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The Moderating Effect of the CEO Duality towards the Influence of the Ownership Structure on the Firm Performance among Jordanian Public Shareholders Companies

Mohammad Mustafa Dakhlallh, NikMohdNorfadzilah Nik Mohd Rashid, WanAmalina Wan Abdullah, Abdulrahman Mustafa Dakhlallh

Faculty of Economics and Management Sciences, Universiti Sultan Zainal Abidin, 21300 Kuala Nerus, Terengganu, Malaysia, Faculty of Management, Al-Hussein Bin Talal University

Email: Mohammad_Dakhlallh@yahoo.com

Abstract

Previous studies that dealt with corporate governance mechanisms have testified high significant that created some new direction. The current study aims to be engaged in such trends through investigating the relationship between ownership structure as one of the corporate governance mechanisms and performance of the firm with the presence of moderating variable which is CEO duality in developing countries such as Jordan. This study used the panel data method to analyze data for a sample of 180 companies listed on the Amman Stock Exchange (ASE) for the period from 2009 to 2017. Three variables of ownership structure are employed, which are: managerial ownership, government ownership, and family ownership, and moderating variable is CEO duality. The current study used Tobin’s Q to estimate the performance of the firm. The findings show that the ownership structure mechanisms have a significant influence on firm performance measured by (TQ). Where managerial ownership and family ownership shows a significant negative relationship with (TQ). While government ownership shows a significant positive relationship with (TQ). On other hands, moderating effect of CEO duality has a significant positive on the relation between family ownership with (TQ), and has a significant negative on the relationship between managerial ownership and government ownership with (TQ). The findings of this study confirm empirical research continuing to find a new performance measurement to gain a real form of firm performance. Therefore, the evidence of this study provides empirical evidence to stakeholders, managers and interested parties to support them for its decision.

Keyword: Corporate Governance, Ownership Structure, CEO Duality, Firm Performance.
Introduction
As a result of the financial crisis that emerged in the late past century, many problems were highlighted by several interested parties around the world. They tried to face such problems by relying on corporate governance as a robust system to participate in its solving (Alabdullah, 2016). But, corporate scandals and failures in several corporations such as the cases of Enron, WorldCom, and Arthur Andersen, lead to continuing to fuel the argument over whether companies should issue or use new perspectives as new trends to measure firm performance to eventually maximize shareholders’ wealth (Alabdullah, Yahya, & Ramayah, 2014). Where most of the managers seek to achieve their own objectives at the expense of the shareholders. This is known as the agency problem. Management interference in the financial disclosure process may affect the figures in the financial statements (Ramadan, 2016). Thus, the interest in studying corporate governance increasing to regain the different stakeholders’ trust. However, developing countries still have relative studies on corporate governance. As opposed to developed countries there have been several studies. Where, (Azzoz, Abdel, & Khamees, 2016) stated that the governance structure is tasked with the distribution process of rights as well as the responsibilities amongst many participants in the association. Those are such as the followings: the board of directors, stakeholders, manager, creditors, auditors, and regulators. Therefore, the purpose of corporate governance is to monitor the manager’s activities and protect the stakeholders’ interest.

The corporate governance aims to monitor the manager’s activities and protect the different stakeholders’ interest, and in order to organize and clarify this relation, Jensen and Mackling (1976) developed the ownership structure theory to organize and clarify relationships between managers and stakeholders, which became ownership structure theory a main dimension for the corporate governance to explain the importance of different types of investors and their impact on the company's performance. On the other hand, from the perspective of agency theory, it explains the conflict of interests and the arising agency costs between shareholders and managers, as the separation of ownership and control, has been considered as one of the most contentious and important issues in the management, accounting, and financial literature. Where the different types of investors and especially individual investors cannot effectively keep monitoring the management’s performance due to the high control cost and to the lack of expertise.

Prior research has revealed that one of the most important components of corporate governance mechanisms is the ownership structure (Mai, Bilbard, & Som, 2009), as the internal mechanisms of corporate governance focus on the ownership structure, the board of directors and board committees such as audit committee, as ownership structure is considered the main internal mechanism to measure the corporate governance’s level (JarboUu, Abu-Serdaneh, & Mahd, 2018).

