## IS THE TAX MANAGEMENT AS A MEDIATING BETWEEN BOARD OF DIRECTORS' CHARACTERISTICS AND FIRM PERFORMANCE?

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#### Abstract

This study targets at investigative the mediating effect of tax management on the board directors' characteristics including gender diversity, and board chairman and board multiple independent memberships and firm performance. The sample of the study includes 135 companies in the industrial and service industries listed with Amman Stock Exchange in 2008 to 2017. The study selects purposive samples using the panel data technique. Results indicate that firstly, tax management does not mediate the board gender diversity with financial performance. Secondly, tax management mediates the independent board chairman relationship with financial performance. And multiple board memberships *relationships* respectively.

Keyword: Board of Directors Characteristics, Firm Performance, Board Gender Diversity, Board Independent Chairman, Board Multiple Memberships, and Tax Management.

#### **1.INTRODUCTION**

Tax management is a make decision that can affect firm performance. The company in its business activities has a goal to be able to increase the performance of the company in each period, which can be seen from the stock market price. According to Nugroho and Agustia (2018), the corporate value can be optimised by improving financial management functions. This is related to decisions taken by management in every company activity.

Additionally, the board's characteristics significantly affect corporate tax management (Mulyadi & Anwar, 2015). They are involved in the decision-making processes and internal organisation that influence tax management and help to effectively improve financial performance (Jamei, & Khedri, 2016). Shareholders view tax management as a means to increase value. Relevantly, tax avoidance appears to be more prevalent among firms with higher characteristics of the board of directors (Ariff & Hashmin, 2014). Opportunistic managers may use corporate tax avoidance for their interests rather than that of the shareholders, that shareholders' wealth might be enhanced through tax reduction. However, factored by personal incentives, it is possible for managers to over or under-invest in an effort to avoid tax. Failure of the board of directors in monitoring management activities as well as in protecting the interest of shareholders can lead to the collapse of the financial performance of the company, which can result in large losses to both the company and the stakeholders (Hasnan et al, 2017). Accordingly, the board of directors shoulders the responsibility of protecting the interests of owners and assisting management in making decisions that would optimally benefit the shareholders (Ittner & Keusch, 2015).

At present, a striking gap in the literature concerns the weak firm performance with the board of directors' characteristics alongside their relation to it. Accordingly, tax management may able to play a mediator role with the board of directors' characteristics and weak firm performance (Nugroho & Agustia 2018; Winasis & Yuvetta 2017). The wide range of directors' characteristics, for instance, gender diversity, independent chairman, multiple memberships plays a significant role in monitoring management to understand governance and enhance efficiency and transparency by define strategy, planning, avoidance of tax (Jamei & Khedri 2016; Garbarino 2011).

Effective tax rate (ETR) is a measure of tax management that has been commonly used. It is usually measured as

the tax liability fraction to accounting income. In the activities of tax planning, Gebhart, (2017) explained that the use of ETR facilitates the effectiveness estimation. In financial statements, Garbarino (2011) stated that the nature of the core sheltering structures of tax management is generally unrevealed. Therefore, policy analysis and tax avoidance and planning, tax strategies studies using publicly accessible data sources become restricted. Hence, indirect measures must be used instead, in measuring the extent to which tax sheltering is practiced in a firm. These indirect measures involve publicly-disclosed levels of tax expense, profitability as well as other variables of accounting.

In the present study, the accounting-based measurement used is ROA, the concept of firm performance is centred on either efficiency or effectiveness. Since organisations must, in the end, be profitable survive, financial efficiency in some form ROA is usually used as an eventual result when performance is included in the research (Strouhal, et al., 2018). ROA encompasses a measurement that is based on accounting, and in general, it measures the performance of an organization in terms of operation and finance in the context of corporate governance (Matari et al., 2014).

Board gender diversity is the proportion of women members on the board. Gender diversity is measured by the percentage of the number of women within the board divided by the total number of members of the board (Bennouri et al., 2018). The fact that the chairman of the board is also an executive director can be interpreted as a higher implication of the independence of the CEO in the firm. Independent board chairman is coded "1" if the CEO and the board chair for a firm are not the same person; otherwise "0" (Azeez, 2015). The memberships per director for a given firm is the average number of firm memberships held by the directors of that firm (Ferris, et al., 2003). Multiple memberships measure the mean number of memberships held by the directors on the board of other companies.

This research will combine some previous studies to examine tax management as mediating and the direct influence of corporate governance mechanism on firm performance. This study aims to examine the effect of board gender diversity, Independent board chairman and multiple memberships on the firm performance through tax management as a mediating factor. However, no study has addressed this issue.

