Advanced International Journal of Banking, Accounting, and Finance
EISSN: 2682-8537
AIJBAF
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

ADVANCED INTERNATIONAL JOURNAL OF BANKING, ACCOUNTING AND FINANCE (AIJBAF)
www.aijbaf.com

THE ROLE OF DIRECTOR NETWORK AND COMPLIANCE RISK ON TAX AVOIDANCE: EVIDENCE FROM INDONESIA

Annisa Hayatun Nazmi Burhan[1], Anna Che Azmi[2]*, Mohamed Hisham Hanifa[3]

[1] Department of Accounting, Universiti Malaya, Malaysia
Email: s2103035@siswa.um.edu.my
[2] Department of Accounting, Universiti Malaya, Malaysia
Email: annaazriati@um.edu.my
[3] Department of Finance, Universiti Malaya, Malaysia
Email: mhisham@um.edu.my
* Corresponding Author

Article Info:

Article history:
Received date: 25.04.2025
Revised date: 07.05.2025
Accepted date: 22.05.2025
Published date: 04.06.2025

To cite this document:

Burhan, A. H. N., Azmi, A. C., & Hanifa, M. H. (2025). The Role of Director Network and Compliance Risk on Tax Avoidance. *Advanced International Journal of Banking, Accounting, and Finance, 7* (22), 41-57.

DOI: 10.35631/AIJBAF.722003.

Abstract:

Research trend on social network in the context of tax compliance has been evolving gradually. Using social network theory, we employ network centrality to investigate the role of director network and compliance risk on tax avoidance. With 1,848 firm-year observations from year 2017-2022, we found that the positive effect of the director network on tax avoidance is weaker because of the compliance risk. It highlights that firms with compliance risk may restrain firm tax avoidance. Our findings add to the body of literature on social network and tax compliance.

Keywords:

Director Network, Compliance Risk, Tax avoidance, Social Network Theory

Introduction

Information of tax avoidance can be spread across companies (Lismont et al., 2018) through the director's multiple board membership (Brown & Drake, 2014). The multiple director

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

membership is manifested in well-connected and influential directors (Omer et al., 2019). Among the extant research on director networks and tax avoidance in Indonesia context (see Firmansyah et al., 2022; Rustiarini & Sudiartana, 2021; Wahab et al., 2024), there remains a dearth of research that look specifically into a broader fraction of network connection that measures well-connected and influential directors. A broader fraction of network connection, determines the centrality of the directors and the companies, offering more insightful information (Liao et al., 2022; Omer et al., 2019). Given that, it is more beneficial for decision-making. Thus, we strive to address this gap.

Literature documents that knowledge transmission on taxpayers' social networks may influence tax compliance behavior (Andrei et al., 2014; degl'Innocenti & Rablen, 2020; Di Gioacchino & Fichera, 2020; Hashimzade et al., 2014, 2015). Given that, social structures determine how tax-compliance-related decisions are made. Compliance risk is a part of company tax risk that may arise from company's ability to deal with tax rule changes (PWC, 2024). Multinational companies have to deal with compliance tax risks when changes in tax rules involve different jurisdictions (Deloitte, 2014). Tax avoidance is a practice under the overarching banner of tax compliance, as it makes multinational companies attempt to comply with tax rules while managing to attain the minimum tax payment to the government. However, not all compliance risks arise from companies' attempts to avoid taxes. Compliance risk may exist due to certain business practices with non-tax purposes due to uncertainty in economics, regulation, and inaccurate information processing (Neuman et al., 2020). Despite the research trend of tax risk, there remains a lack of understanding, specifically on compliance tax risk and how its interaction with information flow through the director network determines tax avoidance. Thus, we aim to fill this gap.

Our research questions then include: (1) Does the director network affect tax avoidance? (2) Does compliance risk moderate the director network effect on tax avoidance? We developed and tested our hypotheses with a sample of publicly listed Indonesian firms from year 2017 to 2022. With the aim to look at a broader fraction of the connection of the director network, we use degree centrality (Freeman, 1978) to measure well-connected directors and eigenvector centrality (Bonacich, 1972) to measure influential directors. We employ long-run tax avoidance based on Dyreng and Maydew (2008). We refer to Neuman et al. (2020) to measure compliance risk. The results show that the director network has a positive association with a firm's tax avoidance. The positive association is weaker due to the interaction with compliance tax risk.

