Rho	0.901	0.477	0.357
LR test (H0: Rho = 0)	105.66***	36.97***	21.90***
YEAR	Yes	Yes	Yes
INDUSTRY	Yes	Yes	Yes

Note(s): Standard errors are in parentheses
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

Table 7.
Logit and Tobit
regression results

agency costs and increase dividend payments. Board members with diverse expertise bring extensive knowledge and valuable experiences that improve resource allocation, and policy formulation. Hence, it mitigates free-riding behavior of management and encourages companies to pay dividends. This finding is in line with prior studies (Anderson *et al.*, 2011; Saeed and Sameer, 2017; Sarwar *et al.*, 2018; Singh, 2007).

Educational diversity (DivEdu) is positive and significantly ($p < 0.01$) related to dividend payments (PDP, DPOR and DY), supporting the fourth hypothesis (H4). The positive association may be due to different ideas offered by board members with diverse educational backgrounds that may help companies manage resources optimally. Educational diversity may also allow companies to evaluate an excellent range of prospects and promote greater

cognitive complexity. This variety of views improves overcoming challenging issues, including dividend payout. This finding endorses prior studies (Curşeu *et al.*, 2007; Curşeu and Schruijer, 2010; Horwitz, 2005; Mirza and Malik, 2019; Pucheta-Martínez and Bel-Oms, 2016). Tenure diversity is positive but insignificant, not supporting the fifth hypothesis (H5). Board members with diverse tenure reduce agency problems and encourage companies to make dividend payments. Although it is insignificant the positive sign endorses earlier works (Dulewicz and Herbert, 2004; Liu and Sun, 2005).

Table 7 also shows that the age diversity (DivAge) is positive but statistically insignificant. Although the result does not support the sixth hypothesis (H6) the positive sign may be attributable to the heterogeneous experiences of board members of different ages. Old board members are resource-driven due to their networks and rich experiences, whereas the young ones are flexible, risk-takers, and technology enthusiasts. This influence may be reflected in high dividend payments. Our findings endorses prior studies (Darmadi, 2011; Hassan and Marimuthu, 2016; Kagzi and Guha, 2018; Kim and Lim, 2010; Mirza and Malik, 2019).

Finally, Table 8 indicates a positive and significant ($p < 0.01$) association between DBDI and dividend policy, implying that composite board demographic diversity positively influences dividend payout. One reason is that the DBDI promotes creativity, increases efficiency in problem-solving, and enhances decision-making on challenging issues, including dividend payments. This finding aligns with the previous studies (Aggarwal *et al.*, 2019; Ararat *et al.*, 2010, 2015).

Among the control variables, firm age and firm size are positive and significant determinants of dividend payout policies, while the leverage has a negative significant effect. Hence, mature companies pay high dividend. This result implies that when companies get older, investment possibilities diminish, leading to slower growth that mitigates fund requirement for capital expenditures. Thus, mature companies with steady incomes, high accessibility to capital markets, and tend to pay high dividends. Further, large companies distribute more dividends to convey positive signals to the market. These findings are in line with the previous studies (Al-Najjar and Kilincarslan, 2016; Kilincarslan, 2015; Saeed and Sameer, 2017; Sener and Selcuk, 2019; Ye *et al.*, 2019; Loukil, 2020).

	Logit PDP	Tobit DPOR	Tobit DY
DBDI	2.655* (1.535)	0.466*** (0.132)	0.034*** (0.013)
BrdSize	0.610 (2.607)	0.181 (0.221)	0.017 (0.020)
IndDir	2.271 (3.887)	−0.432 (0.375)	−0.019 (0.033)
Duality	0.941 (1.916)	0.067 (0.165)	0.000 (0.014)
FirmAge	0.090** (0.038)	0.007** (0.003)	0.001** (0.000)
Fsize	2.880** (1.227)	0.201** (0.090)	0.019** (0.008)
Lev	−11.432*** (3.237)	−1.122*** (0.294)	−0.123*** (0.028)
ROA	1.601 (2.626)	0.097 (0.375)	0.044 (0.038)
Cons	−26.552*** (8.803)	−2.239*** (0.709)	−0.188*** (0.061)
Observations	335	335	335
Wald χ^2	23.62***	50.68***	61.10***
Rho	0.898	0.518	0.398
LR test (H0: Rho = 0)	107.79***	50.33***	30.52***
YEAR	Yes	Yes	Yes
INDUSTRY	Yes	Yes	Yes