According to Abed, Al-Attar, & Suwaidan (2011) “corporate governance became a norm in Jordan, where Amman Stock Exchange (ASE) has made several changes through issuing a corporate governance mechanism in 2009”. In (2014), The World Bank revealed that there is a drop in Gross Domestic Product (GDP) which was faced by the non-financial sector represented by service and industrial companies in the previous few years. In addition, companies in the non-financial sector in Jordan suffered from poor performance as mentioned by (Alabdullah, Yahya,
& Ramayah, 2014). However, because of the poorness in performance in previously mentioned sectors, various difficulties in the internal economic, business and social challenges, as well as financial of the global change, that calls for the importance to identify some key factors affecting the performance of the firm were faced in Jordan (Alabdullah, 2016). Therefore, Abbadi, Hijazi, & Al-Rahahleh (2016) stated that the phase of full compliance with the corporate governance code has not yet been reached by Jordanian companies. Thus, in 2017, the Amman Stock Exchange (ASE) has made modify of corporate governance code, through the “compliance or penalties” approach rather than the “compliance or explain” approach.

The main purpose for examining corporate governance in developing countries, such as Jordan, is a significant fluctuation in the number of listed companies, trading volumes and market capitalization in recent years on Amman Stock Exchange. Where Jordan provides an excellent case to investigate the relationship between ownership structure and firm performance due to the diversity in the ownership structures of Jordanian firms. In addition, the existence proportion of ownership concentration might lead to the CG and weakness in the policies that protect investors' rights in Jordan (Haddad, AlShattarat, AbuGhazaleh, & Nobanee, 2015). So, Jordan is a good area to examine for the effectiveness of ownership structure on the firm's performance.

Based on the previous reading, the current study has a contribution which lies in selecting all sectors constituent of Jordanian companies (financial, service, industrial sector) excepted banks sector and its period of the test. Where the tested of the period from 2009 to 2017. Thus, the current study aims to test the influence of ownership structure (managerial, government and family ownership) on the performance of the firm, and the moderating effect of CEO duality on those relationships in one of the emerging markets, namely Jordan. Furthermore, the significance of this study comes from its attempt to fill the gap in earlier studies. It explores the relationship between ownership structure which is considered one of the internal corporate governance mechanisms with market-based measurement (Tobin's Q). As the contribution of the current study lies from during the variables used in the current study, to the knowledge of the researcher, there is no previous study that has investigated the moderating effect of CEO duality on the relationship between ownership structure and firms performance in Jordan. As, this study has a contribution which lies in selecting the period, where the tested nine of years for the period 2009-2017, that's mean after the first Corporate Governance Code was published in 2009.

Review of Literature and Hypotheses
Agency theory suggested that ownership and control separation causes a convergence in the search for owners’ interests as opposed to managerial interests (Jensen and Mackling, 1976), and consequently many of previous studies have focused on the relationship between mechanisms of corporate governance and performance of the firm by providing much empirical evidence related to the corporate governance. The performance of a company is much fundamental to administration, and also it is considered as an outcome that an individual or a group of individuals has achieved in organization which is related to its authority and liability to achieve the legal and proper goal to morals and ethics (Almajali, Alamro, & Al-Soub, 2012). The performance is the organization ability in gaining and managing resources in different ways in order to improve competitive advantages; to achieve growth and developing for the firm. Prior studies have shown findings that ownership structure is an important issue that less of agency problem and pushes
managers to improve firm performance. Therefore, a corporate ownership structure is considered a significant control mechanism for managers to improve their performance. In Jordan context, showed Alabdullah et al., (2014), there is a positive relationship between ownership structure and firm performance.

Managerial Ownership
Managerial ownership is an effective mechanism of corporate governance because it helps in aligning the managers and shareholders’ interest (Brickley, Lease, & Smith, 1988). According to Jensen and Mackling (1976) “a convergence of interests exists between shareholders and managers as the ownership of the manager's increases, and thus higher ownership of management should reduce the costs of an agency and hence the performance of the firm is increased”. But there is an existence of empirical evidence that the ownership of the administrators and the success of the company and the market’s value have a mixed correlation (Anum & Ghazali, 2010).

