



Ownership Structure and Firm Performance of Kuwaiti Non-Financial Listed Firms

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Abstract

Objectives: This study aims to examine the relationship between ownership structure and firm performance in the framework of agency theory.

Method: This study tested the linear relationship between ownership structure and firm performance, the non-linear relationship, the impact of ownership composition, and endogeneity and causality issues by using a dataset of 100 non-financial listed firms from 2009 to 2018 in Kuwait Stock Exchange (KSE). Firm performance is measured using Tobin's Q and ROA.

Results: The study found that ownership concentration positively impacts firm performance, which supports the monitoring hypothesis. In terms of ownership composition, the study found that only government ownership positively impacted firm performance, while other large shareholders had an insignificant impact on firm performance. However, after controlling for the endogeneity problem, the study found that ownership concentration negatively impacts firm performance not the other way around, and no evidence confirmed the non-linear relationship in Kuwait.

Conclusion: This study concluded with highlighting its importance and value that it can be very useful for Kuwaiti regulators-namely, Capital Markets Authority, Central Bank, and Ministry of Trade Kuwaiti-in determining the importance of ownership structure and how to protect small shareholders. In addition, Kuwait listed firms should give more consideration for the ownership composition because not all large share-

holders positively impact firm performance. More over, the results of this study are important for academics studying the impact of ownership structures and may give them good guidelines for any further studies. However, the results of this study are limited by the sample used, which is relevant for the Kuwaiti environment only. Results may differ for developed and developing countries. Thus, it is difficult to generalize to other countries.

Keywords: Structure, Ownership concentration, Firm performance, Kuwait.

Introduction

Agency theory suggests that different types of ownership structure have different levels of agency conflict that create different mechanisms for monitoring and controlling managers (Jensen & Meckling, 1976). When ownership is dispersed, conflicts of interest occur between shareholders and managers; when ownership is concentrated, they occur among shareholders. Ownership structure is one corporate governance mechanism used to solve the divergence of interests while mitigating agency problems. Jensen and Meckling (1976) argued that, if managers' ownership increases, firm performance would increase because managers are less able to expropriate wealth. However, La Porta et al. (1999) argued that increasing the level of ownership creates conflicts of interest between large shareholders and small shareholders and between large shareholders and debt-holders. Meanwhile, Demsetz and Lehn (1985) argued that ownership structure has advantages and disadvantages that should be balanced to reach equilibrium for listed firms.

The goal of this study is to examine the relationship between ownership concentration and firm performance in terms of whether the relationship is linear (Positive or Negative) or non-linear. It examines the impact of large shareholders. Finally, it examines the endogeneity and causality problems. Introduction of this study discusses the ownership structure in Kuwait, and reviews previous studies and hypotheses developed in this study. The data and methodology are

presented next, then come the results, which are followed by a conclusion at the end of the study.

Ownership Structure in Kuwait

Ownership structure is highly concentrated in four major investors: institutional investors, government investors, families (individuals), and large/small shareholders.⁽¹⁾ Al-Shammari (2005) argued that the Kuwait Stock Exchange (KSE) is dominated by three categories of investor holding. However, he measured ownership concentration according to the proportion of shares owned by institutional investors only and found an average of 37% for 1996, 1999, and 2002 for all listed firms. The government owns an average of 4% of firms listed on the KSE, which is highly visible in sectors like services and industries. Meanwhile, institutional ownership of firms constitutes nearly 39% of companies. Al-Farahi et al. (2012) examined the ownership structure in Kuwait and found that institutional ownership accounted for about 55%, compared to 3% for government concentration; Hamdan and Al-Sartawi (2013) found that the ownership concentration by institutions accounted for about 46%. Al-Shammari (2005) considered the three large shareholders in Kuwait to be insiders because they have easy access to inside information and records.

Literature Review and Hypothesis Development

As mentioned previously, this study examined the relationship between ownership concentration and firm performance from different perspectives-namely, linearity (monitoring hypothesis [positive impact] and expropriation hypothesis [negative impact]), non-linearity, ownership composition, endogeneity, and causality. The first hypothesis in this study argued that a linear relationship exists between ownership concentration and firm performance. Agency theory argues that, when concentrated ownership exists, large shareholders have incentives and resources to monitor management decisions while reducing agency

(1) Ownership by foreign investors is not included in this study because it accounts for a small portion and an insignificant number in KSE.

costs (Jensen & Meckling, 1976). According to Shleifer and Vishny (1986), greater ownership by insiders improves firm performance because it aligns managers' monetary incentives with other shareholders, as the principal-agent conflict disappears when the manager is also the majority shareholder. They also argue that small shareholders cannot pay monitoring costs.

However, other studies have concluded that large shareholders have both the possibility and incentive to expropriate the firm at the expense of other shareholders. Thus, using control-enhancing mechanisms to separate control rights from cash flow rights weakens the alignment between controlling and minority shareholders while increasing incentives for controlling shareholders to extract private benefits (La Porta et al., 1999). Empirically, as presented in Table 1, Hill and Snell (1989) found a positive relationship between performance and ownership in American firms. Nickell et al. (1997) study of UK-based manufacturing firms (1982-1994) demonstrated that firm performance is positively associated with the presence of a majority shareholder as well as the degree of competition in the market. Meanwhile, the German corporate governance system is characterized by large shareholders and, thus, should result in a greater reliance on ownership concentration as a mechanism to align interests and control agency costs in German firms. According to Gorton and Schmid (2000), German firms' performance improves as ownership concentration increases. Juanda (2018) studied the situation in Indonesia and found a positive impact while Xu and Wang (1999) studied the listed firms in China and found similar results. Zoysa and Manawaduge (2013) and Claessens and Djankov (1999) found the same results.

