FAMILY BUSINESS, FIRM EFFICIENCYAND CORPORATE GOVERNANCE RELATION: THE CASE OF CORPORATE GOVERNANCE INDEX FIRMS IN TURKEY

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ABSTRACT

In this paper, corporate governance and the family business structure, and their effects on firm performance are investigated. The empirical analysis is conducted with 45 Turkish joint-stock companies listed on the Borsa Istanbul Stock Exchange and indexed in the Corporate Governance Index of BIST. Family businesses are the least efficient in terms of DEA score and have the lowest CGR scores on average. The results reveal positive relationship between both family business and firm performance and family business and CGR. Moreover, CGR scores do not have any significant relationship with firm performance. There is also a positive relationship between all ownership structures and firm performance. According to industry results, technology and the construction industry have the highest scores whereas financial industry and wholesale and retail industry have the lowest efficiency scores on average. In addition, relationship between industry group and firm performance is not significant.

Keywords: Family Business, Corporate Governance, Firm Performance, Firm Efficiency, Ownership Structure.

JEL Codes: G32, G34, G30, O16.

INTRODUCTION

Obtaining a strategic and competitive advantage, and surviving and sustaining a business over the years is more challenging for companies in today's complex, turbulent and competitive world, especially in the times of slower growth, lower returns, and more frequent economic crises. Among the various factors that have impact on business performance, firms' ownership structure and corporate governance, especially for family businesses, are some of the main determinant factors. Whether family ownership has a positive or a negative impact on a firm performance is a very challenging question and the answer depends on a number of different issues and complex interrelations, since family businesses have some advantages, as well as disadvantages because of their specific resources, unique skills and capabilities or competencies to gain competitive advantage and sustain their business in the future.

Considerable research conducted to date reveals mixed results regarding the relationship between family business and firm performance. Some studies argue that family business creates value and contributes positively to firm performance (Anderson & Reeb, 2003; Barontini & Caprio, 2006; San Martin-Reyna & Duran-Encalada, 2012), while others claim that family firms do not differ from others in terms of firm performance (Filatotchev et al., 2005; Poutziouris et al., 2015; Sarbah & Xiao 2015). Various factors, some of which are the type of firms analyzed,

the performance measures (Sacristan-Navarro et al., 2011) and the context of each country (San Martin-Reyna & Duran-Encalada, 2012), might be the causes of the mixed results (Miralles-Marcelo et al., 2014). Nevertheless, there is a general assumption that family ownership positively affects firm performance because of its uniqueness (Gurarda et al., 2016). Resources, skills and capabilities of family businesses developed over the years can provide such uniqueness (Sarbah & Xiao, 2015). The firms that use those resources, skills and capabilities efficiently to obtain the desired results would have superior performance over other firms (Kahveci, 2011; Kahveci, 2012) and reach sustained competitive advantage. In other words, unique resources, skills and capabilities of family businesses would enable them to exploit opportunities to implement strategies to reach desired performance.

Family businesses play an important role in both developing and developed countries' economies by contributing economic growth and wealth, creating employment and providing flexibility with their entrepreneurship skills. Therefore, exploring the relationship between family business and firm performance has significant importance in order to understand its remarkable role in the economy and its contribution to it. Few empirical studies investigate the determinants of the ownership-firm performance interrelationship in family-controlled but publicly listed firms, despite the fact that a large proportion of listed firms are owned and managed by family members in many developed and developing countries (Piesse et al., 2007). Almost 95% of the companies are family business in Turkey and only 3% of them can be transferred to the fourth generation. Therefore, business performance is very important for family businesses and the corporate governance has a very significant role in their sustainability. That is the main reason of this study to explore and seek to advance the family business empirical researches by investigating the family business and firm performance; family business and corporate governance relationship in the Turkish corporate governance index (XKURY) of Borsa Istanbul (BIST) firms. It is very fortunate that BIST has a XKURY index firms which is dedicated to best corporate governance firms, so it will be easier to look for both family business performance and corporate governance relationship with family business. By looking at the family business performance of those companies is a new approach to the issue and will provide a new insight in terms of both theoretical and practical results, since those firms are large publicly traded companies and have good corporate governance applications.