Table 8.
Logit and Tobit regression results for Demographic Board Diversity Index (DBDI) and control variables

Note(s): Standard errors are in parentheses
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

4.3 Robustness tests

4.3.1 Family ownership and dividend payout. The companies listed on BIST are mostly family-owned and have high ownership concentration. Families may expropriate available funds in their favor, leading to a clash between controlling and minority shareholders unless there is an effective monitoring (Chen *et al.*, 2005; La Porta *et al.*, 2000). In our sample, the family-owned companies accounts for 69 percent. To check the robustness of our results, we test whether our findings are sensitive to family ownership. We first examine how family ownership affects dividend payments. Second, we investigate how board diversity influences dividend payments of family-owned companies. Family ownership incorporates the value of "1" if family, spouse, and children own at least 10% of total shares and "0" otherwise. The corresponding model can be expressed as in Equation (7):

$$
\begin{aligned}
\text{Dividend Payment}_{i,t} = {} & \alpha + \beta_1 \text{DBDI}_{i,t-1} + \beta_2 \text{Family}_{i,t-1} + \beta_3 \text{DBDI}_{i,t-1} * \text{Family}_{i,t-1} \\
& + \beta_4 \text{BrdSize}_{i,t-1} + \beta_5 \text{IndDir}_{i,t-1} + \beta_6 \text{Duality}_{i,t-1} + \beta_7 \text{FirmAge}_{i,t-1} \\
& + \beta_8 \text{FSize}_{i,t-1} + + \beta_9 \text{Lev}_{i,t-1} + \beta_{10} \text{ROA}_{i,t-1} + \sum_{j=1}^{n} \beta_j \text{YEAR}_{j,i,t} \\
& + \sum_{k=1}^{n} \beta_k \text{INDUSTRY}_{k,i,t} + e_{i,t}
\end{aligned}
$$

$$(7)$$

Dividend Payment$_{i,t}$ is a proxy for PDP, DPOR, and DY. We apply logit regression estimation for PDP and tobit estimation for DPOR, and DY.

The results in Table 9 indicate that Family exhibits a positive and statistically significant relationship with DPOR and DY. Hence, the family involvement in companies matters for dividend payment intensity. On the other hand, the family ownership has no impact on the dividend payment decision (PDP). Thus, for family-owned companies, when the ownership is

	Logit PDP	Tobit DPOR	Tobit DY
DBDI	6.080** (3.166)	1.013*** (0.287)	0.077*** (0.027)
Family	12.326 (7.898)	1.720** (0.726)	0.137** (0.069)
Family* DBDI	−4.671 (3.399)	−0.675** (0.309)	−0.052* (0.030)
BrdSize	0.612 (2.342)	0.169 (0.210)	0.016 (0.019)
IndDir	2.017 (3.823)	−0.424 (0.363)	−0.020 (0.033)
Duality	0.709 (1.657)	0.047 (0.155)	−0.002 (0.014)
FirmAge	0.075** (0.034)	0.006* (0.003)	0.001* (0.000)
Fsize	2.762*** (1.079)	0.203** (0.085)	0.019** (0.008)
Lev	−10.647*** (3.017)	−1.098*** (0.286)	−0.115*** (0.027)
ROA	2.704 (2.653)	0.251 (0.380)	0.055 (0.039)
Cons	−34.410*** (10.497)	−3.633*** (0.923)	−0.302*** (0.085)
Observations	335	335	335
Wald χ^2	25.52***	56.77***	65.16***
Rho	0.865	0.467	0.354
LR test (H0: Rho = 0)	86.02***	40.24***	24.38***
YEAR	Yes	Yes	Yes
INDUSTRY	Yes	Yes	Yes
Note(s): Standard errors are in parentheses ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$			