Table 1
Previous Studies Examining Linearity

Authors	Country	Ownership	Results
Hill and Snell (1989)	USA	Large shareholders	+
Nickell et al. (1997)	UK	Large shareholders	+
Gorton and Schmid (2000)	Germany	Large shareholders	+

Cont. Table 1*Previous Studies Examining Linearity*

Authors	Country	Ownership	Results
Juanda (2018)	Indonesia	Large shareholders	+
Xu and Wang (1999)	China	Large shareholders	+
Zoysa and Manawaduge (2013)	Sri Lanka	Large shareholders	+
Claessens and Djankov (1999)	Czech	Large shareholders	+
King and Santor (2008)	Canada	Large shareholders	Non
Prowse (1992)	Japan	Large shareholders	Non
Haniffa and Hudaib (2006)	Malaysia	Large shareholders	Mixed
Jiang et al. (2009)	China	Large shareholders	-
Fauzi and Locke (2012)	NZ	Large shareholders	-

In Japan, firm ownership is highly concentrated; thus, a greater reliance on large shareholder monitoring is expected, as is a positive and significant effect of ownership concentration on firm performance. However, Prowse (1992) found that higher ownership concentration is not related to higher profits in Japanese firms. Meanwhile, King and Santor (2008) studied Canadian listed firms and found a non-significant impact of ownership concentration on firm performance. Jiang et al. (2009) studied the situation in China, and Fauzi and Locke (2012) studied the situation in New Zealand; both studies found that ownership concentration by large shareholders negatively affected firm performance. In short, theoretically and empirically, large shareholders can provide firms with benefits and costs. Benefits come from monitoring and controlling the managers' decisions whereas costs come from acting for their benefits only. Thus, our first hypothesis is:

H1: A statistically significant relationship exists between ownership concentration and firm performance.

This study also suggests that the relationship between ownership concentration and firm performance is non-linear. In the other words, ownership concentration leads to better monitoring and performance, but beyond a certain point the cost of expropriation by insiders exceeds

monitoring, leading to a decline in firm performance. Agency theory suggests a negative performance impact at low ownership concentration and a positive performance impact at high ownership concentration (Jensen & Meckling, 1976). The positive impact stems from managers' and shareholders' objectives being similar (convergence of interests); the negative impact results when their objectives are different. This finding is consistent with La Porta et al. (2000) argument that concentrated ownership may create a trade-off between incentives and entrenchment. Empirical studies produced different results (see Table 2). Morck et al. (1988) estimated piecewise linear regression, allowing for two changes in the slope coefficient on ownership. They found a non-monotonic relationship between ownership and firm value. According to the results, at low and high levels of ownership (less than 5% and more than 25%), any increase in ownership more closely aligns the interests of managers and shareholders, thereby increasing firm value.

However, at moderate levels of insider ownership (between 5% and 25%), increases in ownership further entrench managers and make them less subject to market discipline, thereby decreasing firm value. McConnell and Servaes (1990) confirmed that entrenchment for American managers was more than 49% in 1976 and more than 37% in 1986. However, in the United Kingdom, Short and Keasey (1999) studied the possibility that various corporate governance systems differently impact ownership and firm performance. They found two optimally determined breakpoints: approximately 12% and 41%. Thus, managers were entrenched at higher ownership levels than in the United States. Meanwhile, De Miguel et al. (2004) indicated that Spanish managers become entrenched when ownership ranges from 35% to 70%.

Consistent with these results, Ruan, Tian, and Ma (2011) found a similar curvilinear relationship between performance and ownership in China. Moreover, Amran and Ahmad (2013) studied the situation in Malaysia and found the breakpoint at some level of ownership below 50%. Several studies found that firm performance first decreased and then increased, according to the fraction of ownership (e.g., Amran &

Ahmad, 2013; Arief, Widiyanto, & Agung, 2014). Meanwhile, Machek and Kubicek (2018) and Mueller and Spitz (2006) suggested that firm performance reached a maximum when reaching a certain point of ownership, depending on each country. Ng (2005) studied panel data from Hong Kong listed firms from 1995 to 1998 and found that the relationship between performance and ownership is non-monotonic (entrenchment-alignment-entrenchment). This study concluded that the relationship between firm performance and ownership structure depends on corporate control environment. Moreover, Deb and Chaturvedula (2003) examined Indian firms in 2003 and found that firm performance was linearly related to ownership concentration (rejecting the hypothesis of expropriation). Based on this discussion, our second hypothesis is:

H2: A statistically significant nonlinear relationship exists between ownership concentration and firm performance.

Table 2

Study Results of Non-linearity

Authors	Country	Turning point
Morck et al. (1988)	USA - 371 firms	0-5%-%(+), 5%-25%(-). > 25%(+)
McConnell and Servaes (1990)	USA - 1173(76) 1093(86)	0-49%(+), > 49%(-) in 1976 0-37%(+), > 37%(-) in 1986
Short and Keasey (1999)	UK 225 firms	RSE- 0-15%(+), 15%-42%(-), > 42%(+) VAL - 0-13%(+), 13%-42%(-), > 42%(+)
De Miguel et al. (2004)	Spain - 135 firms	0-35%(+), 35%-70%(-), > 70%(+)
Ruan et al. (2011)	China - 197 firms	0-18%(+), 18%-64%(-), > 64%(+)
Amran and Ahmad (2013)	Malaysia-420 firms	0-15%(-), 15%-49%(+), 49%-15(+)
Arief et al. (2014)	Indonesia -54 firms	0-3.3%(-), 3.3%-15.15%(+)
Machek and Kubicek (2018)	Czech 34284 firms	0-67% (ROA) 0-71% (ROE)
Mueller and Spitz (2006)	Germany-1300 firms	0-80%(+), > 80%(-)

In the third hypothesis, this study assumed that a statistically significant relationship exists between ownership identity and firm performance. Table 3 summarizes studies that examined the impact of ownership composition on firm performance. Institutions have good opportunities, resources, and power to monitor and control the managers' decisions (Shleifer & Vishney, 1986). McConnell and Servaes (1990) found that institutions can positively impact firm performance. Khamis et al. (2015) studied the situation in Bahrain and found that institutional ownership positively affected firm performance. Xu and Wang (1999) studied the ownership and firm performance for a sample of Chinese listed firms, documenting a positive and significant correlation between ownership concentration and profitability as well as the importance of large institutional shareholders in corporate governance. However, Omran et al. (2008) found no empirical evidence to support any significant impact of local institutions on firm performance.