LITERATURE REVIEW

Several different definitions of family business, from owning the biggest percentage of shares or having a controlling interest in the firm (Sarbah & Xiao, 2015), to having a seat on the board of directors (Oudah et al., 2018), from being a CEO and co-founder to having a percentage of ownership rights (Barontini & Caprio, 2006), exist in the literature. Shares in most large firms are relatively more diverse shareholder structure such that although the largest shareholder holds a modest stake in the company rather than a large block, it can still be a family business. Therefore, there is a general consensus that family firms are those where a family owner exercises much influence or have control over the firm's affairs (Gomez-Mejia et al., 2011; Miralles-Marcelo et al., 2014). In other words, if a company is not fully owned by a family, but the family still controls the company, or has a control in management, this means that the company is still a family business, although the company has a widespread ownership structure.

In today's world of increased competition, with their unique and inimitable capabilities that provide sustained competitive advantage and superior performance over their competitors, family businesses can be more flexible, more adaptive and more cautious in spending, in

investing and in doing business. When family members lead their business, they can easily monitor the business by holding a managerial position, report more employment and revenue growth and achieve higher performance (Pearson et al., 2008). In addition, when family members are participated in the firm management, they perform with a higher commitment because they perceive the firm performance as their own welfare (Gallucci et al., 2015; Ward, 1987). Family involvement, thus, enables family members to access to the firms' internal information flows and to monitor the firm easily. It also reduces information asymmetries, generates unusual motivation, and provides incentives that encourage agents to act in the owners' best interests and associate it with own wealth, translating that into better economic and financial results for the firm.

We identify the main capabilities and skills, which provide uniqueness, thus enable family business to gain competitive advantage, are leadership, family business values and corporate governance.

Leadership is the process of helping individuals to increase their capacity with knowledge and capabilities to accomplish the desired objectives by coaching them to understand and accept what needs to be done and how it is to be done. In this regard, the founder, or the leader, of a successful family business is presumed to have great leadership skills. He or she plays a vital role in teaching and training other family members so that they will have the knowledge and skills to become a competent and effective leader required to lead and to continue the business in the next generation (Cater & Justis, 2010; Dyck et al., 2002). One of the reasons why leadership is a unique capability in family business is that leaders in family business share their knowledge with the members contrary to leaders in other organizations are reluctant to do so (Oudah et al., 2018).

Family business values are defined as clear and desirable goals and norms for both family and business. Some families have also a family constitution that defines all values, family and business norms. Family business values serve as a common ground to solve the problems, deal with the conflict of interest between the business and the family and allow both family and business to achieve their own goals (Koiranen, 2002). In addition, family business values helps family members to work together to solve the conflicts between family and business and to transfer successfully the values to the next generations, thus they contribute to the sustainability of the firm in the long run (Erdem & Baser, 2010; Oudah et al., 2018). One of the uniqueness, therefore, comes from successful transfer of these values.

Almost all of the family businesses are established by an entrepreneurial family member and over the years, when they are successful, they build inimitable capabilities that provide them competitive advantage. In order family business to sustain gained competitive advantage, it has to build a mechanism to enable transferring those capabilities and skills to the next generations (Sarbah & Xiao, 2015). One of the effective mechanisms to do this transfer is integrating corporate governance principles to the family business' culture. If the family embraces corporate governance principals and makes them part of its culture, they provide useful alternatives to the challenges come from family ownership and create favorable circumstances to ensure long term sustainability of the firm by enhancing. If the principals of corporate governance put properly into practice they could provide a different strategic view point through external managers, enhance family business's corporate entrepreneurship and competitiveness which contributes to its long-term success, and strengthen its activities (Sarbah & Xiao, 2015).

