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The Influence of Director Networks and Independent Directors on Tax Aggressiveness in Financial Reports

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ABSTRACT

The objective of this study is to examine the effects of independent directors and director networks on tax aggressiveness. Directors, and their networks, may become more sensitive to financial reporting issues by sharing information with directors in the network who are experiencing similar problems. The sample consists of 499 companies in Malaysia that are publicly listed on the Kuala Lumpur Stock Exchange in 2015. The study outcome shows that the proportion of independent directors does not influence tax aggressiveness but director networks have a positive relationship with tax aggressiveness, whereby better director networks result in a higher level of company tax aggressiveness.

Keywords: Director network; Independent director; Tax aggressiveness; Emerging economies

Introduction

Studies have shown that there are dfferences between tax avoidance and tax aggressiveness. Kovermann and Velte (2019) categorises tax aggressiveness a subset of tax avoidance. Frank et al. (2009) defined tax aggressiveness as a manager's action to lower tax through better tax planning, including or excluding tax avoidance. Slemrod (2004) found that tax aggressiveness is more prevalent for specific activities intended to lower the company tax liability. Even though various definitions of tax aggressiveness can be found, the definition used in the corporate world is usually based on the tax risk that a company believes is reasonable to take (Harvey 2014). Task risk has two major components: technical tax risk and reputational tax risk. A company is normally more concerned with the technical tax risk that can result in tax payable, penalties, and interest. However, with the introduction of corporate governance and negative press about non-compliance, companies are also focused on reputational tax risks. In fact, some companies are more concerned about reputational tax risks than technical tax risks since reputational risks can affect the whole business model and brand name, which indirectly affects financial performance (Harvey 2014).

Significant costs and benefits can be generated from tax aggressiveness. Costs that result from taxes include a reduction in cash flow for the company shareholders and stakeholders. In this circumstance, the company and shareholders can take the initiative to reduce tax aggressiveness from tax activities. However, to assume that tax aggressiveness activities always lead to the company's value maximization is simplistic because when a firm is tax aggressive, it faces various potential costs (Myron et al. 2014). Edwards et al. (2013) stated that increased cost of capital, weaker credit rating, and difficulty in gaining external funding can distress the company and result in changes in the company's tax aggressiveness equilibrium position. A company may employ tax aggressiveness strategies when the marginal cost is less than the marginal benefit at equilibrium (Shackelford & Shevlin 2001). A financially distressed firm is normally more tax aggressive since it has limited options. This becomes crucial when the firm needs to raise cash and avoid negative reputational effects. Hanlon and Heitzman (2010) reported that tax aggressiveness pushes the envelope of tax law. Tax planning and tax aggressiveness activities are likely to be scrutinized by tax authorities, and companies may be subject to a large penalty if they do not comply with regulations.

The level of a firm's tax aggressiveness is affected by corporate governance mechanisms (Armstrong et al. 2015; Kovermann & Velte 2019). Tax aggressiveness is not limited to non-compliance activities by the taxpayer; it can be extended to tax-saving activities that are acceptable based on the tax rules and regulations. Having more independent directors on the board can affect director status and reputation in controlling and monitoring the company. Thus, this study will examine the the composition of independent board directors and the influence of director networks in increasing or decreasing tax aggressiveness due to the impact of tax aggressiveness on the organization.

This study makes the following contributions. Firstly, this study makes a contribution to the studies on social network and tax aggressiveness. Directors can access information, such as effective corporate practices, that is not easily observed by investors (Omer et al. 2014). In addition, information transfer from one company to another is enabled through communication among directors when directors sit on several boards. As a result, one possible benefit of membership in this social network is that better-networked directors have larger information sets, which in turn can facilitate monitoring and counseling (Omer et al.