Table 3*Studies Examining Ownership Composition*

Authors	Country	Ownership and Results
Denis and Denis (1994)	USA	Institutions (non), family (non)
Villalonga and Amit (2006)	USA	Family (+)
Aljifri and Mustafa (2007)	UAE	Institutions (non), government (+)
Xu and Wang (1999)	China	Institutions(+), government(non)
Omran et al. (2008)	4 countries	Institutions(non), government(+), family(-)
Khamis et al. (2015)	Bahrain	Institutions (+)
Amin and Hamdan (2018)	KSA	Institutions(+), family(+)
Alfaraih et al. (2012)	Kuwait	Institutions(+), government(-)
Al-Matari et al. (2017)	Oman	Institutions(non), government(+)
Yasser and Almamun (2017)	Pakistan	Institutions (+)
Mohammed (2018)	Jordan	Institutions (-), family (-)
Boerkamp (2016)	Netherlands	Institutions (+), family(+)
Sun and Tong (2003)	Hong Kong	Government (-)

However, large shareholders could be government. La Porta et al. (1999) argued that government ownership concentration in listed firms is related to political and social objectives. Shleifer and Vishny (1997) and Sun and Tong (2003) found that government has a negative impact on firm performance. According to Xu and Wang (1999), government does not impact performance in China. Thus, profit maximization is not necessary in government firms. However, Al-Faraih et al. (2012), Aljifri and Mustafa (2007), and Omran et al. (2008) found that concentrated government ownership has a positive impact on firm performance. In terms of family ownership in family firms, the agency problems would be reduced because the owner and managers will be the same (Jensen & Meckling, 1976). However, many studies found a negative impact of family ownership on firm performance. For example, Andres (2008) found that family ownership reflected less diversity in firm assets. Favoritism and nepotism are also important factors in having any position in board of directors or management. Consistent with this view, Omran et al. (2008) found that ownership concentration by families does not improve firm performance. Amin and Hamdan (2018) found a positive impact in Saudi Arabia. Thus, because of these mixed results, the relationship between ownership composition and firm performance deserves additional attention, and our third hypothesis is:

H3: A statistically significant relationship exists between type of large shareholders (ownership identity) and firm performance.

The fourth hypothesis assumes that no relationship exists between ownership concentration and firm performance because of endogeneity and causality. Endogeneity means that many variables may impact ownership structure without affecting firm performance; reverse causality indicates that the dependent variable (firm performance) might impact the independent variable (ownership concentration). Wintoki (2007) identified three potential reasons for these problems: unobserved heterogeneity, simultaneity, and dynamic endogeneity. Table 4 presents several studies that examined these issues empirically. Demsetz and Lehn (1985) argued that, in competitive capital markets, environment market forces ensure that every firm chooses a value-maximizing ownership structure. Indeed, they supported the idea that

ownership structure is endogenously determined by demonstrating that the ownership structures of American firms are determined by firm size, stock price volatility, industry affiliation, and other variables. However, they found no relationship between ownership concentration and firm performance, as measured by profit rate. Other studies (e.g., Agrawal & Knoeber, 1996) demonstrated similar results.

Himmelberg et al. (1999) documented that endogeneity of ownership reflects different firms choosing amongst different corporate governance mechanisms. They found that ownership can be explained by unobserved firm heterogeneity, whereas insider ownership does not affect firm performance to an econometrically observable extent. Meanwhile, Loderer and Martin (1997) studied the same issues and found that ownership structure does not have a predictive effect on performance, but firm performance does have a negative impact on ownership structure. Cho (1998) determined that investment affected performance, which in turn affects ownership; the effect of ownership on performance is insignificant. Thus, if there is an impact, it would be from performance to ownership whereas the opposite is not true. Demsetz and Villalonga (2001) considered ownership concentration to be an endogenous variable and found no relationship between them. In the United Kingdom, Davies et al. (2005) found that the relationship between ownership and firm value is co-deterministic. Meanwhile, in Japan, Hu and Izumida (2008) found a positive relationship between firm performance and ownership when controlled for fixed effects. However, no evidence confirmed that causality relationship.

Table 4

Studies Examining Endogeneity and Causality

Authors	Country	Performance model	Ownership model
Omran et al. (2008)	4 countries	Non	———
Cho (1998)	USA	Non	+
Demsetz and Villalonga (2001)	USA	Non	———

Cont. Table 4*Studies Examining Endogeneity and Causality*

Authors	Country	Performance model	Ownership model
Davies et al. (2005)	UK	Non	Non
Beiner et al. (2004)	Switzerland	Non	Non
Kapopoulos and Lazaretou (2007)	Greek	Non	———
Thomsen et al. (2006)	Many countries	Negative for Europe countries	Non
Hu and Izumida (2008)	Japan	+	Non
Loderer and Martin (1997)	USA	Non	Mixed
Himmelberg et al. (1999)	USA	Non	Non
Agrawal and Knoeber (1996)	USA	Non	Non
Al-Farooque et al. (2007)	Bangladesh	-	-

Kaserer and Moldenhauer (2005) studied 245 German firms in 2003, finding that the outside stockholder as well as more concentrated ownership positively impacts firm performance. Beiner et al. (2004) followed the methodology of Agrawal and Knoeber (1996) and found no evidence of any relationship between ownership concentration by large shareholders and firm performance. Kapopoulos and Lazaretou (2007) studied the situation in Greece, and Thomsen et al. (2006) studied the situation in the USA and Europe; both found no strong relationship between firm performance and ownership concentration. Al-Farooque et al. (2007) studied the issue of endogeneity and causality in Bangladesh listed firms and found a significant negative impact. Meanwhile, Omran et al. (2008) found that ownership concentration is an endogenous response to investors' poor legal protection, but it seems to have no significant effect on a firm's performance. Thus, based on the issues of endogeneity and causality, our final hypothesis is:

H4: No statistically significant relationship exists between ownership concentration and firm performance in both ways.