Table 9.
Logit and Tobit
regression results of
Demographic Board
Diversity Index (DBDI)
and family ownership

still concentrated in the hands of a family, the board diversity has no effect on the probability of dividend payment. These results are in line with the findings of similar studies (Al-Najjar and Kilincarslan, 2016; Sener and Selcuk, 2019; Setia-Atmaja, 2010; Wei *et al.*, 2011). However, the findings confirm that the joint effect of Family and DBDI (Family * DBDI) on DPOR and DY is significant and negative. This result suggests that when family members control the board, families are more likely to extract private benefits and are less likely to distribute high dividends. Hence, the board of family-owned companies with heterogeneous board member characteristics has a negative influence on dividend payment intensity.

4.3.2 Endogeneity. There may be an endogeneity issue in the sense that dividend can be an outcome of good corporate governance but may also serve as a disciplining device for good corporate governance (Abor and Fiador, 2013). The diverse board members may have joined companies that pay high dividends in the first place, making causality run in the opposite direction. Assuming that dividend payments can act as a substitute for corporate governance, we estimate the following equation, where board demographic diversity is used as an alternative corporate governance measure:

$$\text{DBDI}_{i,t} = \alpha + \beta_1 \text{Dividend Payment}_{i,t} + \beta_2 \text{BrdSize}_{i,t-1} + \beta_3 \text{IndDir}_{i,t-1} + \beta_4 \text{Duality}_{i,t-1} \\ + \beta_5 \text{FirmAge}_{i,t-1} + \beta_6 \text{FSize}_{i,t-1} + \beta_7 \text{Lev}_{i,t-1} + \beta_8 \text{ROA}_{i,t-1} + e_{i,t}$$

(8)

To estimate the panel regression model, we first conducted a fixed effects model and an F test to see if any firm-specific characteristics exist. We concluded that there were individual effects, and that the pooled OLS model cannot be used. In the next step, we employed Hausman (1978) test. The test indicated that random effects model is better than the fixed effects model.

The regression results are presented in Table 10. The results show that dividend payment decision (DPD) has a significant positive effect on DBDI (Model 1), but the intensity of dividend payment (DPOR or DY) does not affect DBDI (Model 2, 3). Diverse board members prefer to join to companies that pay dividend. On the other hand, the intensity of dividend payment does not effect the board demographic diversity.

	Model 1	Model 2	Model 3
PDP	0.081** (0.038)		
DPOR		0.051 (0.039)	
DY			0.240 (0.344)
BrdSize	0.423*** (0.116)	0.405*** (0.116)	0.412*** (0.116)
IndDir	−0.054 (0.164)	−0.062 (0.164)	−0.060 (0.165)
Duality	−0.069 (0.111)	−0.062 (0.111)	−0.064 (0.110)
FirmAge	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)
Fsize	0.093* (0.050)	0.101** (0.050)	0.105** (0.050)
Lev	0.020 (0.113)	0.008 (0.113)	−0.001 (0.113)
ROA	−0.020 (0.146)	−0.014 (0.149)	−0.031 (0.149)
Cons	0.847*** (0.377)	0.852** (0.378)	0.826** (0.377)
Observations	335	335	335
R^2	0.174	0.167	0.164
Wald χ^2	27.28***	24.33***	23.19***

Table 10.
The effect of dividend payout on Demographic Board Diversity Index (DBDI)

Note(s): Standard errors are in parentheses
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$
VIF scores for the variables are lower than the cut-off value of 10. Hausman test confirms the random effect model. The test results are not reported but they will be given upon request

5. Conclusion and discussions
Board demographic diversity plays an essential role in business environment, particularly in enhancing corporate governance. Companies that lag in a talented pool of diverse, experienced, and well-educated board members may face with a limited value creation and weak corporate performance. In this frame, the relationship between board demographic diversity and finance aspects is important in improving corporate performance.