2014). Studies have suggested that a broader director network can influence board monitoring and advising effectiveness because better-networked directors are better informed. Pamela (1993) investigated whether managers who hold directorships on other firms' boards imitate the acquisition activities of those firms, suggesting that connectedness functions as a mechanism for diffusing corporate practices. Davis (1991) documented a tendency for firms that share directors with other firms to employ a "poison pill" clause to adopt this practice themselves, and Chui et al. (2013) reported that interlocked directors are linked with the likelihood of reporting an accounting irregularity. Thus, similarly tax aggressiveness practices could also be communicated throught these networks. Secondly, this study contributes to the literature that examines the influence of board composition on tax aggressiveness (e.g. Law and Mills, 2017; Richardson et al., 2016; Francis et al., 2014), from a developing country perspective.

The remainder of this article is organized as follows. The next section outlines pertinent information about Malaysia's corporate directors and their related networks. This is followed by the literature review and hypotheses development. Next, methods and findings are presented. The final section discusses the findings and offers the conclusion.

BACKGROUND

In Malaysia, family and government-linked companies have highly concentrated ownership (Claessens et al 2000). However, 10% of Malaysia's listed companies have failed to comply with the one-third proportion of independent directors, as the Code of Best Practice on Corporate Governance in Malaysia suggests. The Bursa Malaysia Listing Requirement defines independent director expansively; however, many compliance regulations must be strictly followed. Additionally, government ownership of publicly listed companies is also a factor in this concentration control. Another concern is the political influence toward the company. In some privatized companies, the source of government control is limited to the ownership of shares, but may also exist through special rights granted under the company's articles of association. Additionally, the articles of association generally have a provision for a "special share" held by a "special shareholder," who is a representative of the state. The special shareholder has the right among other shareholders to appoint a number of directors, including the managing director and the chairperson of the board. As part of this status, the special shareholder also has extensive veto rights (Salim 2011).

Moreover, board balance is another governance issue in Malaysian government-linked companies. An appropriate balance must be maintained between executive directors and non-executive and independent directors, which is fundamental for listed companies to safeguard their minority shareholders. This is a Code on Corporate Governance in Malaysia requirement. However, for most publicly listed, government-linked companies, the requirement comes at the expense of managerial participation in the board. In Malaysia, the presence of directors who have been appointed by the government and other major shareholders, including government-linked companies' chairpersons, is common. The presence of large numbers of directors who are nominees of the government for government-linked investment companies reinforces the influence the government, as the controlling shareholder, has on the board. This circumstance will also compromise the board's independence to act in the best interests of the company (Salim 2011).

CORPORATE GOVERNANCE AND TAX AGRESSIVENESSS

The responsible person for monitoring management's behavior is the board of directors (Fama & Jensen 1983). Past research has assessed the impact of board monitoring on the possibility of corporate fraud and misstatement of financial reporting (Beasley 1996) due to tax aggressiveness (Lanis & Richardson 2011). Wang (2010) reported that a transparent company avoids more tax relative to its stakeholders and shareholders. Corporate transparency enables the monitoring of manager actions and gives more emphasis to outsiders regarding any hidden agenda related to tax avoidance or tax aggressiveness. Desai and Dharmapala (2006) found that a well-governed company has greater potential to develop more tax aggressiveness, while a less-well-governed company has low capacity and little possibility to become less tax aggressive. Thus, any improvement associated with management and shareholder interests allows the less-well-governed company to develop less tax aggressiveness. Hanlon and Slemrod (2009) argued that a company's tax aggressiveness activities, on average, result in a decline in the company's share price.

Limited research has linked tax aggressiveness and corporate governance. Kubick and Lockhart (2017), Law and Mills (2017), Halioui et al. (2016), Kim and Zhang (2016), Richardson et al. (2016), Francis et al. (2014) and Minnick (2010) are some of the few studies that has examined this relationship. Minnick (2010) investigated how the long-run tax management affects corporate governance. The result showed that tax aggressiveness benefits shareholders by providing a high return. Tax aggressiveness is likely to occur because of the tax planning reflected in the financial statement through book-tax differences. Book-tax differences come from various sources and the results are related to earnings, market valuations, and credit ratings (Hanlon & Heitzman 2010). Kubick and Lockhart (2017), find that overconfident CEOs are more tax aggressive. Women holding directorship or top managerial posts influence the tax aggressiveness of companies (Francis et al. 2014; Richardson et al. 2016; Law & Mills 2017). Kim and Zhang (2016) found that politically connected firms are more tax aggressive.