Methodology

Data Collection and Analysis

This study examined the non-financial listed firms in KSE from 2009 to 2018; however, due to the different regulations and structures and being consistent with previous studies, the financial firms and some firms with no ownership data were excluded from the sample, resulting in a final sample of 100 firms: 30 estate sector firms, 20 industrial sector firms, 47 service sector firms, and 3 food sector firms. The information on the study variables were collected mainly from KSE online and firms' annual reports.⁽²⁾ As Table 5 indicates, this study used two performance measures; four independent variables, and three control variables.

Table 5

Operationalization of Study Variables

Variables	Operationalization
Dependent variables	
Tobin's Q (TQ)	Ration of market value of common shares + total debt divided by book value of total assets
Return on assets (ROA)	Earning after tax dividing by total assets
Independent and Control variables	
Ownership concentration (OC)	Total ownership concentration in the firms (more than 5%)
Institution ownership concentration (IOC)	Ownership concentration by institutions (more than 5%)
Government ownership concentration (GOC)	Ownership concentration by government (more than 5%)

- (2) In 2012, the government changed the KSE classification. Currently there are 14 industry sectors: oil and gas, basic material, industrial, consumer goods, health care, consumer services, telecommunication, utilities, banks, insurance, financial services, investment, and technology. The study used the old classification to be consistent with the study period (2009 to 2018).

Cont. Table 5*Operationalization of Study Variables*

Variables	Operationalization
Family and individual ownership concentration (FIOC)	Ownership concentration by families and individuals (more than 5%)
Debt ratio (DT)	The percentage of total liabilities to total assets
Firm size (FS)	Total assets
Industry (IN)	Four industry sectors in KSE: estate sector, industrial sector, service sector, and food sector

To achieve the goals of this study, the following six models were used to test the issues of linearity, non-linearity, and the impact of ownership identity on firm performance.

$$TQ = \beta_0 + \beta_1 OC + \beta_2 DT + \beta_3 FS + \beta_4 IN + \varepsilon_i \dots\dots\dots 1$$

$$ROA = \beta_0 + \beta_1 OC + \beta_2 DT + \beta_3 FS + \beta_4 IN + \varepsilon_i \dots\dots\dots 2$$

$$TQ = \beta_0 + \beta_1 OC + \beta_2 OC^2 + \beta_3 DT + \beta_4 FS + \beta_5 IN + \varepsilon_i \dots\dots\dots 3$$

$$ROA = \beta_0 + \beta_1 OC + \beta_2 OC^2 + \beta_3 DT + \beta_4 FS + \beta_5 IN + \varepsilon_i \dots\dots\dots 4$$

$$TQ = \beta_0 + \beta_1 OC + \beta_2 IOC + \beta_3 GOC + \beta_4 FIOC + \beta_5 DT + \beta_6 FS + \beta_7 IN + \varepsilon_i \dots\dots 5$$

$$ROA = \beta_0 + \beta_1 OC + \beta_2 IOC + \beta_3 GOC + \beta_4 FIOC + \beta_5 DT + \beta_6 FS + \beta_7 IN + \varepsilon_i \dots\dots 6$$

Then, this study applied OLS regressions and the second stage least square (2SLS) using many instrument variables. This is consistent with the study of Agrawal and Knoeber (1996). This study used ROE as the instrument variable for performance and two variables for ownership concentration. Then the predicted value is saved (the first-stage) and used with all exogenous variables to estimate the firm performance (the second stage), as follows:⁽³⁾

$$OC = \beta_0 + \beta_1 TQ + \beta_2 DT + \beta_3 FS + \beta_4 IN + \varepsilon_i \dots\dots\dots 7$$

$$OC = \beta_0 + \beta_1 ROA + \beta_2 DT + \beta_3 FS + \beta_4 IN + \varepsilon_i \dots\dots\dots 8$$

(3) Models 9, 10, and 11 were used to test the validity of the instruments and were not included in this study.

$TQ = \beta_0 + \beta_1ROE + \beta_2DT + \beta_3FS + \beta_4IN + \varepsilon_i$	9
$ROA = \beta_0 + \beta_1ROE + \beta_2DT + \beta_3FS + \beta_4IN + \varepsilon_i$	10
$OC = \beta_0 + \beta_1IOC + \beta_2FIOC + \beta_3DT + \beta_4FS + \beta_5IN + \varepsilon_i$	11
$OC = \beta_0 + \beta_1\text{Predicted value of } TQ(\text{model9}) + \beta_2DT + \beta_3FS + \beta_4In + \varepsilon_i$	12
$OC = \beta_0 + \beta_1\text{Predicted value of } ROA(\text{model10}) + \beta_2DT + \beta_3FS + \beta_4In + \varepsilon_i$	13
$TQ = \beta_0 + \beta_1\text{Predicted value of } OC(\text{model11}) + \beta_2DT + \beta_3FS + \beta_4In + \varepsilon_i$	14
$ROA = \beta_0 + \beta_1\text{Predicted value of } OC(\text{model11}) + \beta_2DT + \beta_3FS + \beta_4In + \varepsilon_i$	15

Results and Discussion

Descriptive Analysis

Table 6 shows some significant relationships among the independent variables; however, these relationships fall below 80%, indicating that multicollinearity does not exist. Field (2002), Brooks (2002), and Gujarati (1999) argued that, if the relationship among variables is less than 80%, multicollinearity is not a problem. Moreover, other OLS assumptions such as serial correlation, heteroskedasticity, outliers, normality, and linearity were tested and found to be not normal. Five variables were transformed with a normal scores technique (see Table 7), consistent with Haniffa and Hudaib (2006). The mean value for Tobin's Q was 1.1, while the mean value for ROA was 5% (see Table 7). Al-Faraih et al. (2012) studied the relationship between firm performance and ownership concentration for 2010 and found Tobin's had a mean of 1.8 and ROA had a mean value of 3%. Al-Saidi (2013) studied the relationship between ownership composition and firm performance and found that Tobin's Q had a mean value of 1.3 and ROA had a mean value of 3% from 2009 to 2012. In terms of ownership concentration, this study found that the mean value of total ownership concentration equaled 56%, while Al-Saidi (2013) found that the ownership concentration was about 55%. Al-Faraih et al. (2012) found that ownership concentration was about 58%. This is consistent with the study of La Porta et al. (1999), which demonstrated that ownership is more concentrated in developing countries; in addition, the mean value of ownership concentration by institutions was 45% compared to 4% for government and 7% for families.