Another important feature of corporate governance is helping to decrease the agency costs. Studies on publicly traded family firms mostly draw upon agency theory, suggesting that

the equity level of the controlling family can influence the conflicts between family and non-family shareholders (Taras et al., 2018). As the family business grows and enlarges, the relationship between the owners and other stakeholders becomes more complicated. Therefore, it requires monitoring mechanisms to prevent opportunistic management behavior, which in turn can result in agency costs (Jensen & Meckling, 1976). Corporate governance helps varied participants and shareholders such as, managers, shareholders, employees and creditors to manage potential conflict of interest by putting right control mechanisms into place (Sarbah & Xiao, 2015). At this point, corporate governance decreases information asymmetries and allows transparency that make it possible for agents to engage in activities that, if left unchecked, would threaten firm performance and may ultimately harm the welfare of owners and agents alike (Sarbah & Xiao, 2015). Improving the quality of corporate governance enables the firm to attract foreign investors by informing all stakeholders about its financial situation, performance, ownership structure and other conditions in a timely and accurate manner (Aydin & Cavdar, 2015; Kahveci, 2016; Kahveci &Taliyev, 2016).

RESEARCH METHODOLOGY

The Model and the Variables

The main aim of this research is to analyze family business's impact on firm performance and on corporate governance rating (Aydin & Cavdar, 2015; Kahveci, 2016). Following hypotheses will be tested:

H_1: There is a positive relationship between family business (and family involvement in business or management) and firm performance.

H_2: There is a positive relationship between family business and Corporate Governance Rating.

The empirical analysis is conducted with dataset of companies listed on the main Turkish stock exchange, BIST, and included in the XKURY index (Kahveci, 2016). The empirical model proposed by Zheka (2005), Lauterbach & Vaninsky (1999) and Kahveci (2016) are utilized. Our estimation involves two stages. In the first stage, we calculate the firm's performance using an input-oriented model with DEA (Kahveci, 2016; Kahveci & Wolfs, 2018). DEA is used to measure relative performance (efficiency) of firms. Multiple inputs and outputs can be used by DEA. DEA identifies Decision Making Unit (DMU) s that produces the largest amount of output by consuming the least amount of input (Cooper et al., 2006). In the first stage, efficiency scores are obtained for three inputs (Kahveci, 2016): assets (Samad & Patwary, 2003; Ulucan, 2000:2002; Zhu, 2000) number of employees (Kahveci, 2011; Kahveci, 2016; Samad & Patwary, 2003; Ulucan, 2000:2002; Zhu, 2000) and cost of operations in 2014 and two financial performance measures as outputs, a market perspective price/book value per share and market capitalization (Kahveci, 2011; Ulucan, 2000:2002; Zhu, 2000), since the aim of management is maximize the firm's market value (Kahveci, 2016).

In the second stage, cross sectional data regression analysis is employed to estimate the relationship between the efficiency scores obtained in the first stage (Ej (xj, yj) = EFFj) and the set of explanatory variables (Table 1) that represent the firm's ownership structure (Ownershipj), industry-specific factors (Industryj), corporate governance ratings (CGIj), and size (log(Mcap/TA)) as a control variable. In particular we use OLS methods to estimate the equation (1).

$$EFF_j = (\alpha_k) \sum Ownership_j \, k \, k=1 + (\mu_k) \sum Industry_j \, w-1 \, w=1 \, CGR_j + Size_j \qquad (1)$$

Sample and Data Collection

Forty five companies are chosen which are included in the XKURY of BIST to conduct an empirical analysis (Kahveci, 2016). Data were obtained from company websites, annual reports and Reuter's terminal. In terms of this study, a firm is defined as a family business if the majority of shares are owned by a family or a family's group of companies that are enough to have control of the company, or at least one family member is having a seat on the board of the company.