Owner interests and management activities should be harmonized and aligned with good corporate governance.

When the company's activities are subject to corporate governance, management is more transparent and careful in making decisions. This action can minimize the cost of tax aggressiveness. Poor corporate governance may allow the company to have higher tax aggressiveness.

Fama and Jensen (1983) reported that, to mitigate the shareholder residual loss from tax aggressiveness, the decision-making system must separate the management (e.g., implementation and initiation) from the control (e.g., ratification and monitoring) at all levels. Thus, the most important decision system is the board of directors (Fama & Jensen 1983). The board of directors has the ultimate responsibility toward stakeholders and the entire society.

According to Jensen and Meckling (1976), agency theory describes the relationship between two parties in which the principal party delegates tasks to the other party. The theory explains the differences in decisions and behavior between two parties, which often have differences in goals and attitude toward risk. The problem for agency theory is that the principal and agent may have differing risk preferences and goals. Thus, the agent is employed by the principal to maximize the return, but the agent may take action that benefits the agent's rather than the princial's interests (Jensen & Meckling 1976). To mitigate such principal-agent issues, corporate governance measurements are applied.

Social network theory complements agency theory by explaining how director networks affect corporate governance measurement. Social network theory looks at the connection between two or more individuals within the network. This theory examines how relationships influence and suggests how individuals should act and react. Stephen and Halgin (2011) claimed that social network analysis is an alternative that can be used to define the amount of information flow, as well as the possibility of receiving information based on the individual relationship position in the network. Social network analysis is normally used to examine the director network in the new accounting and finance literature. Past studies of director networks contribute to the understanding of social tie effects, which are limited to first-degree relationships and focus on local effects. Further study of the corporate director network as a whole will extend our understanding of the information flow across the network (Conyon & Muldoon 2006).

This study focuses on the relationships among the composition of independent directors and director networks, two corporate governance mechanisms, and tax aggressiveness. Limited research has focused on director independence and the influence of director networks on tax aggressiveness in an environment where government-linked companies dominate.

Development of Hypotheses

Fama and Jensen (1983) argued that the critical factor in establishing an effective control system is having both inside and outside directors on the board. They further stated that the effectiveness of the company's controlling and monitoring systems results from management action that is the combined function of inside and outside directors. Lanis and Richardson (2011) reported that the importance of having outside directors is linked to being more responsive to the society's needs and preventing the board of directors from establishing an aggressive tax policy.

Board composition is a critical factor for an effective monitoring system; having a board that consists of management and non-management members is valuable (Fama & Jensen 1983). Fama and Jensen (1983) stated that the combination of insiders (independent directors) and outsiders (non-independent directors) may result in more effective monitoring of management. A company's independent directors are the most important board members since they have valuable information regarding company activities that may help the board act in effective way with the right control mechanism (Fama & Jensen 1983). Thus, the board of directors is likely to include a company management team in the board composition. However, based on Beasley (1996), boards cannot achieve effective decision making and control unless managers have limited discretion. Since internal managers possess company inside information, the board of directors can easily become a management asset for making decisions and ignoring shareholder interests. Indeed, managers may collude and engage in fraudulent activities if the management dominates the composition of the board of directors. An alternative to enhance the viability of the board as a market-induced mechanism is to include outside or non-independent directors. Non-independent directors can work as professional referees or oversee competition in the company's top management. Boards normally appoint several non-independent directors to act as go-betweens or mediators in disagreements between company managers and sanction decisions that involve major agency problems (Fama & Jensen 1983). The appointment of a greater number or proportion of non-independent directors will increase board efficiency in monitoring management action and enhance corporate compliance with rules and regulations.