Table 6
Pearson Correlation Matrix

	TQ	ROA	OC	IOC	GOC	FIOC	DT	FS
TQ	1							
ROA	0.41*	1						
OC	0.21**	0.10*	1					
IOC	0.074	0.12*	0.69**	1				
GOC	0.19*	-0.09	0.14**	-0.27**	1			
FIOC	0.098	-0.068	0.15**	-0.38**	-0.17**	1		
DT	0.07	0.05	0.13*	0.09	-0.18**	0.17**	1	
FS	-0.02	0.029	0.033	0.05	0.18**	-0.14**	0.18**	1

Notes. ***, **, and * Significant at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed). For definitions of the variables, see Table 5.

Table 7
Descriptive Statistics for All Variables in Sample

Variables	Sample	Mean	S.D.	Min	Max	Skewness	Kurtosis
TQ	100	1.1	0.99	0	9.3	4.3	29.7
ROA	100	0.05	0.08	-0.66	0.98	6.1	55.9
OC	100	0.56	0.20	0	0.97	-0.144	-0.530
IOC	100	0.45	0.24	0	0.97	-0.243	-0.603
GOC	100	0.04	0.11	0	0.69	3.2	15.6
FIOC	100	0.07	0.14	0	0.66	2.6	5.1
DT	100	0.36	0.23	0	1.13	0.276	-0.511
FS	100	193667	411825	3000	3495181	5.8	37.96

Notes. For definitions of the variables, see Table 5.

OLS Results: Linear or Nonlinear Relationship

Estimation results of the first four models (from model 1 to 4) using the OLS are summarized in Table 8. The ownership concentration impacts firm performance positively, and it is significant based on

both performance measures. Hypothesis 1 is accepted, which is consistent with agency theory that hypothesizes a positive impact on firm performance. Also, debt ratio negatively impacts firm performance based on both performance measures, while firm size positively impacts firm performance. This is in line with the studies of Xu and Wang (1999) in China, Zoysa and Manawaduge (2013) in Sri Lanka, and Claessens and Djankov (1999) in the Czech Republic. The study then conducted the quadratic regression (see Table 8) to test Hypothesis 2. However, no firm evidence indicated that ownership concentration is non-linearly related to firm performance as OC^2 was insignificant based on both measures in the case of non-financial listed firms in Kuwait. Thus, Hypothesis 2 is rejected.⁽⁴⁾ This is consistent with Deb and Chaturvedula's (2003) findings that no empirical evidence supported the argument of non-linear relationships between firm performance and ownership concentration; these authors argued that this relationship is linear.

Table 8

OLS Using TQ and ROA as Dependent Variables

Variables	OLS- regression		Quadratic-regression	
	Tobin's Q(model 1)	ROA (model 2)	Tobin's Q(model 3)	ROA(model 4)
OC	7.089***	4.005***	1.961*	-2.813**
OC^2	—	—	-0.299	-1.273
DT	-4.103***	-3.964***	-4.104***	-4.484***
FS	2.424*	2.774*	2.339*	6.474***
IN1	3.250***	2.665***	8.566***	1.941*
IN2	2.398*	2.317***	7.593***	3.875***

- (4) The literature review included studies testing the nonlinear relationship between ownership concentration and firm performance using specific calculations to compute the two cut-off points. They were calculated by differentiating performance from ownership and by equating the partial derivative to zero (start from zero).
the model = $-b \pm \text{root square of } b^2 - 4ac / 2a$. This step was not conducted in this study because there was no evidence of the non-linearity relationship in Kuwait.

Cont. Table 8*OLS Using TQ and ROA as Dependent Variables*

Variables	OLS- regression		Quadratic-regression	
	Tobin's Q(model 1)	ROA (model 2)	Tobin's Q(model 3)	ROA(model 4)
IN3	-1.758*	1.556	1.768*	-1.756*
R ²	0.28	0.10	0.29	0.13
Adj- R ²	0.27	0.09	0.28	0.12
F-Statistic	38.46	11.12	32.9	11.77

Notes. ***, **, and * Significant at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed). For definitions of the variables, see Table 5. The excluded sector is the food sector.

Ownership Composition and Firm Performance

Next, the OLS regression was conducted to examine the impact of ownership composition on firm performance by examining the impact of ownership concentration by institutions, government, and families and individuals. Table 9 presents the results of models 5 and 6. This study found that ownership concentration by institutions does not impact firm performance based on both firm performance measures, concurring with the findings of Denis and Denis (1994), Aljifri and Mustafa (2007), Omran et al. (2008), and Al-Matari et al. (2017). Thus, this study confirmed that institutional investors do not act in the interests of all shareholders.

Table 9*OLS Using TQ and ROA as dependent Variables*

Tobin's Q (model 5)		ROA (model 6)	
Variables	Significance	Variables	Significance
OC	2.125*	OC	1.153
IOC	0.369	IOC	0.255
GOC	5.103***	GOC	0.738
FIOC	0.226	FIOC	-0.048
DT	-5.768***	DT	-3.539***

cont. Table 9

OLS Using TQ and ROA as dependent Variables

Tobin's Q (model 5)		ROA (model 6)	
Variables	Significance	Variables	Significance
FS	0.132	FS	5.958***
IN1	3.737***	IN1	2.537**
IN2	3.341***	IN2	2.228**
IN3	-0.431	IN3	1.545
R ²	0.35	R square	0.10
Adj- R ²	0.34	Adjusted R square	0.09
F-Statistic	34.22	F-Statistic	7.42

Notes. ***, **, and * Significant at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed). For definitions of the variables, see Table 5. The excluded sector is the food sector

This study also found that government ownership concentration positively impacts firm performance based on Tobin's Q only, although this impact is insignificant based on ROA. Thus, the Kuwait government can improve the value of both firms and, thus, shareholders. This is consistent with the studies of Omran et al. (2008) and Al-Matari et al. (2017). This finding is probably because the Kuwait government can use its power and monies to work in safe and friendly environments as well as reduce the level of risk in any new projects. Finally, in terms of family ownership concentration, this study found that such a variable does not impact firm performance based on both performance measures. This is consistent with the study of Denis and Denis (1994). However, Omran et al. (2008) and Mohammed (2018) studied the situation in Arab countries and found that family ownership negatively impacts firm performance. Thus, Hypothesis 3 is accepted. The study found that debt negatively impacts firm performance whereas firm size has the opposite effect.