#### 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

#### 2.1. Tax Management

According to Mulyadi and Anwar (2015), tax management can help reduce tax payments. Tax management provides several economic benefits to the company by maximising corporate profits. The management should seek to minimise the tax burden that is deposited as expected by shareholders. However, shareholders also expect tax management to be done correctly to avoid fines and penalties which could decrease performance and profits significantly (Armstrong et al., 2015). Tax management is the method firms lead to reduce the tax. the aim of tax planning is challenging thus that the tax can be reduced to the deepest potential level for the use of being steps only separate from the purpose of the administrator, planning here is the same as avoiding taxes because both are economically trying to increase income after tax (Lanis et al, 2018).

#### 2.2. Firm performance

In accounting-based research, the construct of firm performance has been presented as an essential dependent variable, as it provides evidence of good corporate governance and its contextual variables (Wamba, 2017). Moreover, Concepts of firm performance are focused on either efficiency or effectiveness because firms should be profitable in the long run to survive (Wamba, 2017).

There is a difference in previous studies in the relationship between the characteristics of the board of directors and firm performance.

Diversity of board gender includes the existence of both female and male directors on the board. The studies are conducted about positively the relationship between diversity gender and firm performance (see Vieira, 2018; Reguera et al., 2017; Salloum, et al., 2019; Ahmadi, et al., 2018). This relationship was found to be negative in other study of Bennouri et al., 2018).

An independent board chairman refers to CEO's duality, taking on the role of chairman and director of the board. The literature has shown that firm performance is much better when an independent chairman is present in the board (Mishra & Kapil, 2018; Duru et al., 2016). Nevertheless, others have reported that the board's independent chairman negatively influences firm performance (Ahmadi et al., 2018; DeBoskey et al., 2019; Shahid et al., 2018).

Multiple board memberships refer to the director who functions in other boards and companies. Similarly, the results vary as to its influence on performance. Scholars in this topic found either a positive linkage between multiple memberships and firm performance (see Hasnan et al., 2017; Chen et al., 2015; Laoworapong et al., 2015) or a negative one (see Bischoff & Buchwald, 2018; Mohd et al., 2016).

#### 2.3. Board of directors characteristics

The current study was focused on the three characteristic of board gender diversity, independent board chairman, multiple board memberships. Based on the agency perspective, the existence of a board of directors' characteristics can provide oversight and the most important thing in managing corporate taxes. Furthermore, the resource dependency perspective, a board of directors' characteristics ware considered as a resource to the companies.

#### 2.3.1 Board gender diversity

Based on the agency theory, board gender diversity supports that Women are more likely to ask questions, debate issues, and collaboration skills and display participative leadership (Vieira, 2018), and generally hold their organisations to higher ethical standards (Salloum, et al., 2019). There has been evidence that boards with more women have greater levels of public disclosure (; Reguera et al., 2017), and better oversight of management reporting that enhances earnings quantity.

From the resource dependency theory, the women are thought to have skills in the social setting, and the emergence of gender diversity leads to trust and an increase in external investors (Ahmadi, et al., 2018). The existence of women on the board leads to high- quantity consultations and the adoption of appropriate decisionmaking (Vieira, 2018). This diversity of perspectives can enhance overall creativity and innovation concerning problem-solving. This may lead to enhanced financial performance (Reguera et al., 2017). Thus, the following hypothesis is proposed:

H1: There is a positive relationship between board gender diversity and financial performance.

#### 2.3.2. Independent board chairman

Duality increases the conflict between shareholders and managers to the concentration of power with one person. Therefore, agency theory suggests that the separation of decision management and control management reduces these conflicts, hindering the firm's ability to establish supervisory mechanisms (Mishra & Kapil, 2018). Agency theory recommends that the positions of independent chairman on the board be separated and held by two different individuals to avoid the concentration of power in one hand (Mishra and Kapil, 2018).

As far as the resource dependence theory is concerned, several large institutional investors have pressured for corporate governance reforms and called for CEO duality elimination to align top management interests with shareholders (Shahid et al., 2018). As a result, multiple memberships can lead to management entrenchment, which enables multiple memberships to pursue policies that enhance their power and prestige at the expense of shareholder interests (Duru et al., 2016). Therefore, the following hypothesis is proposed:

H2: There is a positive relationship between independent board chairman and financial performance.

#### 2.3.3. Board multiple memberships

From the agency perspective, multiple memberships on board are diligent monitors which can increase a firm's financial quantity (Chen et al., 2015), this is because by holding memberships for more than one board, directors attain skill, knowledge and expertise to monitor managers' activities actively. According to Laoworapong et al., (2015), the multiple membership's role from various firms will allow more exposure and proactiveness in the decision-making and at the same time be added with the advantage to overrule any conflicts in the internal process.