According to Borsa Istanbul (BIST 2018):

"*The BIST XKURY aims to measure the price and return performances of companies traded on Borsa Istanbul Markets (except companies on the Watch List and Lists C and D) with a corporate governance rating of a minimum 7 out of 10 as a whole and a minimum of 6.5 for each main section. The corporate governance rating is determined by the rating institutions incorporated by the Capital Markets Board in its list of rating agencies as a result of their assessment of the company's compliance with corporate governance principles.*"

Descriptive statistics of the chosen companies' variables are given in Tables 1-4. Number of employees, total assets and operational costs are inputs; market capitalization and price/book value per share are output variables (Table 1) (Kahveci, 2016; Samad & Patwary, 2003). Twenty eight of 45 companies are family businesses, whereas seven of them are foreign and ten of them are local (Table 2). In terms of industry specific structure, 17 of the companies operate in the financial sector, 20 of them in manufacturing and the remainder are one in mining, one in construction, two in technology, two in transportation and communication and two in wholesale and retail trade industry (Table 3). The last eight companies are grouped as other, since the number of companies in each industry is small (Table 3). Descriptive statistics are also given in Table 4.

<table>
<tr><th colspan="2">Table 1
DESCRIPTION OF INPUT AND OUTPUT</th></tr>
<tr><th>Input</th><th>Output</th></tr>
<tr><td>Number of Employees</td><td>Market Capitalisation</td></tr>
<tr><td>Total Assets</td><td>Price/Book Value per Share</td></tr>
<tr><td>Operational Costs</td><td></td></tr>
</table>

<table>
<tr><th colspan="3">Table 2
DESCRIPTION OF OWNERSHIP VARIABLES</th></tr>
<tr><th>Ownership variables</th><th>Description</th><th>Number of Companies</th></tr>
<tr><td>**Foreign (FO)**</td><td>Share of Equity held by foreign firms/investors</td><td>7</td></tr>
<tr><td>**Local (LC)**</td><td>Share of Equity held by local firms/investors</td><td>10</td></tr>
<tr><td>**Family (FB)**</td><td>Share of Equity held by family members or family firms or family member on Board of Directors</td><td>28</td></tr>
<tr><td>**Publicly Traded (PT)**</td><td>Share of Equity Traded on Borsa Istanbul</td><td>45</td></tr>
</table>

Table 3 DESCRIPTION OF INDUSTRY VARIABLES		
Industry Variables	**Description**	**Number of Companies**
Financial	=1 if the company belongs to financial sectors, 0 otherwise	17
Manufacturing	=1 if the company belongs to manufacturing sectors, 0 otherwise	20
Mining		1
Construction		1
Technology	OTH'=1 if the company belongs to one of these sectors, 0 otherwise	2
Transportation and Communication		2
Wholesale and Retail Trade		2

Table 4 DESCRIPTIVE STATISTIC OF VARIABLES										
	FO (%)	**FB (%)**	**PT (%)**	**LC (%)**	**CGR**	**Total Assets (Billion TL)**	**Number of Employees**	**Cost of Operations (Million TL)**	**Market Capitalization (Million TL)**	**Price/Book Value Per Share**
Mean	16.5	32.0	32.8	16.6	8.81	16.72	6711	790.89	4885.12	2.02
SD	24.0	29.3	15.0	25.1	0.45	4.35	8859	1219.88	6641.49	2.40
Max	83.8	85.0	84.8	84.7	9.4	217.73	34147	4713.01	29904.00	11.63
Min	28.3	10.2	8.4	35.3	7.1	0.12	48	5.44	44.12	0.29

RESULTS

Firstly we calculated efficiency scores by using companies' assets, number of employees and cost of operations in 2014 as input and market capitalization and price/book value per share of 2015 as output (Kahveci, 2016; Samad & Patwary, 2003). In terms of this analysis, output maximization assumption with DEA is employed since the main aim of the firm is to maximize market value. Therefore, the company employing given inputs should be able to maximize market value and so market price (Kahveci, 2016). Then, secondly we used OLS methods to estimate the equation (1). We used the efficiency score calculated in first stage as a performance indicator of the firm for the second stage. In the second stage CGRs are also added to the model to see how, and to what extent, corporate governance implementations affect companies' efficiency scores (Kahveci, 2016).