Controlling Endogeneity and Causality

Table 10 presents the results of the OLS and 2SLS regressions used for testing the endogenous relationship between ownership concentration and firm performance from models 7 through 15. The Stock and Yogo test was used to test the instrument validity. The F-value of each of the three endogenous variables (TQ, ROA, and OC) in the simultaneous regressions exceeded the critical value (more than 3); thus, the instruments used in this study were good instruments⁽⁵⁾. The study found that the ownership concentration negatively impacts firm performance based on both performance measures. This confirms that OLS estimates are biased and inconsistent because omitted variables must be considered when studying the relationship between ownership concentration and firm performance. This negative relationship is consistent with the study of La Porta et al. (1999), which found that large shareholders create a conflict of interest among shareholders that negatively impacts firm performance. This is consistent with the studies of Jiang et al. (2009) and Fauzi and Locke (2012).

Table 10

OLS and 2SLS to Test Endogeneity and Causality Problems

Variables	OLS	OLS	2SLS	2SLS	2SLS	2SLS
	OC (model 7)	OC (model 8)	OC (model 12)	OC (model 13)	TQ (model 14)	ROA (model 15)
TQ	1.099	---	-1.170	---	---	---
ROA	---	1.102	---	-1.209	---	---
OC	---	---	---	---	-5.286***	-3.487***
DT	1.223	2.178**	1.783*	4.280***	-2.762***	-1.565
FS	-1.394*	-1.783**	-1.113	-3.032***	-3.714***	-3.641***
IN1	-2.232**	-1.839**	-4.360***	-3.934***	1.724*	1.347

(5) A Hausman test can be used to examine which regression is appropriate, but this test was not used because the study's objective was to compare the OLS and 2SLS results, not choose the best one.

cont. Table 10

OLS and 2SLS to Test Endogeneity and Causality Problems

Variables	OLS	OLS	2SLS	2SLS	2SLS	2SLS
	OC (model7)	OC (model 8)	OC (model 12)	OC (model 13)	TQ (model 14)	ROA (model 15)
IN2	-2.550**	-1.301*	-2.637**	-2.356**	1.524*	1.270
IN3	-2.282**	-2.182**	-3.035***	-4.222***	0.921	1.718
R ²	0.13	0.08	0.12	0.08	0.14	0.10
Adj-R ²	0.12	0.07	0.11	0.07	0.13	0.08
F-Value	14.9	8.8	13.9	8.71	15.9	6.52

Notes: ***, **, and * Significant at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed). For definitions of the variables, see Table 5. The excluded sector is the food sector

Finding a negative impact of ownership concentration on firm performance based on 2SLS regressions raises a significant question about the relationship between the two variables and how it is a mistake to conduct any test without considering Wintoki's (2007) recommendations. Thomsen et al. (2006) studied the same issue in many European countries and found that ownership negatively impacted firm performance. In terms of the causality issue, the study found that ownership affects firm performance but the opposite is not true (models 7, 8, 12, and 13). Thus, if a relationship exists between the two variables, it would be from ownership to firm performance not the other way around. Thus, the last hypothesis was rejected. Al-Farooque et al. (2007) found similar results in Bangladesh. Meanwhile, when this study tested the causality issue, the study found no empirical evidence to support the causality relationship between firm performance and ownership concentration; if there is a relationship, it would run from ownership to firm performance, not the opposite. In both 2SLS and OLS regressions, the causality issue does not exist in the case of Kuwait. The results of this study are consistent with the studies of Beiner et al. (2004), Thomsen et al. (2006), Agrawal and Knoeber (1996), and Himmelberg et al. (1999). Thus, high performance does not encourage Kuwaiti investors to increase their shares; they probably

prefer to liquidate their shares and recognize fast gains. In addition, limited protections in Kuwait, the investors may believe that managers may use the money in risky projects.

Conclusion

This study adds to the previous literature by examining the relationship between ownership and firm performance from four different perspectives. This study found a positive impact of ownership concentration and ownership concentration by government on firm performance based on OLS regressions. However, after controlling for the endogeneity problem, this study found a negative impact of ownership concentration on firm performance based on both performance measures. Meanwhile, this study found no evidence that confirmed a nonlinear relationship between ownership concentrations and firm performance, although causality runs from ownership concentration to firm performance. Table 11 summarizes the results.

Table 11

Main Results of the Study

Objective	Impact of ownership on firm performance
Linearity	Based on OLS regressions - Positive
Non-linearity	Does not exist
Ownership composition	Only government ownership
Endogeneity	Based on 2SLS regressions - Negative
Causality	Runs from ownership to firm performance only

This study provides Kuwait's regulators-namely, KSE, Kuwait Central Bank, and Ministry of Trade-with important and valuable results that could be used to evaluate the role of ownership stature in improving the performance of Kuwait's listed firms. The results would also be of interest to academics. The results provide investors and listed firms with a significant opportunity to evaluate the role of large shareholders in improving the firm performance and helping them in their investment decisions. Regardless of the study results, the sample of this study consisted only from the Kuwaiti non-financial listed firms. Thus, the

results of this study cannot be generalized to other countries or financial firms. Further studies could explore three areas. First, researchers may examine the impact of ownership structure by using other dependent variables, such as earning management or disclosure. Alternatively, researchers could examine the relationship between diffused (dispersed) ownership and firm performance. Finally, they could use qualitative methods to provide more in-depth understanding of Kuwait.