Within the resource dependency perspective, directors with multiple memberships, by being more networked, can generate benefits by helping to bring in needed resources, suppliers, and customers to a company (Hasnan et al., 2017). Multiple external board appointments can be a source of organisational learning, innovation and obtaining insights into the policies and practices of other organisations (Mohd et al., 2016). Based on the agency and resource dependence theories, the following hypothesis is proposed:

H3: There is a positive relationship between board multiple memberships and financial performance.

# 2.4. The mediation role of tax management with the relationship between board characteristics and Firm performance

Modern tax management performs common types of activities or business processes. Some of these activities directly relate to the mission of tax management while other activities provide the support of the framework to properly carry out this mission (Kerr et al., 2016). Core business processes are interrelated and ongoing communications, and coordination between these processes is essential. For example, significantly increasing the number of audits in a given year will impact taxpayer services and enforce collection resource requirements. Similarly, increased attention to non-filers will impact audit and collection resource needs. Legislative changes will have similar impacts. Modern tax management is based on the establishment of monitoring the status (Jamei & Khedri, 2016), which may be operated in the characteristics of the board of directors. The board of directors' characteristics can have a significant influence on improving financial performance (Kumar, 2016).

From the agency perspective, managers engage in tax management as they benefit from the additional income of tax avoidance activities (Armstrong et al., 2015). The characteristics of the board of directors can discourage or encourage tax management activities. If the board of directors' characteristics are favourable to block perversion, then managers are less inclined to engage in conflicting tax management as they are less able to benefit from the extra incomes generated (Jamei & Khedri, 2016). If the characteristics are weak, the management may be able to extract incomes (Kerr et al., 2016).

Tax management explains the size of a tax liability that is avoided by a company that affects firm performance, where the greater the avoidance of corporate taxes, the

more the company has the ability to avoid tax obligations based on decisions made by the company (Winasis & Yuyetta 2017). The firm which obtains high profit will have the opportunity to position itself in tax planning thereby reducing the burden of tax liability (Chen et al., 2015) Thus, companies tend to prefer optimal tax planning that can improve their financial performance (Kartikaningdyah & Putri, 2017). The impact of tax management on the performance of a company is becoming more significant, in which more efficient tax management can have a heavy influence on improving performance (Lukic, 2017). Tax management seeks legal ways to reduce the current value of companies' taxes in order to increase their firm performance (Lukic, 2017). From the agency perspective, financial performance is the result of business management (Ndofor et al., 2015). Further, tax reduction via tax management has been referred to the management practices of the cast of benefit to shareholders (Vafeas, 2010). The increase in financial performance is due to the interest of shareholders. From the resource dependence perspective, the proper design of management procedures may lead to effective tax management with a consequent increase in financial performance (Gomes, 2016) and increase in investors as well (Vafeas, 2010).

Additionally, Jamei & Khedri, (2016) claim that women directors are strengthened corporate oversight in organisations and effectively reduce the agency cost and enhances the role of tax management. Further, the tax strategy contributes to formulating women directors on the board, the role of monitoring may be enhanced, and this only one woman on the board is considered a company resource (Oyenike et al., 2016). Otherwise, the differences in the behaviour of women and men may have an essential effect on outcomes (Kerr et al., 2016). Thus, tax management activities, it is highly probable that monitoring and oversight function over managerial choices on tax liability improves to reflect on the decisions related to the more women are represented on the board (Jamei & Khedri, 2016).

The company which consists of less tax management and higher tax expense have CEO duality (Gomes, 2016). There is tax management in the interest of efficiency of separation between the functions of the chairman of the board and the CEO duality. The tax management activates was directly participated by the CEO. Tax management purposely does not make clear whether the documented tax effects are a by-product of investment, funding, or operational decisions within the company (Gomes, 2016).

Better tax management is believed to lead companies to directors who have multiple memberships and serve as an influential source of information (Fan 2017). They also serve as a mechanism for control (Laoworapong et al., 2015). The stable strategy in tax management have strong external networks and can obtain more information and are able to formulate and implement the directors with multiple memberships (Chen et al., 2015). This will lead to participation to solve agency problem through opportunities to learn new strategy alternatives, approach and innovation that can facilitate the performance of the board's task duty and linkages to external organisations. The directors who provide high- quantity management oversight is more likely to attain extra memberships, while compliant directors who are willing to allow greater management discretion are also likely to receive additional memberships (Suffian et al., 2017). The following hypotheses can be suggested:

H4a: Tax management mediates the relationship between board gender diversity and financial performance.

H4b: Tax management mediates the relationship between independent board chairman and financial performance

H4c: Tax management mediates the relationship between board multiple memberships and financial performance.