Prior literature has revealed that increasing managerial ownership in the company is a vital factor that alleviates agency conflicts and promotes company performance (Kumar & Singh, 2013; Arora & Sharma, 2016). Findings were revealed by previous research show that it is significant to increase the administrative ownership within the firm, and higher performance of the firm and its value are associated with (Hanson & Song, 2000). And a study Fauzi & Locke (2012) in New Zealand's listed firms, showed that managerial control with an emphatic and meaningful connection with the performance of the firm exists, suggesting that the occurrence of the higher authority of management increase the performance of the firm. Kumar & Singh (2013) investigated the relationship between managerial ownership and firm performance, and they found there is a significant positive relationship between these two variables. In the Jordanian context, a study done by Zeitun (2009) investigates the impact of government ownership and ownership concentration on firm performance and the findings revealed that they played a significant role in the firm performance. Alabdullah et al., (2014) conducted a study that shows an emphatic relationship among the ownership of management and the performance of the firm. As found there is a positive relationship and highly significant for 109 companies listed at Amman Stock Exchange (ASE) for the relationship among managerial control and financial fulfillment (Alabdullah, 2018). On the other hand, Tam & Tan (2007) contend that in Malaysia, a negative relationship occurs between the concentrations of ownership with the performance of the firm. Acharya & Bisin (2009) found a negative relationship between managerial ownership mechanism and firm performance. Khamis, Elali, & Hamdan (2015) they found the Managerial ownership is a negatively significant effect on firm performance measured by Tobin's Q in Bahrain (Khamis et al., 2015). Mohammed (2018) found a negative relationship and highly significant for 90 listed companies on the Amman Stock Exchange from 2013 to 2016 for the relationship between managerial ownership and firm performance. Finally, the study of the managerial ownership as a variable for ownership structure comes as a recommendation from Zraiq & Fadzil (2018) to study the relationship between ownership structure and firm performance in Jordan. Therefore, according to agency theory and ownership structure theory, the following hypothesis was developed:
H1. There is a positive relationship associated with firm performance and managerial ownership.

Government Ownership
The presence of the ownership of government in the capital markets gives confidence to the shareholders as to whether the firm’s performance is in line with aim of investors is maximizing value. Where, in developing countries, government ownership of firms is needed to revive both financial and economic development and eventually foster growth (Lassoued, Sassi, & Attia, 2016). But, the government is trying to pressure companies into implementing governmental objectives at the expense of shareholder objectives, Consequently, Government Ownership can be a hindrance to the implementation of Corporate Governance as a vital monitoring system (Al-Janadi, Rahman, & Alazzani, 2016).

The empirical evidence for the relationship between firm performance and government ownership has been mixed results. Some studies report a positive effect of government ownership on firm performance (Liao & Young, 2012), as Jiang, Laurenceson, & Tang (2008) they found a positive relationship between the government’s ownership and the firm’s performance, as the government may play a key role in monitoring and controlling the firm’s management. Conversely, Zeitun (2009) found that government ownership showed a negative significant relationship to performance in Jordan. In China, Tian & Estrin (2005) reported that the increase in government shareholding decreases the value of the firms to a certain point before the increment improves the corporate value. These findings were because of the incentive for the government to own shares in the firm might be related to achieving political objectives rather than economic objectives (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1999). However, government ownership is significantly and negatively related to firm performance measured by Tobin’s Q (Ting, Kweh, Lean, & Ng, 2016). On other hands, study Darko, Aribi, & Uzonwanne (2016) show no relationship between government ownership and firm performance. According to the explanation above and the agency theory as well as ownership structure theory, the study develops the following hypothesis:

H2. There is a positive relationship associated with government ownership and firm performance.

Family Ownership
Prior studies investigated the relationship between corporate governance and firm performance and conclude that the ownership structure is one of the most significant factors of corporate governance which affect the firm performance (Rathnayake, 2017). While, the ownership by families has been one of the major reasons which challenge the superior level of conformity as it happens in developed countries (Al-Najjar, 2014). Hence, family ownership is common worldwide, and it’s one of the most common kinds of ownership structures around the world (Khamis et al., 2015). However, the corporates of the family have a high tendency to supervise management. This may be achieved through chairmanship or being a member of the board, and also by means of the control of senior management positions (OECD, 2004). It may result in conflicts of interest between the controlling family and minority stakeholders (Alabdullah, 2016).

Many prior studies provide evidence to the effect of family ownership on firm performance. The family ownership has an incentive and explicit management’s decisions in order to ensure
the management of the company for the interest of the investors. Arouri, Hossein, & Badrul Muttakin (2014) they found a positive impact of family ownership on bank performance. As Wang & Shailer (2017) provide evidence to the effect positively of family ownership on firm performance. Zraiq & Fadzil (2018) provided evidence comprised of 228 firms for the years 2015 and 2016, they found a significant positive relationship between family ownership and firm performance in Jordanian listed firms.