REFERENCES

- Agrawal, A., & Knoeber, C. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial and Quantitative Analysis*, 31, 377-397.
- Al-Faraih, M., Alanezi, F., & Al-Mujamed, H. (2012). The influence of institutional and government ownership on firm performance: Evidence from Kuwait. *International Business Research*, 5(10), 192-200.
- Al-Farooque, O., Zijl, T., Dunstan, K., & Karim, A. (2007). Ownership structure and corporate performance: evidence from Bangladesh. *Asia-Pacific Journal of Accounting & Economics*, 14, 127-150.
- Aljifri, K., & Mustafa, M. (2007). The impact of corporate governance mechanisms on the performance of UAE firms: An empirical analysis. *Journal of Economic and Administrative Sciences*, 23(2), 71-93.
- Al-Matari, E., Al-Matari, Y., & Saif, S. (2017). Association between ownership structure characteristics and firm performance: Oman evidence. *Academy of Accounting and Financial Studies Journal*, 21(1), 1-10.
- Al-Saidi, M. (2013). Ownership concentration and firm performance: The case of Kuwait. *Jordan Journal of Business Administration*, 9(4), 803-819.
- Al-Shammari, B. A. (2005). Compliance with international accounting standards by listing companies by Gulf Cooperation Council members states: Empirical study [Unpublished doctoral thesis]. The University of Western Australia.
- Amin, A., & Hamdan, A. (2018). Evaluating the effect of ownership structure in firm performance: Evidence from Saudi Arabian companies. *Journal of Economic Cooperation and Development*, 39(3), 65-92.
- Amran, N., & Ahmad, A. (2013). Effects of ownership structure on Malaysia companies' performance. *Asian Journal of Accounting and Government*, 4, 51-60.
- Andres, G. (2008). Large shareholders and firm performance: An empirical examination of founding-family ownership. *Journal of Corporate Finance*, 14(4), 431-445.
- Arief, Y., Widiyanto, K., & Agung, U. (2014). Linear and non-linear approaches I Testing managerial ownership on the firm value: Evidence from Indonesia firms. *Journal of Business and Management*, 16(9), 1-5.
- Beiner, S., Drobetz, W., Schmid, F., & Zimmermann, H. (2004). An integrated Framework of corporate governance and firm valuation: Evidence from Switzerland. *ECGI Paper*, 34.
- Boerkamp, E. (2016). *Ownership concentration, ownership identify and firm performance: an empirical analysis of Dutch listed firms*. [Thesis conference]. Netherland.

- Brooks, C. (2002). *Introductory econometrics for finance*. Cambridge.
- Cho, M. (1998). Ownership structure, investment, and the corporate value: An empirical analysis. *Journal of Financial Economics*, 47, 103-121.
- Claessens, S., & Djankov, S. (1999). Ownership concentration and corporate governance in the Czech Republic. *Journal of Comparative Economics*, 27, 498-513.
- Davies, J. R., Hillier, D., & McColgan, P. (2005) Ownership structure, managerial behavior and corporate value. *Journal of Corporate Finance*, 11, 645-660.
- De Miguel, A., Pindado, J., & De La Torre, C. (2004), Ownership structure and firm value: New evidence from Spain. *Strategic Management Journal*, 25, 1199-1207.
- Deb, S. S., & Chaturvedula, C. (2003). Ownership structure and firm value: empirical study on corporate governance system of Indian firms. *SSRN Working Paper Series*, no. 594221. Retrieved from <http://ssrn.com>
- Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93, 1155-1177.
- Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, 7, 209-233.
- Denis, D., & Denis, D. (1994). Majority-owner managers and organizational efficiency. *Journal of Corporate finance*, 1, 91-118
- Fauzi, F., & Locke, S. (2012). Board structure, ownership structure and firm performance: A study of New Zealand listed firms. *Asian Academy of Management Journal of Accounting and Finance*, 8(2), 43-67.
- Field, A. (2002). *Discovering statistics using SPSS for Windows*.
- Gorton, G., & Schmid, F. (2000) Universal banking and the performance of German firms. *Journal of Financial Economics*, 58, 29-80.
- Gujarati, D. (1999). *Basic econometrics* (3rd ed.). McGraw-Hill.
- Hamdan, A., & Al-Sartawi, A. (2013). Corporate governance and institutional ownership: Evidence from Kuwait's financial sector. *Jordan Journal of Business Administration*, 9(1), 191-203.
- Haniffa, R., & Hudaib, M. (2006). Governance structure and firm performance of Malaysian companies. *Journal of Business Finance and Accounting*, 33, 1034-1062.
- Hill, C. W., & Snell, S. (1989). The effects of ownership structure and control on corporate productivity. *Academy of Management Journal*, 32, 25-46.
- Himmelberg, C. P., Hubbard, R. G., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, 53, 353-384.