#### **3. RESEARCH DESIGN**

This study presents a quantitative correlation design. This study uses panel data regression for heteroscedasticity, autocorrelation, normality, and test multicollinearity.

#### 4. RESEARCH METHODOLOGY

The sample of study 135 firm, includes services and industrial companies listed in the Amman Stock Exchange. This study uses secondary quantitative data gathered employing panel data for the timeframe of 2008–2017, by analyses the data using STATA software. The design to investigate tax management as mediation with the relationship between the board of directors' characteristics and firm performance in Jordan.

#### 5. DATA ANALYSIS

In Stata analysis, this resulted in 1350 observations (N=1,350). The data was screened to find the distribution and the number of the data as well as the mean, standard deviation (std. dev.), maximum (max), minimum (min), and observation. Table 1 shows a summary of the variables.

|          | Table 1: Summary of Variables |            |           |            |           |              |  |  |  |
|----------|-------------------------------|------------|-----------|------------|-----------|--------------|--|--|--|
| Variable |                               | Mean       | Std. Dev. | Min        | Max       | Observations |  |  |  |
| Year     | overall                       | 2012.5     | 2.873346  | 2008       | 2017      | N = 1,350    |  |  |  |
|          | between                       |            | 0         | 2012.5     | 2012.5    | n = 135      |  |  |  |
|          | within                        |            | 2.873346  | 2008       | 2017      | T = 10       |  |  |  |
| ROA      | overall                       | -0.1221511 | 12.45781  | -195.296   | 43.299    | N = 1,350    |  |  |  |
|          | between                       |            | 7.434548  | -24.0638   | 28.2522   | n = 135      |  |  |  |
|          | within                        |            | 10.01466  | -171.08    | 38.54895  | T = 10       |  |  |  |
| BGD      | overall                       | 0.0417187  | 0.0901553 | 0          | 1         | N = 1,350    |  |  |  |
|          | between                       |            | 0.0763828 | 0          | 0.5       | n = 135      |  |  |  |
|          | within                        |            | 0.0482967 | -0.1463028 | 0.9279829 | T = 10       |  |  |  |
| BIC      | overall                       | 0.7853704  | 0.4071951 | 0          | 1         | N = 1,350    |  |  |  |

|     | between |           | 0.3681081 | 0          | 1        | n = 135   |  |
|-----|---------|-----------|-----------|------------|----------|-----------|--|
|     | within  |           | 0.1766587 | -0.1096296 | 1.69037  | T = 10    |  |
| BMM | overall | 0.5470408 | 0.3215954 | 0          | 1        | N = 1,350 |  |
|     | between |           | 0.2970879 | 0          | 1        | n = 135   |  |
|     | within  |           | 0.1255039 | -0.1338036 | 1.270641 | T = 10    |  |
| ТМ  | overall | .677118   | 23.77849  | -544.6182  | 513.362  | N = 1,350 |  |
|     | between |           | 5.539921  | -0.3438063 | 48.05992 | n = 135   |  |
|     | within  |           | 23.12856  | -580.6726  | 477.3076 | T = 10    |  |

Note: N= Observation, n= company, T= time, ROA= Return on assets, BGD= Board Gender Diversity, BIC= Independent board chairman, BMM= Board Multiple Membership, TM= Tax Management. The mean score value in the table above shows the overall mean score value of each variable.

Table 2 shows a summary of the mean score value of the variables. It also shows the overall mean score value of the variables

#### Table 2: Summary of Mean Score and Overall Mean Score of Panel Data

| Variable | 2008  | 2009  | 2010  | 2011  | 2012 | 2013  | 2014  | 2015  | 2016  | 2017  | Overall |
|----------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|---------|
|          |       |       |       |       |      |       |       |       |       |       | Mean    |
| ROA      | 1.52  | -0.03 | -1.85 | -0.81 | 1.22 | 0.36  | 1.23  | -0.24 | -1.11 | -1.51 | -0.122  |
| BGD      | 0.045 | 0.046 | 0.046 | 0.046 | 0.04 | 0.042 | 0.037 | 0.038 | 0.038 | 0.039 | 0.0417  |
| BIC      | 0.74  | 0.75  | 0.76  | 0.78  | 0.8  | 0.8   | 0.8   | 0.81  | 0.8   | 0.81  | 0.785   |
| BMM      | 0.55  | 0.55  | 0.56  | 0.56  | 0.55 | 0.54  | 0.54  | 0.54  | 0.54  | 0.54  | 0.547   |
| ТМ       | 0.75  | 0.78  | 0.61  | 0.61  | 0.6  | 0.61  | 0.69  | 0.67  | 0.73  | 0.72  | 0.677   |