Very little research has considered corporate tax planning and board of director involvement (Williams 2007; Erle 2008). If the tax planning happens at a low level within the company, management's implementation process becomes complex so an effective board of directors is important to properly monitor the corporate tax planning (Schön 2008). Landolf (2006) claimed that as the tax risk has become more diverse, it is important for board members to be directly involved in the company's tax planning. The board should implement the right strategy after considering the important factors of sustainability, compliance culture, compatibility of business activities, and tax structure. Lanis and Richardson (2011) argued that appointing a higher proportion of independent or outside directors to the board can increase board effectiveness via improved corporate compliance and monitoring management. Richardson et

al. (2014) researched corporate taxation and found a negative relationship between tax aggressiveness and outside board members. However, Armstrong et al. (2012) reported that a relationship exists only when tax aggressiveness is at a higher level or extreme. Hence, more independent members of the board of directors can discourage tax aggressiveness with efficient control and monitoring. Dyreng et al. (2008) found that individual directors are important in influencing tax avoidance matters. Their research concluded that the board of directors plays an important role in determining or setting the level of tax aggressiveness that is acceptable for the company.

Based on the above discussion, one can expect that a higher proportion of independent directors on the board can significantly reduce the possibility of tax aggressiveness. Thus, this study tests the following hypothesis:

H1: The higher the proportion of outside directors on the board, the lower the level of tax aggressiveness.

The director's network offers a system for information spread across networks through the relationship ties between directors. This study suggests that wider director networks can influence the board monitoring and advising system due to well-connected directors being better informed. Various types of information on financial and non-financial matters, including corporate policy, have been shared through the director network on corporate boards. The exchange of information between directors may involve, for example, potential concerns about the financial restatement experience or internal controls in other companies. This valuable information can help directors monitor or, if necessary, change policies using early signals gained from the director network. In addition, directors may gather information regarding corporate governance practices that have been successful in others companies, resulting in a reduction in the the cost of oversight.

Directors can transfer information through their networks, which enables information to flow from one company to another if directors serve on multiple boards. Multiple board positions can result in benefits if the company receives large sets of information through well-connected directors. This information can be used to monitor and control management actions (Omer et al. 2014). Past research has shown that director networks have a positive outcome with the spread of value-added corporate governance information, such as alliance formation (Gulati & Westphal 1999) and business innovations (Haunschild 1993). Evidence provided by Brown and Drake (2014) stated that, through director networks, firms that are linked with low-tax firms tend to have lower effective tax rates. In addition, Ghosh and Lee (2013) found that a director who serves on audit committees within the network has a high possibility of conservative behavior rather than aggressive behavior. This finding indicated that companies with director networks learn from other companies' success to avoid and prevent critical mistakes (Mizruchi 1996). Based on the prior studies, the director network is a communication tool for directors to share and transfer information, which can result in increasing or decreasing firm value.

A potential cost that may arise from the director network is the spread of value-reducing financial disclosures between two or more directors in the network, such as one director manipulating earnings and the other directors following suit (Chiu et al. 2013). There is a high probability for directors to imitate the actions of other directors because of the corporate connection or common identification (Gino et al. 2009). Manipulation of earnings can become more acceptable if the directors determine that the actions of other directors in a different company are not questioned. However, prior studies (Wallsten et al. 1997; Clemen 1989; Fischer & Harvey 1999) have shown that information averaging best describes decision makers' action when they consider different information. In this situation, when the director network is well-connected, information regarding value-reducing options is diluted as long as the negative practice is not pervasive within the network. Based on the given potential benefits arising from the director network and the non-trivial cost of restating financial statements, this study proposes a link to tax aggressiveness, as follows:

H2: A well-connected director network reduces corporate tax aggressiveness.