Conversely, Iturralde, Maseda, & Arosa (2011) found a negative relationship between family ownership and performance, this negative relationship can be attributed to the entrenchment argument, where the high number of shares held by the family shareholder creates an incentive for them to expropriate wealth from the minority shareholders. While, Fattoum-Guedri, Guedri, & Delmar, 2018; Shen, Au, & Yi, 2018. Reported that there is a negative effect between family ownership and firm performance. Therefore, It is highly concentrated in terms of family ownership may increase the probability of agency conflict (Ararat, Black, & Yurtoglu, 2017). Finally, In Jordan, the ownership structure is highly concentrated, and the majority of the firms are controlled by the family (Mohammed, 2018). So, the study of family ownership as a variable for ownership structure comes as a recommendation from Alabdullah (2018) to study the relationship between ownership structure and firm performance in Jordan. Therefore, according to above, agency theory and ownership structure theory, the following hypothesis was developed:

\[ H3. \text{There is a positive relationship associated with family ownership and firm performance.} \]

**Moderating Effect of the CEO Duality**

CEO duality refers to a board structure which the Chief Executive Officer (CEO), and also the chairman of the board of directors (Wijethilake, Ekanayake, & Perera, 2015). A theoretical debate between the theory of the agency and stewardship theory revolves around the issue of the CEO duality as a governance mechanism. Agency theory and stewardship theory are associated as a governance mechanism with opposite predictions as to the effectiveness of CEO duality. The theory of the agency argument that separation of the CEO and chairperson board is important to develop effective monitoring. Moreover, the agency's theory argues that if the function of the CEO and the Chairman is combined, it is likely to create abuse of power. Therefore, the agency theory predicts that companies that separate the CEO from the chairperson of the board perform better than those firms that combine between CEO and chairperson of the board (Fama & Jensen, 1983).

On the other hand, stewardship theory argued that combine the roles of CEO and chair of the board in a single person, it is fundamental to unify and to remove ambiguity from the leadership of the firm. According to the theory of the stewardship, when separated between the CEO and chair of the board are performed to different people, they often have contrary objectives (Johnson, 1998). Therefore, stewardship theory predicts that firms with CEO duality perform better than firms without CEO duality.

There are many prior types of research that investigated the relationship between performance and the structure of the leadership of the companies and showed mixed empirical results (Yang & Zhao, 2014). The study was done by Siti Marlia, Wan Razazila, & Amir Hakim (2015) that shows that CEO duality has an insignificant positive relationship with the firm
performance measured by Tobin’s Q, which suggests that if the CEO is also a chairman of the board, it could enhance the firm performance. Aktan, Turen, Tvaronavičienė, Celik, & Alsadeh (2018) found that CEO duality does not have a significant effect on the performance of firms in Bahrain. Moreover, a study done by Zayed (2017), points out that CEO duality is significantly and positively related to the performance of Jordanian companies.

Conversely, empirical evidence related to the duality proved the firms that separate between the CEO and chairperson of the board perform more best than those firms that combine between CEO and chairperson of the board (Singh, Tabassum, Darwish, & Batsakis, 2018). Using a panel of U.S. firms Duru, Iyengar, and Zampelli (2016), they found that CEO duality there is the significant negatively on the operating performance of firms when independent directors account for a small proportion of the board. Jermias & Gani (2014) found a negative relationship between CEO duality and performance which suggest that it is important to separate the CEO and the chairman of the board.

On another hand, In the study done by Abdul Gafoor, Mariappan, & Thyagarajan (2018), for pooled panel data of 36 scheduled commercial banks in India for a period of 14 years from 2001 to 2014. they found no significant improvement in bank performance when the separated of the role of chairman and CEO. In addition, most Jordanian companies have separated the CEO from the chairperson of the Board to two different people. There is no interactive impact of the CEO duality on the financial performance of Jordan’s non-financial companies (Alabdullah et al., 2014; Alabdullah, Yahya, Nor, & Majeed, 2016).

The literature has documented few arguments on the benefits and drawbacks of the CEO duality. CEO has the rights to make the decision but has no control over the shareholders’ capital. Thus, the CEO might not act in the best interest of shareholders. While such a decision is most likely as a consequence of an instrument of pressure exerted on the board of directors to align the interests of the executives with the shareholders which consequently can lead to an enhancement of the performance of a company. That's mean, the board of directors role is to follow the instruction made by the CEO.