First Stage DEA Results

Companies' efficiency scores according to group of industry are given in Table 5. Technology and the construction industry are fully efficient since their mean is 1.

Industries	Number of Companies		FO (%)	FB (%)	PT (%)	LO (%)	CGR	Efficiency Score
Table 5 EFFICIENCY SCORES, CGR AND OWNERSHIP STRUCTURE BY INDUSTRY GROUP								
Construction	1	Mean	0	82	18	0	9.02	1.00
		SD	NA	NA	NA	NA	NA	NA
Financial	17	Mean	16	18	37	29	8.95	0.31
		SD	22	26	17	28	0.50	0.27
Manufacturing	20	Mean	17	41	34	7	9.04	0.56
		SD	30	27	14	14	0.49	0.31
Mining	1	Mean	0	68	32	0	9.06	0.47
		SD	NA	NA	NA	NA	NA	NA
Technology	2	Mean	17	17	23	42	9.06	1.00
		SD	25	25	11	60	0.04	0.00
Transportation and Communication	2	Mean	14	46	24	16	8.75	0.39
		SD	20	27	15	22	0.04	0.15
Wholesale and Retail Trade	2	Mean	40	33	27	0	9.36	0.25
		SD	57	46	11	0	0.15	0.21

Companies' efficiency scores and CGRs according to ownership structure are given in Table 6. The average efficiency score and CGR of the family businesses are the lowest compared to local and foreign ownership. Foreign ownership companies' average CGRs are higher than others, whereas local ownership companies have the highest average efficiency scores.

Table 6
EFFICIENCY SCORES AND CGR BY OWNERSHIP STRUCTURE

	Definition	Number of Firms	Efficiency Score (Average)	CGI (Average)
FO	Share of Equity held by foreign firms/investors	7	0.423	9.123
LC	Share of Equity held by Local firms/investors	10	0.498	9.005
FB	Share of Equity held by family members or family firms or family member on Board of Directors	28	0.413	8.871

Second Stage Regression Results

The results of OLS estimation of equation (1) are shown in Table 7. We calculated equation (1) three times according to industry structure and we present separate results for each industry. The coefficients and their significance values indicate the positive and significant effects of all ownership structures on the technical efficiency of the firms in the sample. Family business, foreign and local ownership and publicly traded shares are all positively related to firm efficiency score which means firm performance.

The coefficients for all ownership structures are significant at the 1% level. The coefficients for the industry are not significant for all industries meaning that there is no relationship between industry type and efficiency score which means firm performance. The size variable log (MCAP/TA) is significant at 1% level meaning that the size is positively related to company's efficiency score, its performance.

<table>
<tr><td colspan="9">Table 7
EFF RELATIONSHIP WITH OWNERSHIP STRUCTURE AND INDUSTRY</td></tr>
<tr><td colspan="9">Dependent Variable:Efficiency Score</td></tr>
</table>

Variable	Coeff.	Prob.	Variable	Coeff.	Prob.	Variable	Coeff.	Prob.
FA	0.552	0.000	**FA**	0.546	0.000	**FA**	0.562	0.000
FO	0.452	0.003	**FO**	0.411	0.005	**FO**	0.460	0.002
LO	0.609	0.000	**LO**	0.550	0.002	**LO**	0.637	0.000
PT	0.820	0.000	**PT**	0.767	0.000	**PT**	0.788	0.000
LOG(MCAP/TA)	0.209	0.000	**LOG(MCAP/TA)**	0.234	0.000	**LOG(MCAP/TA)**	0.211	0.000
MNF	-0.027	0.740	**FIN**	0.113	0.306	**OTH**	-0.055	0.595
R-squared		0.533	**R-squared**		0.544	**R-squared**		0.535
Adjusted R-squared		0.473	**Adjusted R-squared**		0.486	**Adjusted R-squared**		0.476