Methods

The dependent variable for this study is tax aggressiveness; it uses the ETR1 measurement Lennox and Pittman (2013) defined as total tax expenses divided by pre-tax book income, which reflects the traditional generally accepted accounting principles (GAAP) effective tax rate. This study has two independent variables and seven control variables, with the control variables using the natural logarithm. The independent variables are the proportion of board members who are independent directors (BODI) and the director network based on the closeness score (BDNET). The details of board members for each company are collected and the board members are separated into independent and non-independent directors. Next, only the proportion of independent data is selected for this analysis. On the director network, this study uses the average closeness for every director who holds a directorship within the selected sample. Average closeness is based on closeness centrality, how easily information flows through the network (Newman et al. 2006). It is calculated based on the "inverse of the sum of the shortest distances between one network member and the other network members with whom that member is connected" (Omer et al. 2014, p. 14). Thus, a higher centrality score shows that the directors are closer and information is transferred faster while a lower score indicates that information is transferred slowly due to the directors being farther away from one another. The average closeness score is calculated using Pajek software, which

can be employed to analyze and visualize large networks (Breton & Dicko 2014; Kılıç et al. 2019; Qi et al. 2020).

Moreover, this study uses control variables derived from Omer et al. (2014) and Lanis and Richardson (2011). The control variables represent firm characteristics, such as economic condition, financing activities, firm size, number of years the company's shares have been traded, proportion of long-term debt to total assets, proportion of pre-tax income to total assets, proportion of research and development expenditure to net sales, natural logarithm proportion of net property, plant, and equipment to total assets, natural logarithm proportion of inventory to total assets, and natural logarithm proportion of market value of equity to book value of equity.

Ordinary least squares (OLS) regression has been used to record an interval scale to a model single response variable using a generalized linear modeling technique. The model for this study was adapted from Armstrong et al. (2015), Richardson et al. (2013), and Lanis and Richardson (2012):

$$\ln TAGit = \alpha 0 + \beta 1 BODIit + \beta 2 BDNETit + \beta 3 AGEPUBit + \beta 4 LEVit + \beta 5 ROAit + \beta 6 RDINTit + \beta 7 lnCINTit + \beta 8 lnINVINTit + \beta 9 lnMKTBKit$$

Table 1 provides abbreviations and descriptions of the model variables. The Ramsey RESET test was designed to detect both omitted variables and inappropriate functional forms in a general misspecification test. The test is used to determine whether the independent variable stated in the model has any power to explain the tax aggressiveness. The sample consists of companies in Malaysia that are publicly listed on the Kuala Lumpur Stock Exchange (KLSE) for 2015. Initially, the sample consisted of 963 companies. However, the sample was reduced for three reasons. First, 13 companies were no longer listed on the KLSE for financial year 2015. Second, banking and financial institutions (13 companies) were excluded. Third, companies with incomplete financial data (438 companies) were dropped. Therefore, the final sample for this study includes 499 companies.

This study uses secondary data on companies' financial statements. The data are extracted from Bloomberg and DataStream. Data have been extracted from the Directors Report, Statement of Financial Position, Statement of Changes in Equity, Statement for Cash Flow, and Notes to Account. Data were transferred to an Excel format for summarization and formulation, then uploaded into GRETL software for analysis.This study used GRETL software in simulating the results. The definition and development of variables is as shown in the equation model under section 3.3. This study calculated directors' networks for 2015 by the degree of closeness scores for each director listed in the KLSE for 2015 using PAJEK software. The director's level of closeness measure at the company level was calculated by averaging each of the closeness scores across directors within the board.

Analysis and Results

Table 2 presents the descriptive statistics or covariates for 2015. The sample size is 499 companies listed on the KLSE and the average tax aggressiveness index ranges from 10.150 to 22.910 with a mean of 17.178. The average range for BODI is from .167 to 1.000 with a mean of .483, the average range for BDNET is from .000 to 0.086 with a mean of .052, the average range for AGEPUB is from .000 to 43.000 with a mean of 9.830. The average range for LEV is from .000 to .718 with a mean of .082, the average range for ROA is -71.392 to 633.780 with a mean of 3.759, the average range of RDINT is from .000 to .521 with a mean of .002, the average range for lnCINT is from -6.562 to -0.007 with a mean of -1.331, and the average range for lnINVINT is -10.036 to -0.147 with a mean of -2.541. Finally, the average range for lnMKTBK is from -5.759 to 4.426 with a mean of 0.233.