The interpretation behind the choice of CEO duality as a moderating variable in the relationship between ownership structure and the performance of firms is that the general manager, the CEO, has the right to make the decisions. Therefore, this study predicts that ownership structure will lead to higher levels of a firm’s performance when there is the presence of CEO duality. This study in line with study by Hsu, Chen, & Cheng (2013) for the uses CEO duality as a moderating variable, and as a result of recommendation Zraiq & Fadzil (2018) in the use of new variables as a moderating variable, to study the relationship between the ownership structure and the performance of Jordanian companies. For this reason, and according to agency theory and stewardship theory, this research has developed the following hypothesis:

**H4**: There is a Moderating Effect of CEO duality on the Relationship Between ownership structure and Firm Performance.

**Research Methodology**

**Study Population Sample and Resources of Data**
The data of the current study consists of the public shareholders' companies listed on the Amman Stock Exchange (ASE), excluding banks sector. Based on the local Corporate Governance
dimensions, the dimensions of the Corporate Governance were taken more preferably than a common or universal dimension of Corporate Governance to ensure the validity of this study. Also, the scoring of the Corporate Governance based on (September 2009) Jordanian Corporate Governance guide. So, studied the Jordanian Companies’ consecutive for years reports from 2009 to 2017.

The setting of the data for this current study comprises financial and non-financial information for the companies listed on ASE through the period 2009-2017. Also, the data gathered from the available annual reports announced on the ASE website and of DataStream site. Where, used the quantitative method in the current study, and used secondary data to data collected. So, the study sample consisted of 180 companies from the financial, industrial and service companies. The selection of the listed firm in Amman Stock Exchange for this study has been summarized in Table 1.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total firm-size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial sector</td>
<td>86</td>
</tr>
<tr>
<td>Service sector</td>
<td>45</td>
</tr>
<tr>
<td>Industrial sector</td>
<td>49</td>
</tr>
<tr>
<td><strong>Total firm-year in the final sample</strong></td>
<td><strong>180</strong></td>
</tr>
</tbody>
</table>

**Table 1. Sample Selection**

**Measurement of Variables**

The aim of this study at investigating the influence of ownership structure on the firm’s performance, to analyze the performance of the firm, this study used Tobin’s Q as a measure of the dependent variable. TQ (Tobin, 1969) is a combination of different accounting as well as market values via considering the value of the market of a firm. Tobin’s Q, as a result, is a powerful tool to utilize, since it analyses corporate performance from a market perspective, a market-based measurement which is categorized as long term, and therefore reflects the present value of future cash flows based on current and future information (Wahla, Shah and Hussain, 2012). So, this study measures firm performance (dependent variable) through Tobin’s Q its relationship with the ownership structure which are: the Managerial Ownership (MO), Government Ownership (GO), and Family Ownership (FO), as independent variables and the dependent one is market share to represent financial performance. In addition, Moderate variable includes CEO duality (CEO). Table 2 shows a summary of variables measurement.
Table 2. Description of Measurements of the Variables and Literature

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>Measurement</th>
<th>Source of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm performance</td>
<td>TQ</td>
<td>(The ratio of the book value of total assets – (the book value of total equity + the market value of total equity)) / the book value of total assets.</td>
<td>Thompson Data Stream</td>
</tr>
<tr>
<td>(Tobin’s Q)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Independent variable:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial ownership</td>
<td>MO</td>
<td>The percentage of shares owned by members of the board of directors to the total number of shares issued.</td>
<td>Annual Report</td>
</tr>
<tr>
<td>Government ownership</td>
<td>GO</td>
<td>The percentage of shares owned by the government to the total number of shares issued.</td>
<td>Annual Report</td>
</tr>
<tr>
<td>Family Ownership</td>
<td>FO</td>
<td>The percentage of shares owned by the family to the total number of shares issued.</td>
<td>Annual Report</td>
</tr>
<tr>
<td><strong>Moderating Variable:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO duality</td>
<td>CEO</td>
<td>When the individual is the chairperson and CEO at the same time. (equals 1 if the role of chairman and CEO are combined, and 0 otherwise).</td>
<td>Annual Report</td>
</tr>
</tbody>
</table>

Source: Authors’ own research.