**Time (T) =10, Number of Companies (n) =135 company, Observations (N) = 1,350,** ROA= Return on assets, BGD= Board Gender Diversity, BIC= Independent board chairman, BMM= Board Multiple Membership, TM= Tax Management

The descriptive analysis of the return on assets showed that the average mean score of the return on assets decreased between 2008 and 2017. In 2008, the mean

score was 1.52 decreased in 2009 to -0.03 and to -1.85 in 2010. While among 2011 to 2014 the mean score increased to 1.23. A drop was started in 2015 and continued until 2017. The overall mean score value of the ten years between 2008 and 2017 is -0.122. Figure 1 shows the changes in the mean value of the return on assets graphically.

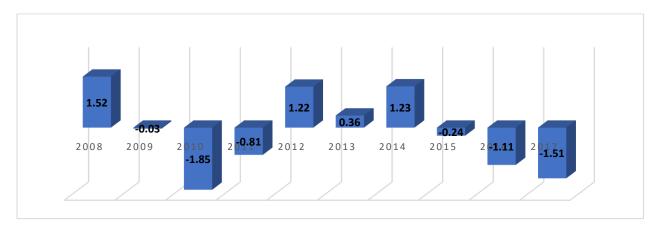




Figure 1: Mean score of Return on Assets among 2008-2017

The overall mean of -0.122 indicates that the return on asset is generally negative between the year 2008 and 2017. Overall, it can be seen that the return on asset was positive in 2008 and among 2012 to 2014. While in other years, the return on asset was negative.

Board gender diversity showed that the diversity level across all years is similar. In 2008 to 2011, the level was consistently 0.046. In 2012, a decrease was noticed and also in the following years to 2017. The level from 2014 to 2017 was almost 0.038. Figure 2 shows the level of board gender diversity.

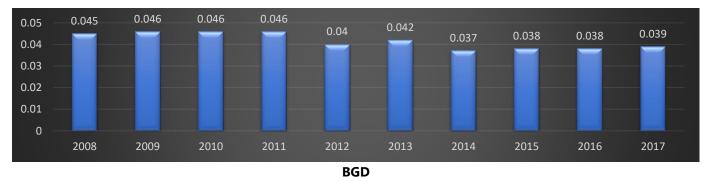
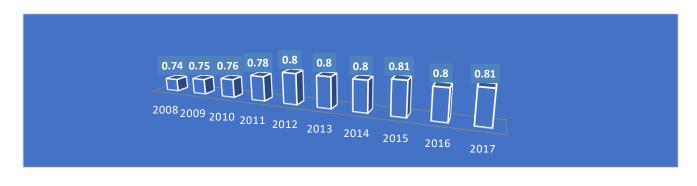


Figure 2: Level of Board Gender Diversity

The overall level of board gender diversity is 0.0417 indicating that the level of board gender diversity dropped between 2008 and 2017.

The level of independent board chairman is presented in Table 2, and a graphical description is given in Figure 3. It shows that the level of independent board chairman in 2008 was 0.74 and increased over 2010-2014 to 0.80. In 2015 increased to 0.81 and maintained the same level in 2017. Figure 3 shows the level of independent board chairman.



#### Figure 3: Level of Independent board chairman

The overall mean score of the level of independent board chairman is 0.785 indicating that the level of the independent chairman was in an increasing trend between 2008 and 2017.

The level of multiple board memberships is given in Table 2. It shows that the level was steady during the

period between 2008 and 2017. In 2008, the level of multiple board memberships was 0.55 and maintained a similar level during 2009, 2010 to 2017 where the level in 2017 was 0.54. Figure 4 shows the level of multiple board memberships.

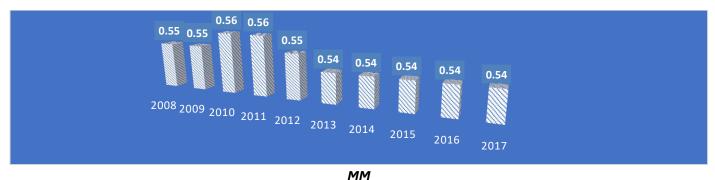
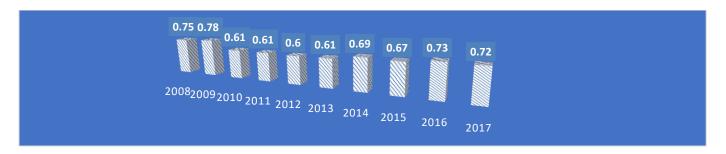


Figure 4: Level of Board Multiple Membership

The level of tax management is presented in Table 2. It shows that tax management level in 2008 was 0.75 and increased in 2009 to 0.78. In the following years of 2010,

2011, 2012 and 2013, the level was almost 0.61. An increase in the level of tax management was seen in 2014 with 0.69 level and increased to 0.73 in 2016 and 0.72 in 2017.