Table 3 presents the output of the correlation matrix of the covariates used in this study. There is no significant correlation coefficient greater than 50%; therefore, this study estimation is not subject to multicollinearity problems.

TABLE 1. Abbreviations and descriptions of the model variables

Abbreviation	Description
i	Companies 1 to 499
t	Financial year 2015
lnTAG	Natural logarithm of tax aggressiveness
BODI	Proportion of board members who are independent directors
BDNET	Director network based on closeness score
AGEPUB	Number of years that the corporation's shares have been traded on the stock exchange
LEV	Long-term debt divided by total assets
ROA	Pre-tax income divided by total assets
RDINT	Research and development (R&D) expenditure divided by net sales
lnCINT	Natural logarithm net property, plant, and equipment divided by total assets
lnINVINT	Natural logarithm inventory divided by total assets
lnMKTBK	Natural logarithm of the market value of equity divided by the book value of equity

TABLE 2. Descriptive statistics of all model variables

	Mean	SD	Min	Max	Obs
lnTAG	17.138	1.812	10.150	22.910	499
BODI	0.483	0.128	0.167	1.000	499
BDNET	0.052	0.027	0.000	0.086	499
AGEPUB	9.830	7.738	0.000	43.000	499
LEV	0.082	0.107	0.000	0.718	499
ROA	3.759	25.916	-71.392	633.780	499
RDINT	0.002	0.022	0.000	0.521	499
lnCINT	-1.331	1.026	-6.562	-0.007	499
lnINVINT	-2.541	1.634	-10.036	-0.147	499
lnMKTBK	0.233	0.873	-5.759	4.426	499

Variable definitions: lnTAG: Natural logarithm of tax aggressiveness; BDNET: Director network by closeness score; BODI: Proportion of board members who are independent directors; AGEPUB: Number of years that the corporation's shares have been traded on the stock exchange; LEV: Long-term debt divided by total assets; ROA: Pre-tax income divided by total assets; RDINT: R&D expenditure divided by net sales; lnCINT: Natural logarithm net property, plant, and equipment divided by total assets; lnINVINT: Natural logarithm inventory divided by total assets; lnMKTBK: Natural logarithm of the market value of equity divided by the book value of equity.

TABLE 3. Pearson correlation table for all model variables

	lnTAG	lnMKTBK	lnINVINT	lnCINT	RDINT	ROA	LEV	AGEPUB	BDNET	BODI
lnTAG	1.000									
lnMKTBK	0.359	1.000								
lnINVINT	-0.114	-0.082	1.000							
lnCINT	0.105	0.031	-0.037	1.000						
RDINT	0.039	0.002	0.030	-0.032	1.000					
ROA	0.317	0.272	0.011	0.028	0.104	1.000				
LEV	0.327	0.289	-0.170	0.076	-0.020	-0.151	1.000			
AGEPUB	-0.049	-0.028	0.068	0.073	-0.048	-0.008	-0.005	1.000		
BDNET	0.279	0.121	-0.102	-0.038	-0.028	-0.021	0.167	-0.150	1.000	
BODI	-0.101	-0.023	-0.50	-0.007	-0.017	-0.131	0.008	0.016	0.049	1.000

The table represents the correlation matrix for the covariates in 2015. lnTAG: Natural logarithm of tax aggressiveness; BDNET: Director network by closeness score; BODI: Proportion of board members who are independent directors; AGEPUB: Number of years that the corporation's shares have been traded on the stock exchange; LEV: Long-term debt divided by total assets; ROA: Pre-tax income divided by total assets; RDINT: R&D expenditure divided by net sales; lnCINT: Natural logarithm net property, plant, and equipment divided by total assets; lnINVINT: Natural logarithm inventory divided by total assets; lnMKTBK: Natural logarithm of the market value of equity divided by the book value of equity.