Model Specification

In order to test the study hypotheses, the model was used to depict the relationship between performance measured by the Tobin’s Q and the various types of ownership. Therefore, the model used in this particular study is as follow: Based on Table 2 above, the model used in this particular study is as follow:

\[ TQ = \alpha + \beta_1 MO + \beta_2 GO + \beta_3 FO + \beta_4 CEO + \epsilon \]

This particular research comprised of selected public listed companies on the Amman Stock Exchange from 2009 to 2017. Therefore, companies not listed during the investigation period were excluded from the sample selection for this research. Therefore, the samples were collected based on the availability of the companies which had already been listed during the period of the investigation. Meanwhile, the second criterion that was considered for sample selection was the availability of the selected companies’ financial data required for the analyses in this study. Furthermore, the selection of the samples was based on the list of companies provided by the Amman Stock Exchange. Therefore, the database of Thompson Data Stream was used in order to retrieve the data from the selected companies. Thus, the final sample that was gathered for this particular study comprised of 180 public listed companies on the Amman Stock Exchange. Hence, from these samples, the total firm years of companies tested in this particular study was 1620.

The researcher used panel data methodology to analyze data across firms and over the years. Panel data sets better identify the estimate effects that are not detectable in pure cross-sectional or pure time series analysis (Ahmed Sheikh & Wang, 2012). The regression has been carried out for a complete set of data to understand the differential impact of ownership structure downloaded by some variables on various types of companies (Mishra & Kapil, 2017). For the data analyses, the study employed the Fixed Effect regression method in order to investigate the association between selected components with the changes in the firm performance in the business organization.
Empirical Results and Discussions

Descriptive Statistics

Table 3 presents some descriptive statistics for the study variables of 180 Jordanian companies and 1620 firm-year observations listed on ASE during the period (2009-2017). This table shows the means and standard deviations of the dependent and independent variables included in the regression model.

Table 3. Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>TQ</th>
<th>MO</th>
<th>FO</th>
<th>GO</th>
<th>CEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.998948</td>
<td>0.169724</td>
<td>0.011593</td>
<td>0.015867</td>
<td>0.145537</td>
</tr>
<tr>
<td>Median</td>
<td>0.998954</td>
<td>0.156045</td>
<td>0.011655</td>
<td>0.015820</td>
<td>0.153162</td>
</tr>
<tr>
<td>Maximum</td>
<td>0.999288</td>
<td>0.923790</td>
<td>0.015412</td>
<td>0.027874</td>
<td>0.192440</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.998090</td>
<td>0.131512</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>8.09E-05</td>
<td>0.074183</td>
<td>0.002775</td>
<td>0.006040</td>
<td>0.040626</td>
</tr>
<tr>
<td>Skewness</td>
<td>-3.159501</td>
<td>7.792473</td>
<td>-0.964883</td>
<td>-0.476072</td>
<td>-1.154761</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>35.08297</td>
<td>72.18493</td>
<td>4.277453</td>
<td>3.261897</td>
<td>4.468207</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>72174.15</td>
<td>339487.5</td>
<td>361.5220</td>
<td>65.82377</td>
<td>505.5432</td>
</tr>
<tr>
<td>Probability</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Table 3 explains the descriptive statistics for the variables of the study, for the 180 public shareholders companies listed on Amman Stock Exchange (ASE) by using descriptive statistics represented by mean, standard deviation, minimum and maximum. Table 3. presents the distribution of all variables in this study. Based on the results of descriptive statistics, the dependent variable which is Tobin’s Q showed that the mean Tobin’s Q of Jordanian companies is 0.998948% with a standard deviation of 8.09E-05, minimum rate of Tobin’s Q in the Jordanian companies is 0.998090% with maximum level of Tobin’s Q equal to 0.999288%. Furthermore, the table shows that the mean of Managerial ownership (MO) is 0.169747 with a standard deviation of 0.074183, a minimum is 0.0131512% with a maximum level of Tobin’s Q equal to 0.923790%. While the mean of Family ownership (FO) is 0.011593 with a standard deviation of 0.002775, the minimum is 0.000000% with a maximum level of Tobin’s Q equal to 0.923790%. Moreover, the mean of Government ownership (GO) is 0.015867 with a standard deviation of 0.006040, the minimum is 0.000000% with a maximum level of Tobin’s Q equal to 0.027874%. As a result of that, the mean of the Managerial ownership (MO) represents the highest mean from all types of ownership. In addition, the current study resorts to a used moderating variable are CEO duality, to show its influence on the relation between ownership structure and firm performance (Tobin’s Q). The table shows that the CEO duality ranges between 0.000 and 0.192440 with a mean of 0.145537 with a standard deviation of 0.040626.
Multiple Regression Analysis