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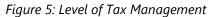
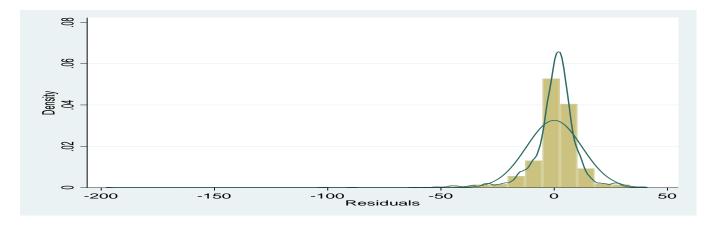


Figure 5 shows that the level of tax management was steady at the overall tax management level of 0.68. In this study, the method of the Breusch-Pagan/ Cook-Weisberg test is used to check for heteroscedasticity. Running the test, the result showed that the Prob-Chi2= 0.2904. Prob is the significance level (P-value or Sig). This indicates that the null hypothesis cannot be rejected and the data is free from the issue of heteroscedasticity.

The result of the test shows that the p-value (Prob>chi2) is greater than 0.05 supporting the null hypothesis that there is no serial correlation among the variables.

In the data analysis, normality is considered a fundamental assumption. In Stata, the histogram in Figure 6 shows that the data distribution has a bell-shape indicating that the data is normally distributed.

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**Normality** Figure 6: Histogram of Normality

To confirm this assumption, the Jarque-Bera test was conducted, and the value of the p-value is 0.9285 indicating that it is not significant and the null hypothesis is rejected. Thus, the alternative hypothesis that the data is normally distributed is accepted, and it is concluded that the data is normally distributed. Also, skewness and kurtosis are used among the most common approaches in order to describe the data shapes or distribution.

Hair et al. (2010) suggest that the normal value for skewness is less than absolute 2 ( $\pm$ 2). Table 3 shows the normality analysis of the variables.

| Variable                   | Skewness <2 | Kurtosis < 2 |
|----------------------------|-------------|--------------|
| ROA                        | .813        | 1.676        |
| Board Gender Diversity     | 1.645       | 1.734        |
| Independent board chairman | 998         | .624         |
| Board multiple membership  | .146        | 597          |
| Tax management             | 345         | 582          |
| Standard error of skewness |             | .067         |
| Standard error of kurtosis |             | .133         |

#### Table 3: Normality Test

Table 3 shows that the skewness and kurtosis of the variables are less than absolute 2. The highest skewness was for board gender diversity with 1.645, and the lowest skewness is .146 for multiple board memberships. In this study, both the VIF and tolerance

as well as the correlation matrix are examined to check for multicollinearity. Table 4 shows the result of multicollinearity analysis using VIF and tolerance.

#### **Table 4: Result of Multicollinearity Analysis**

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| Variables                  | Tolerance>0.10 | VIF<10 |
|----------------------------|----------------|--------|
| Board Gender Diversity     | .881           | 1.135  |
| Independent board chairman | .885           | 1.130  |
| Board Multiple Membership  | .566           | 1.766  |
| Tax Management             | .822           | 1.216  |

#### Dependent variable: ROA

Table 4 shows that the tolerance for all the variables is greater than 0.10 and the VIF is less than 10. This indicates that there is no multicollinearity issue among the variables. To confirm this result, Table 5 presents the correlation matrix. In this table, none of the correlation

among the variables exceeds the value of 0.90 indicating that there is no high correlation among the variables and confirming the non-existence of multicollinearity issues among the variables of this study (Hair et al., 2010).

|     | ROA    | BGD     | BIC    | BMM   | ТМ |
|-----|--------|---------|--------|-------|----|
| ROA | 1      |         |        |       |    |
| BGD | 0.0632 | 1       |        |       |    |
| BIC | 0.0836 | -0.0677 | 1      |       |    |
| BMM | 0.0219 | -0.062  | 0.1574 | 1     |    |
| ТМ  | 0.0072 | 0.006   | 0.0198 | 0.017 | 1  |
|     |        |         |        |       |    |

Note: ROA= Return on assets, BGD= Board Gender Diversity, Independent board chairman, BMM= Board Multiple Membership, TM= Tax Management. The result of the direct effect hypotheses testing in Table 6.