We add the CGR scores to the equation (1) to be able to analyze the relationship between EFF and CGR. The results are given in Table 8. After adding the CGR scores to the equation, ownership structures and size variables are again positively related but the coefficient and significance level has changed. PT is significant at 5% and size is significant at the 1% level whereas FA, FO and LO are significant at the 10% level. CGR seems negatively related but it is not significant. Yet, the industry specific variables are not significant either. We expect to see a positive relationship between CGR and EFF scores since corporate governance makes companies more transparent and enables investors to invest more in companies who have good corporate governance practices. On the other hand, especially at family business firms, corporate governance practices bring some bureaucracy and slow the processes and decision-making mechanism and because of that the performance can be affected negatively. That could be the reason for the negative sign for the CGR yet it is not significant.

<table>
<tr><td colspan="9">Table 8
EFF RELATIONSHIP WITH OWNERSHIP STRUCTURE, CGR AND INDUSTRY</td></tr>
<tr><td colspan="9">Dependent Variable: Efficiency Score</td></tr>
</table>

Variable	Coeff.	Prob.	Variable	Coeff.	Prob.	Variable	Coeff.	Prob.
FA	1.54	0.0811	**FA**	1.96	0.0578	**FA**	1.94	0.0599
FO	1.43	0.1024	**FO**	1.80	0.0805	**FO**	1.82	0.0761
LO	1.64	0.0764	**LO**	1.93	0.0616	**LO**	1.99	0.0543
PT	1.69	0.0344	**PT**	2.30	0.0267	**PT**	2.30	0.0271
CGR	-0.1052	0.2529	**CGR**	-1.32	0.1931	**CGR**	-1.31	0.1976
LOG(MCAP/TA)	0.2186	0.0000	**LOG(MCAP/TA)**	5.85	0.0000	**LOG(MCAP/TA)**	6.57	0.0000
MNF	-0.0211	0.7976	**FIN**	1.19	0.2423	**OTH**	-0.77	0.4437
R-squared			0.549016	**Adj R-squared**		0.477808		

Table 9 CGR RELATIONSHIP WITH OWNERSHIP STRUCTURE AND EFF					
Dependent Variable: CGR			**Dependent Variable: CGR**		
Variable	**Coefficient**	**Prob.**	**Variable**	**Coefficient**	**Prob.**
FA	9.603	0.000	**FA**	9.426	0.000
FO	9.473	0.000	**FO**	9.327	0.000
LO	9.961	0.000	**LO**	9.759	0.000
PT	8.541	0.000	**PT**	8.278	0.000
LOG(MCAP/TA)	0.164	0.042	**LOG(MCAP/TA)**	0.096	0.082
EFF	-0.331	0.239			
R-squared		0.271	**R-squared**		0.244
Adjusted R-squared		0.178	**Adjusted R-squared**		0.169

Since there is no significant relationship between CGR and EFF scores, we reversed the variables to see if there is a relationship between EFF and CGR. So we put CGR instead of CGR as dependent variable, and calculated the equation (1) accordingly. The results are presented in Table 9. All family ownership structures are significant at 1% level meaning positive relationship with the CGR scores, the highest coefficient is for LO. EFF has a negative sign but it is not significant yet. Therefore, companies efficiency score, in other words their performance, is not related to their CGR score. With regards the R-squared and Adjusted R-squared, they are low compared to the time series data. However, since in cross-sectional data models, values of R-squared and Adjusted R-squared around 0.30 are common. In our study, first two models, results are given in Tables 7 and 8, are significantly higher R-squared and adjusted R-squared with around 0.50, which are very good explanatory power. On the other hand, only the last model's R-squared and adjusted R-squared, given in Table 9, is around 0.30, which is not high but acceptable.