Table 4. Regression Analysis Using Tobin's Q

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO</td>
<td>-0.001374</td>
<td>6.58E-05</td>
<td>-20.88392</td>
<td>0.000</td>
</tr>
<tr>
<td>FO</td>
<td>-0.021929</td>
<td>0.003909</td>
<td>-5.610505</td>
<td>0.000</td>
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<tr>
<td>GO</td>
<td>0.005797</td>
<td>0.001265</td>
<td>4.582495</td>
<td>0.000</td>
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<tr>
<td>MOCEO</td>
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</table>

R-squared 0.454384  Mean dependent var 0.998948
Adjusted R-squared 0.448500  S.D. dependent var 8.09E-05
S.E. of regression 1.84E-05  Akaike info criterion -18.86581
Sum squared resid 4.83E-07  Schwarz criterion -18.24694
Log-likelihood 15467.31  Hannan-Quinn criteria -18.63615
F-statistic 162.1765  Durbin-Watson stat 2.167073
Prob(F-statistic) 0.000000

The regression of the relationship between ownership structure and firm performance are presented in Table 4 above. This study tested four hypotheses. Model of the study shows presents the market-based performance, Tobin’s Q. For the analysis conducted in on above, the model produces R2 of 0.454384, F-value is 162.1765 and P-value is 0.000 and highly significant at level 5%. The adjusted R2 indicates that 0.448500 Table 3 above of the firm performance can be explained by the overall explanatory variables in this study.

Based on table 4 above, the results were depicted as there is a significant relationship between all the selected components towards the changes in the firm performance in the business organization. These results were explained below: the regression result in Model on above, indicates that managerial ownership (MO) is negatively and significantly associated with the firm performance measured by (TQ), β = -0.001374, t = -20.88392, p = 0.000. The negative relationship reference, when the increasing percentage of managerial ownership, it would result in decrease firm performance. The result is not consistent with the hypothesis that supports positive managerial ownership with the firm performance (TQ), hence H1 is rejected. The result of this study agrees with the previous study done by Acharya & Bisin, 2009; Khamis et al., 2015; Mohammed, 2018. on another hand, the results of this study are disagree with the previous studies such as Zeitun et al., 2009; Kumar & Singh, 2013; Alabdullah, 2018. According to agency theory supports that higher managerial ownership should decrease agency costs and leads to firm performance is increased. But, the results for this study are not consistent with the agency theory.

Meanwhile, H2 suggest that government ownership has a positive relationship with the firm performance measured by Tobin’s Q. The finding reveals that found that government ownership has a positive and significant relationship at 1% level with the firm performance (TQ), β =
0.005797, \( t = 4.582495 \), \( p = 0.000 \). Thus, the result is regular with the hypothesis that supports a positive relationship with firm performance. Therefore, H2 is accepted. A positive result means, when the percentage of government ownership is increasing, it would result the firm performance is increased. These findings agree with the previous study such as Jiang et al., 2008; Liao & Young, 2012. And these findings disagree with the study by Zeitun et al., 2009; Ting et al., 2016. The presence of the ownership of government in companies gives confidence to the shareholders as to whether the firm’s performance is in line with aim of investors, as the government may play a key role in monitoring the firm’s management. Therefore, these findings agree with agency theory which supports that government ownership leads to the firm performance is increased.

This study supports that family ownership is negatively related to firm performance. The model above shows that negatively ownership has a significant negative relationship with firm performance (TQ), \( \beta = -0.021929 \), \( t = -5.610505 \), \( p = 0.000 \). This positive significant relationship regular with H3, thus H3 is accepted. The negative relationship reference, when the increasing percentage of family ownership, it would result in decreased firm performance. The current result agrees with the study done by Iturralde, Maseda, & Arosa, 2011; Ararat, Black, & Yurtoglu, 2017; Fattoum-Guedri, Guedri, & Delmar, 2018. While, the results disagree with previous studies such as Arouri et al., 2014; Wang & Shailer, 2017; Zraiq & Fadzil, 2018. Therefore, these findings agree with agency theory which supports that family ownership leads to conflicts of interest between the controlling family and minority stakeholders.