| Hypothesis | Path     | Coef  | T-value | p-value | Remark   |
|------------|----------|-------|---------|---------|----------|
| H1         | BGD→ ROA | 0.074 | 4.81    | 0.000   | Accepted |
| H2         | BIC→ ROA | 0.307 | 19.25   | 0.000   | Accepted |
| Н3         | BMM→ ROA | 0.104 | 4.75    | 0.000   | Accepted |

Note: Note: ROA: Return on assets, BGD: Board Gender Diversity, BIC= Independent board chairman, BMM= Board Multiple Membership, TM: Tax Management. This study proposed that the relationship between board independence and financial performance is positive "H1: There is a positive relationship between board independence and financial performance" Result of direct effect hypotheses testing in Table 6 indicates that the relationship between board independence and financial performance is positive and significant (Coef=0.120, T-value= 6.60, P-value>0.001), H1 is supported. The increase in the board independence will lead to an increase in the financial performance of the Jordanian companies

#### 5.1. Board Gender Diversity and Financial Performance

This study predicted that the relationship between board gender diversity and financial performance is positive. "H1: There is a positive relationship between board gender diversity and financial performance" The prediction is true. The relationship between board gender diversity and financial performance is positive and significant (Coef=0.074, T-value= 4.81, Pvalue>0.001). Therefore, H1 is supported. The more diversified the board of director, the better the financial performance of the Jordanian companies.

#### 5.2. Independent board chairman and Financial Performance

This study predicted that the independent board chairman has a positive relationship with financial performance. "H2: There is a positive relationship between independent board chairman and financial performance". The findings in Table 6 showed that the relationship between independent board chairman and financial performance is positive and significant (Coef=0.307, T-value= 19.25, P-value>0.001). Thus, there is a positive relationship between independent board chairman and the financial performance indicating that the increase in the independence of the chairman will result in positive financial performance and this supports the H2.

#### 5.3. Multiple board memberships and Financial Performance

This study proposed that the relationship between multiple board memberships and financial performance is positive and significant. "H3: There is a positive relationship between multiple board memberships and financial performance". The findings in Table 6 indicates that the relationship is positive and significant (Coef=0.104, T-value= 4.75, P-value>0.001). This supports the hypothesis and indicates that the more the member of the board have memberships in other companies, the better the financial performance of the Jordanian companies. Thus, H3 is supported.

The result of hypotheses testing on the mediating effect is presented in Table 7 as well as the indirect effect.

| Hypothesis | Path                                 | Direct | effect | Direct effect | Indirect | Remark            |
|------------|--------------------------------------|--------|--------|---------------|----------|-------------------|
|            |                                      |        |        | <i>c</i> .    |          |                   |
| H4a        | BGD→TM→ROA                           | 0.074* |        | 0.064*        | 0.010    | No mediation      |
| H4b        | $BIC \rightarrow TM \rightarrow ROA$ | 0.307* |        | 0.261*        | 0.046*   | Partial mediation |
| H4c        | BMM→ TM→ ROA                         | 0.104* |        | 0.078*        | 0.025**  | Partial mediation |

#### **Table 7: Result of Mediating Hypotheses**

\*significant at 0.001 level, \*\* significant at 0.05 level, \*\*\* significant at 0.010 level

Note: ROA: Return on assets, BGD: Board Gender Diversity, BIC= Independent board chairman, BMM= Board Multiple Membership, TM: Tax Management.

#### 5.4. Mediating effect of tax management between Board Gender Diversity and Financial Performance

This study proposed that tax management will mediate the relationship between board gender diversity and the financial performance of Jordanian companies. "H4a: There is a mediating effect of tax management on the relationship between board gender diversity and financial performance". The findings of mediating analysis in Table 7 showed that effect of board gender diversity on financial performance (ROA) was reduced from 0.074 to 0.064 and stayed significant. However, the indirect effect through tax management is 0.010 and it is insignificant. Thus, there is a no mediation.

#### 5.5. Mediating effect of Tax Management on the relationship between Independent board chairman and Financial Performance

A mediating relationship between independent board chairman and financial performance through tax management was proposed in this study. "H4b: Independent board chairman relates positively to tax management, which in turn has a positive effect on financial performance". The findings of mediation analysis in Table 7 shows a comparison between the direct effect and the indirect effect. The direct effect reduced from 0.307 to 0.261 but stay significant. Also, the indirect effect is 0.046, and it is significant. This indicates that partial mediation occurred. Part of the relationship between independent board chairman and financial performance can be explained through tax management. Thus, H4b is supported.