In this study, the Ramsey RESET test is used to test whether a regression model is correctly specified in terms of the regressors that have been included. The specified linear model for this study is as follows:

$$\ln TAG_{it} = \alpha 0 + \beta 1 BODI_{it} + \beta 2 BDNET_{it} + \beta 3 AGEPUB_{it} + \beta 4 LEV_{it} + \beta 5 ROA_{it} + \beta 6 RDINT_{it} + \beta 7 lnCINT_{it} + \beta 8 lnINVINT_{it} + \beta 9 lnMKTBK_{it}$$

and the p-value for the study is 0.327, which is more than 0.05, and the linear model is statistically significant.

Table 4 presents the results of the main regression. The results show a negative insignificant relationship between the composition of independent directors on the board and tax aggressiveness. This outcome is not consistent with Lanis and Richardson (2011) or Fama and Jensen (1983). Furthermore, the relationship between director network and tax aggressiveness is not consistent with Omer et al. (2014) but is consistent with Davis (1991), Beasley (1996), and Chiu et al. (2013) since a positive signfiicant relationship exists between the two. However, we find that the regression coefficients for RDINT and INVINT are insignificant. We also find that the regression coefficient for the CINT control variable has a significantly positive association ($p < .05$) in the regression model, while the regression coefficients for LEV, ROA, and MKTBK have a significantly positive association ($p < .001$) in the regression model.

TABLE 4. Results for the main regression

Variable	Coefficient
BODI	-0.316
BDNET	14.379***
AGEPUB	-0.002
LEV	4.870***
ROA	0.068***
RDINT	1.376
lnCINT	0.179*
lnINVINT	-0.041
lnMKTBK	0.347***
C	16.217
Ramsey RESET Test (*p* value)	0.327
F-statistic	1.119
R^2	0.328
Obs.	499
Note: *p<0.05, **p<0.01, and ***p<0.001	

Discussion and Conclusion

This study examines the influence of the composition of independent directors and the director network on company tax aggressiveness. The result shown in the correlation and regression test does not support H1 and there is a non-significant negative relationship between independent directors and tax aggressiveness. This result is not consistent with Lanis and Richardson (2011). However, a positive, significant relationship exists between director network and tax aggressiveness, but this result is not consistent with Omer et al. (2014), who reported that the director network increases the quality of financial disclosure. They further stated that firms having an exchange of relevant information among directors in well-connected networks will benefit both firms when the directors hold multiple board memberships. These results are consistent with Davis (1991), Beasley (1996), and Chiu et al. (2013). In the literature, the network is used to help avoid negative financial outcomes for the firm; for example, a well-connected director network may employ a poison pill clause in its practice (Davis 1991), with a greater risk of accounting fraud in the company (Beasley 1996) and the possibility of irregularities in financial reporting (Chiu et al. 2013).

Overall, our study provides unique insights into the association among indedpendent director composition, director networks, and tax aggressiveness. In so doing, it extends the literature on corporate governance and tax aggressiveness. Moreover, our findings should be of value to tax policymakers who seek to identify the aspects of corporate governenace that can increase or decrease the risk of tax aggressiveness. This study extends Desai et al. (2004), who investigated the relationship between tax aggressiveness and agency framework within corporate governance by incorporating aspects of social network theory. Thus, agency theory and social network theory are important for corporate governance in ensuring that the responsibility and accountability of directors and management can lessen or eliminate any principal-agent problem.

Limitations and Future Research Directions

This study is subject to several limitations. First, the sample is limited to publicly listed companies and not extended to unlisted companies since the data are unavailable in the public domain, such as Bloomberg and DataStream. Second, this study constructs the tax aggressiveness measurement based on financial statements rather than company tax returns. The data might be more accurate if the tax return information is interpreted together with the financial statements. However, due to the unavailability of such information, this study is limited to financial statements only.

The study had several constraints and limitations especially related to gathering adequate and relevant information. Future studies can extend the observation to a bigger sample to ensure reliability and consistency in the results. Future research can also examine the relationships between the proportion of independent directors and director networks with respect to a firm's tax risks. In addition, future research can seek to identify the practices that directors within the network use to measure or assess tax aggressiveness; providing a better understanding of how director networks control board actions would be beneficial.

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