This study investigates the board demographic diversity and dividend policy relationship for a sample of 67 non-financial companies listed on the Borsa Istanbul 100 Index over the period of 2013–2018. In this work, board demographic diversity implies diverse attributes of board members, i.e. gender, nationality, experience, educational background, tenure, and age, while the dividend policy is determined by a binary variable, indicating whether a company pays dividend or not, and a continuous variable showing the intensity of dividend payments.

The results indicate that nationality diversity positively influences companies to pay high dividends. This finding can be attributable to foreign directors' diverse experiences in improving monitoring and reducing the possibility of expropriation by controlling shareholders to pay fewer dividends to shareholders. Thus, it mitigates agency costs between shareholders, empowering the board to behave more independently in dividend payments. The results also show that experience diversity and educational diversity positively affect the dividend payout policy. Board members with diverse expertise and education bring distinct ideas and solutions to problems that may alleviate agency costs, mobilize resources optimally, and encourage policy formulation in dividend payments. Hence, they counteract "silo thinking" in challenging decisions and assess the issues through a multidimensional approach.

The findings show positive but insignificant effect for gender diversity, tenure diversity and age diversity. One likely reason for positive, but insignificant impact of female members on board is that when families control the board, most of the women directors belong to controlling families where they serve the interests of families. Therefore, it seems that family ties conflict with the independence of female directors. Thus, the significance of women directors on dividend payout should be driven primarily by independent female directors as argued by Adams and Ferreira (2009), Chen *et al.* (2017), and Garcia-Meca (2022).

Finally, the results indicate a positive and significant relationship between DBDI and dividend payout policy, implying that the composite board diversity positively influences the dividend payout. One likely reason is that the DBDI promotes creativity, increases efficiency in problem-solving, and enhances strategic decision-making, including the formulation of dividend policies. Last but not least, the family-owned companies with diverse board members has a negative influence on dividend payment intensity, suggesting that when family members control the board, families are less likely to distribute high dividends.

5.1 Managerial implications
This study provides valuable insights for companies and policymakers. First, given the positive influence of board diversity on dividend payout, Turkish companies should structure their boards to accommodate demographic diversity to improve monitoring, alleviate agency costs, and enhance external linkages. Second, Turkish companies should develop a congenial culture to ensure nationality diversity on board to take advantage of international experience and linkages and to further incorporate corporate governance measures. Third, policymakers should introduce policies to ensure the existence of independent female board members who do not belong to controlling families. This will also mitigate agency costs and eventually increase investors' trust. Finally, the positive implications of optimization in board demographic diversity increase over time as the board members become more familiar with each other. This leads to the similarities in their thinking, and decision-making, leading them to develop more sustainable dividend policies.

5.2 Limitations and future research
We acknowledge that this study has some limitations. First, it considers only non-financial companies. Future studies may examine financial, investment, and utility companies listed on Borsa Istanbul to enlarge the scope. Second, the research focuses solely on cash dividends, but ignores other types of dividends. Future studies may consider stock dividends and share repurchases to deepen the findings. Third, this study examines a limited number of board diversity attributes. Future work may extend the scope by covering other board demographic attributes, i.e. race, ethnicity, religion, physical abilities. Fourth, the present study uses only secondary data to explore the influence of board demographic diversity on dividend policy. Future studies may use survey methodology to obtain primary data from companies or investors to analyze the perceptions of stakeholders on board diversity in shaping dividend policies in emerging markets. Finally, this research covers only Turkish capital markets. Future studies may hold cross-country analyses covering other emerging countries to create an enlarged framework and reflect the effect of different institutional and socio-economic dynamics on the dividend payout policy.

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