- Hu, Y., & Izumida, S. (2008). Ownership concentration and corporate performance: A causal analysis with Japanese panel data. *Journal of Corporate Governance*, 16(4), 342-358.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency cost and ownership structure. *Journal of Financial Economics*, 3, 305-360.
- Jiang, G., Yue, H., & Zhao, L. (2009). A re-examination of China's share issue privatization. *Journal of Banking & Finance*, 33(12), 2322-2332.
- Juanda, J. (2018). Ownership concentration and firm performance in Indonesia. *Journal of Accounting Research, Organization and Economics*, 1(2), 173-181.
- Kapopoulos, P., & Lazaretou, S. (2007). Corporate ownership structure and firm performance: Evidence from Greek firms. *Corporate Governance: An International Review*, 15(2), 144-158.
- Kaserer, C., & Moldenhauer, B. (2005). Insider ownership and corporate performance evidence from Germany. *Review of Managerial Science*, 2(1), 1-35.
- Khamis, R., Elali, W., & Hamdan, A. (2015). Ownership structure and corporate financial performance in Bahrain Bourse. *Journal of Corporate Ownership & Control*, 13(1), 305-360.
- King, M. R., & Santor, E. (2008). Family values: Ownership structure, performance and capital structure of Canadian firms. *Journal of Banking and Finance*, 32(11), 2423-2432.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the monitoring of the CEO. *American Economic Review*, 88, 96-118.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate valuation. *Journal of Finance*, 57, 1147-1170.
- Loderer, C., & Martin, K. (1997). Executive stock ownership and performance: Tracking faint traces. *Journal of Financial Economics*, 45, 223-255.
- Machek, O., & Kubicek, A. (2018). The relationship between ownership concentration and performance in Czech Republic. *Journal of International Studies*, 11(1), 177-186.
- McConnell, J. J., & Servaes, H. (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economics*, 27, 595-612.
- Mohammed, A. (2018). The impact of ownership structure on firm performance: Evidence from Jordan. *Academy of Accounting and Financial Studies Journal*, 22(5), 1-9.
- Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: an empirical analysis. *Journal of Financial Economics*, 20, 293-315.

- Mueller, E., & Spitz, A. (2006). Managerial ownership and company performance in German small and medium-sized private enterprises. *German Economic Review*, 7, 233-247.
- Ng, M. (2005). An empirical study on the relationship between ownership and performance in a family-based corporate environment. *Journal of Accounting, Auditing and Finance*, 20, 121-146.
- Nickell, S., Nicolitsas, D., & Dryden, N. (1997). What makes firms perform well?. *European Economic Review*, 41, 783-796.
- Omran, M., Bolbol, A., & Fatheldin, A. (2008). Corporate governance and firm performance in Arab equity markets: Does ownership concentration matter?. *International Review of Law and Economics*, 28, 32-45.
- Prowse, S. (1992). The structure of corporate ownership in Japan. *Journal of Finance*, 47, 1121-1140.
- Ruan, W., Tian, G., & Ma, S. (2011). Managerial ownership, capital structure and firm value: Evidence from China's civilian-run firms. *Australasian Accounting, Business and Finance Journal*, 5(3), 73-92.
- Shleifer, A., & Vishny, R. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94, 461-488.
- Shleifer, A., & Vishny, R. (1997). A survey of corporate governance. *The Journal of Finance*, 52, 737-783.
- Short, H., & Keasey, K. (1999). Managerial ownership and the performance of firms: Evidence from the UK. *Journal of Corporate Finance*, 5, 79-101.
- Sun, Q., & Tong, W. (2003). China share issue privatization: The extent of its success. *Journal of Financial Economics*, 70(2), 1-27.
- Thomsen, S., Pedersen, T., & Kvist, H. K. (2006). Blockholder ownership: Effects on firm value in market and control based governance systems. *Journal of Corporate Finance*, 12, 246-269.
- Villalonga, B., & Amit, R. (2006). How do family ownership, control, and management affect firm value? *Journal of Financial Economics*, 80, 385-417.
- Wintoki, J. (2007). *Endogeneity and the dynamics of corporate governance* [Working paper]. University of Georgia, GA.
- Xu, X., & Wang, Y. (1999). Ownership structure and corporate governance in Chinese stock companies. *China Economic Review*, 10, 75-98.
- Yasser, Q., & Almamun, A. (2017). The impact of ownership concentration on firm performance: Evidence from an emerging market. *Emerging Economy Studies*, 3(1), 34-53.
- Zoysa, A., & Manawaduge, A. (2013). The structure of corporate ownership and firm performance: Sri Lankan evidence. *Corporate Ownership & Control*, 11(1), 723-734.

هيكلية الملكية والأداء في الشركات الكويتية المدرجة غير مالية

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ملخص

الأهداف: يتمثل هدف هذه الدراسة في توضيح وقياس العلاقة بين ملكيات الأسهم والأداء المالي في إطار نظرية الوكالة.

المنهج: تقوم هذه الدراسة بدراسة العلاقة الخطية وغير الخطية بين الملكيات والأداء بالإضافة إلى دراسة تأثير نوعية الملاك وموضوع التداول والسببية بين الملكيات والأداء في سوق الكويت للأوراق المالية لعينة، تتكون من 100 شركة كويتية غير مالية في الفترة من 2009 إلى 2018.

النتائج: خلصت نتائج الدراسة إلى وجود تأثير إيجابي من كبار الملاك على أداء الشركات الكويتية؛ مما يعزز الدور الرقابي لوجود كبار الملاك. وعند دراسة نوعية كبار الملاك تبين أن وجود الحكومة فقط هو الذي يعزز هذا الدور الإيجابي، ولكن بعد إدخال موضوع التداول والسببية بين المتغيرات اختفى هذا الدور الإيجابي وتحول إلى دور سلبي، بالإضافة إلى تأكيد أن الملكيات هي التي تؤثر على الأداء وليس العكس، كما أن العلاقة غير الخطية غير موجودة بين المتغيرين في حالة الشركات الكويتية غير المالية.

الخاتمة: تعطي هذه الدراسة المشرعين في دولة الكويت، وهم هيئة سوق الكويت، والبنك المركزي، ووزارة التجارة، الفرصة لتعرف ملكيات الأسهم وكيفية حماية صغار المستثمرين، أما بالنسبة إلى الشركات؛ فإن هذه الدراسة توضح لهم أنه ليس جميع كبار الملاك في الكويت يؤثرون على الأداء المالي بشكل إيجابي، كذلك تعتبر هذه الدراسة مهمة للأكاديميين المهتمين بدراسة نسب ملكيات الشركات، مع فتح المجال للدراسات المستقبلية الأخرى للبحث في هذا الموضوع. كذلك أكدت الدراسة أن نتائجها نتائج خاصة بالشركات الكويتية غير المالية المسجلة في سوق الكويت للأوراق المالية؛ ومن ثم لا يمكن أن تعمم على الدول الأخرى.

الكلمات المفتاحية: الملكيات، تركيز الملكيات، الأداء المالي، الكويت.

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