DISCUSSION

In this paper, we examined corporate governance and ownership structure, especially the family business structure, and its effects on firm performance using DEA efficiency scores. In particular, the study aims to shed a light on family business structure and corporate governance effects in Corporate Governance Index Firms in Turkey. The empirical analysis of 45 firms reveals that overall ownership structure and particularly family business impact firm performance, where performance is calculated as DEA efficiency scores given the firm's inputs and outputs.

We found that:

1. Family businesses are least efficient in terms of DEA score and have the least CGR scores on average. According to industry results, the technology and construction industry has the highest scores whereas the financial industry and the wholesale and retail trade industry have the lowest scores on average.
2. When we analyze the regression results we accept both our Hypotheses. There is a positive relationship between family business (and family involvement in business or management) and firm performance; and there is a positive relationship between family business (and family involvement in business or management) and Corporate Governance Rating (Aydin & Cavdar, 2015). On the other hand there is no significant relationship between industry group and performance. Moreover, CGR scores do not have any significant relationship with firm performance. There is also a positive relationship between all ownership structure and firm performance (Barontini & Caprio, 2006).

Regarding the results, the average lower-performing family businesses and lower CGR scores in family businesses are likely the result of transforming into public-controlled non-majority owned corporations and therefore, their capabilities' effectiveness in leadership, family business values unique to the family business might, as time progresses, diminish their efficacy. When family businesses are relatively small and have an entrepreneurial or start-up soul, they take the advantage of their capabilities in leadership and in business values and reflect them to the business easily. They can be very flexible, adaptable to both changing environment and changing customer demands easily. Therefore, their performance would be better compared to non-family firms. When they are relatively bigger it becomes challenging to keep their flexibility and adaptability. Therefore, it becomes challenging to reflect their uniqueness to their performance as they evolve into a big publicly traded company. In this transformation, the sustainability of the firm is more important than its performance where corporate governance is at the forefront. In other words, corporate governance does not necessarily provide superior performance; it only guarantees the family business's sustainability and helps to keep the strategic advantage that it already has.

These findings suggest that publicly traded companies with dispersed ownership structure promote performance. Regarding family business we expect a positive difference in terms of performance compared to the other types of ownership structure, but all ownership structures are positively related in this study. The publicly traded companies are strictly controlled by government authorities and there are some regulations with which they have to comply. Therefore, it can be said that every publicly traded company is forced to show at least a certain level of performance independent of its ownership structure. Moreover, from forming the board of directors to finding and employing the right people for the job and from organizational structure to financial structure, everything must be taken carefully into account to maximize company's performance in a publicly traded company in today's complex, turbulent and competitive world, especially in an environment of slower growth, lower returns, and more frequent economic crises. This might be the reason that all forms of ownership are positively related to performance in this study. The reason why the companies with a share of equity held by foreign or local firms/investors which are seven foreign, and 10 local firms, have higher average efficiency scores compared to family business might those that are big and well institutionalized companies.

CONCLUSION

In terms of corporate governance, all companies that have been studied are in the BIST XKURY index. They are strictly regulated and have to comply with the corporate governance principles independent of their ownership structure and performance. That might be the reason why there is no significant relation between CGR and ownership structure and performance. Since all of the companies in this study have a certain level of good corporate governance, their performance is not related to their CGR scores. For future researches, it would be a good subject to explore if there is a relationship with complying with corporate governance principles and firm performance with XKURY companies and other listed companies.

Further policy implications, family business firms might be encouraged to comply with corporate governance principles in order to sustain their business over the years and transfer them successfully to next generations. There should be some regulations encouraging and supporting family businesses to comply with the corporate governance principles.

In terms of the limitations of the study, it is conducted with 45 companies in Turkey Borsa Istanbul XKURY index. In order to understand the impact of corporate governance principles and procedures on family business, wide range of country, industry and firm experiences, cases and implications are needed. Overall positive impact of corporate governance on family business should be tested with different country and industry experiences.

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