The current study provides evidence that CEO duality has significant on the relationship between ownership structure and firm performance. The model above, explains that CEO duality has a significant negative on the relationship managerial ownership with the firm performance (TQ), \( \beta = -0.003010 \), \( t = -2.278240 \), \( p = 0.0229 \). Which suggests that the presence of CEO duality, it could decrease the relationship between managerial ownership and firm performance. Therefore, the result of the current study match with the agency theory, which predicts that companies that separate the CEO from the chairperson of the board perform better. As opposed to the stewardship theory, which predicts that companies that combine the CEO from the chairperson of the board perform better. As The model on above, explains that CEO duality has a significant negative on the relationship government ownership with the firm performance (TQ), \( \beta = -0.065609 \), \( t = -5.19796 \), \( p = 0.000 \). Which suggests that the presence of CEO duality decrease the relationship between government ownership and firm performance. According to agency theory that CEO duality handicap the board’s ability to observe management. At the same time, stewardship theory supports that separated leadership is achieved contrary objectives. But, the results of the current study support the agency theory and not consistent with the stewardship theory. Table 3 above, explains that CEO duality has significant positive on the relationship family ownership with the firm performance (TQ), \( \beta = 0.148389 \), \( t = 4.539202 \), \( p = 0.000 \). which suggests that the presence of CEO duality increase the relationship between family ownership and firm performance. Therefore, the result of the current study match with the stewardship theory, which predicts that the companies that bring together the CEO and the Chairman are performing better, and conflict with agency theory. Finally, the result of the present study shows a significant relationship with the H4, thus accepting H4.
Conclusion

The current study provides evidence on the influence of the ownership structure as one of the corporate governance mechanisms on the performance of the firms of public listed companies on the Amman Stock Exchange (ASE). Where, the aim of the current study was to investigate the effect of ownership structure (managerial ownership, family ownership, and government ownership) as one of the important corporate governance mechanisms on firm performance and examine the moderating effect of the CEO duality on the relationship between ownership structure and firm performance.

This study included Jordanian public shareholders companies listed on the website of the Amman Stock Exchange (ASE) from 2009 to 2017. Therefore, the samples were collected based on the availability of the companies which had already been listed during the period of the investigation and financial data required for the analyses in this study for the selected companies. Furthermore, the database of Thompson Data Stream was used in order to retrieve the data from the selected companies. Thus, by using the panel data method, the final sample that was gathered for this particular study comprised of 180 public listed companies on the Amman Stock Exchange for 1620 firm-years. Where the study employed the Fixed Effect regression method in order to investigate the association between selected components. After analysis, this study found the following main issues:

1. There is a negative and significant related between both of managerial ownership and family ownership and firm performance measured by (TQ).
2. There is a positive and significant related between government ownership and firm performance measured by (TQ).
3. There is a significant of the moderating effect of the CEO duality on the relationship between ownership structure and firm performance measured by (TQ). Where found CEO duality has a significant negative on the relationship between both of managerial ownership and government ownership and firm performance measured by (TQ). While has a significant positive on the relationship between family ownership with firm performance measured by (TQ).

The current study contributes to the literature, by providing a guide to the relationship between the ownership structure and the performance of companies. Therefore, this study globally contributes to the field of corporate governance and firm performance by investigating the link between ownership structure and market performance in one of the developing country, Jordan. In that, it should be noted that the current study provides new insights into the moderating effect of the CEO duality on the relationship between ownership structure and firm performance measured by (TQ). It, therefore, provides a new investigation considered as extending for prior studies in this discipline.

Finally, for the future research in both developed and developing countries, consideration must be taken to investigate the relationship between ownership structure and TQ, and the effect of moderate of the CEO duality on this relationship, to identify the results from a different perspective and from different levels of development in the countries. In addition, future research should investigate other variables, such as institutional, block holders, and foreign ownership. Future researchers can also use different performance measures, which are a response to calls for a new study into the field of corporate governance and firm performance because as demonstrated by Marr & Schiuma (2003) that the firm performance issue is still in a
dire need for more contributions to overcome the lack in company performance's measurements. Furthermore, future research should investigate the framework of the study before and after reform corporate governance in Jordan which might get new results to enrich the framework drawn by the current study.

References


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