#### 5.6. Mediating effect of Tax Management on the relationship between Board Multiple Membership and Financial Performance

This study predicted that tax management would mediate the relationship between multiple board memberships and financial performance "H4c: There is positive relationship between mediating tax а management in multiple board memberships has positive effect on financial performance". The analysis in Table 7 showed that the prediction was true. The direct effect of multiple board memberships on financial performance was decreased from 0.104 to 0.078. Also, the indirect effect (0.025) is significant. This indicates that tax management mediates partially the effect of multiple board memberships with financial performance. Also, tax management explains the relationship between multiple board memberships and financial performance partially. Thus, H4c is supported.

### 6. DISCUSSION AND RESEARCH RESULT

The first hypothesis predicted that there would be a positive relationship between board gender diversity and financial performance. The results confirmed that board gender diversity had positive relationships with financial performance. This variable has been found in previous studies conducted (see Vieira, 2018; Ahmadi, et al., (2018); Sen, and Mukherjee, 2019; Salloum, et al.,

2019). By contrast, this relationship was found negative in other studies (Bennouri et al., 2018). This result may be reinforced by the fact that the presence of women on the board of directors in developing countries, motivates the board of directors to focus and scrutinize management control procedures, which is the physiological nature of women, especially in Jordan, where inequality between men and women, that has made women think differently. On the contrary, in developed countries where men and women are equal. The second hypothesis projected that independent board chairman dimension would have a positive relationship with financial performance. The literature has shown that firm performance is much better when an independent chairman is present in the board (Mishra & Kapil, 2018; Duru et al., 2016; Azeez, 2015). Nevertheless, others have reported that the independent board chairman negatively influences firm performance (Ahmadi et al., 2018; DeBoskey et al., 2019; Shahid et al., 2018). CEO duality was reducing of the efficiency of corporate governance in developing countries, on the contrary in developed countries.

The third hypothesis predicted that the relationship between the multiple board memberships dimension and financial performance would be positive. The findings signified that multiple board memberships had a significant positive relationship with financial performance. The studies were agreed with this result by similarly, Hasnan et al., (2017), Chen et al., (2015), and Laoworapong et al., (2015). This is because director working in more than company, he has been more experienced and knowledge to solve some problem in the company. Other studies were finding for this relationship a negative in Bischoff & Buchwald, (2018), Mohd et al., (2016), and Ferris et al., (2003). Their argument wasn't giving the director enough time for the company. The proliferation of social networks, especially in recent times, let directors know what the company without the need for physical presence is.

The fourth hypotheses (a,b and c) were aimed at testing the effect of a role tax management on the relationship between the board of directors' characteristics and financial performance. The fourth (a) hypothesis predicted that the dimension of a role tax management mediated the relationship between board gender diversity and financial performance. The results of testing this hypothesis showed that tax management did not mediate the relationship between board gender diversity and financial performance. The fourth (b) hypothesis predicted that the dimension of a role tax management mediated the relationship between the independent board chairman and financial performance. The results of testing this hypothesis showed that tax management mediated the relationship between dimension independent board chairman and financial performance.

The fourth (c) hypothesis predicted that the dimension of role tax management mediated the relationship between multiple board memberships and financial performance. As evidenced by the obtained test results, tax management mediated the relationship between dimensions multiple board memberships and financial performance.

#### 7. CONCLUSION AND FUTURE WORK

The results of this study indicate that (1) tax management does not mediate the relationship between board gender diversity relationship and financial performance (2) tax management does mediate the relationship between independent board chairman relationship and financial performance (3) tax management does mediate the relationship between multiple board memberships s relating and financial performance.

That for firms, practising good corporate governance increases their prospect for attaining higher accounting and market performance. Expressed another way, the practices of good corporate governance decrease agency costs, and therefore, firms in developing nations could improve their performance.

Evidence that tax management has a mediation role of board characteristics facilitate financial performance improvement is recorded in this research. This research provides corporations with the practical implications that would help them fulfil the demands of shareholders and entice potential investors. Effective corporate governance is the fact a crucial constituent of market discipline. As investors are increasingly demanding greater accountability of the corporate board, it is likely that the quantity of managerial practice will improve, resulting in capital markets with greater competency. Besides that, the significance of good corporate governance in safeguarding investors and in solidifying and establishing capital markets has been proven. Firm performance is improved with good corporate governance, and this also attracts investment. Additionally, good corporate governance allows management to identify corporate objectives, satisfy legal requirements, and safeguard the rights of shareholders.

The tax management in this study was used from the companies' perspective, it is a way for the management to improve the actual performance using some tax planning and avoidance mechanism. This study did not address the ethical aspect of tax management. Tax management is normally seen as negative rather than positive from the perspective of countries. Tax management suffers from confirmed ethical violations, the effective tax management has reduced tax revenues of the general economy of countries, in the form of tax avoidance or evasion. Future research could use tax management from the perspective of the economic and the influence in the countries, and the continuation of the company.

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