Our study contributes to the literature in the following ways. First, as we employ social network theory (SNT), we explicitly employ director centrality to understand how the companies' connections through well-connected and influential directors determine firm tax avoidance. Thus, we extend the previous works in the Indonesian context that focus specifically on political and military connectedness (see Firmansyah et al., 2022; Rustiarini & Sudiartana, 2021; Wahab et al., 2024). Our finding implies that information spread through the director's network may urge firms to avoid tax. Second, we contribute to the literature by showing the moderating role of compliance tax risk on the positive effect of director networks on tax avoidance. We also contribute to the existing works that, up to this point, have examined how *ex-post-tax* risk moderates tax avoidance (see Drake et al., 2019; Firmansyah, Wahyudi, et al., 2022; Guedrib & Marouani, 202).

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Further, we offer insight into the tax avoidance debate in developing economies, especially Indonesia. Our finding suggests that Indonesian tax authorities watch over firm social networks through well-connected and influential directors. Further, it is paramount for the Indonesian tax authority to understand how information is shared among the social actors in relation to tax avoidance practices.

Our study consists of an introduction in the first part. The second part is the literature review and the development of hypotheses. The third part is the research method. We deliver analysis and discussion in the fourth part. We present the conclusion in the last part.

Literature Review

Director Network

Indonesia allows for multiple directorships (Habib & Muhammadi, 2018), and hence, companies are connected to one another, creating a network through their shared directors (Caiazza & Simoni, 2019). The shared boardroom meeting allows directors to share knowledge and experiences. SNT asserts that a social network comprises a set of nodes and ties that bind (Borgatti & Foster, 2003). Nodes can be individual (e.g., human and animal) and also collectivist, such as teams, companies, and countries (Borgatti et al., 2018). Ties connect the nodes in the network with relational types (e.g., co-membership). Nodes and ties indicate a social system (Borgatti et al.,2018). Given the grand concept of SNT, the director network is a manifestation of the social network.

Central position of the nodes led to well-connected and influential nodes, and thus, allows the attainment of channel of information (Borgatti et al., 2009; Borgatti et al., 2018). Actors at the most central position have easier access to information (Bianchi et al., 2023; Nezami et al., 2024). Degree centrality examines the number of social ties each individual (i.e., directors) has in the network (Freeman, 1978). Degree centrality indicates the ease with which information can be received and disseminated (Nezami et al., 2024). Eigenvector centrality is the degree of an actor's link to the most influential actors (Bonacich & Lloyd, 2001). It represents the influence of actors on the network (Nezami et al., 2024). Centrality has a behavioral consequence (Borgatti & Halgin, 2011). Previous empirical evidence shows that director centrality results in better management of cash (Miranda et al., 2018), less misstatement (Omer et al., 2019), firm's profitability (Raddant & Takahashi, 2022), better CSR performance (Amin et al., 2020), and firm innovation (Chuluun et al., 2017). Drawing upon SNT-based research, we conjecture that director network results in tax behavior.

Tax Avoidance In Indonesia

Firms conducting tax avoidance aim to minimize tax liability (Hanlon & Heitzman, 2010) by utilizing tax regulation loopholes (Dyreng & Maydew, 2008). It is important to highlight that tax avoidance does not always imply unlawful activities because the technique employed is still within legal parameters (Frecknal-Hughes, 2018). Nevertheless, the ambiguity of tax avoidance (Frecknall-Hughes et al., 2017) drives multinational firms to strive to engage with the practice.

According to Joshi (2020), the existing policies might be insufficient to mitigate tax avoidance. As reported by Tax Justice Network (2020), Indonesian firms are predicted to contribute a US$4.8 billion loss to the country and are predicted to make other countries lose US$1.1

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

billion. Meanwhile, emerging nations like Indonesia rely on firm's payments as an important source of tax (Mardan & Stimmelmayr, 2020). Further, Indonesia has a comparably low tax-to-GDP ratio (OECD, 2023). Given that, the dynamic of tax avoidance practices has caught the interest of scholars (Z. Chen et al., 2024) and the general public (Anesa et al., 2019; Cobham & Janský, 2018; Fuest et al., 2022).

Previous research has explored firm characteristics, corporate governance, CSR, and management expertise as tax avoidance determinants. Further, tax research shows that tax avoidance relies on information transmission (Pomeranz, 2015). Social network research in relation to taxation shows the importance of central actors in influencing tax compliance through information transmission. As people tend to follow the social movement and be motivated by social norms (diGioacchino & Fichera, 2020), taxpayers tend to imitate (degl'Innocenti & Rablen, 2020). Given that, central actors' lead to collective behavior (Andrei et al., 2014; Hashimzade et al., 2014).

Hypotheses Development

Extant literatures show that director network results in better capital structure (Li et al., 2019), higher stock returns (Larcker et al., 2013), and firm performance (Wang et al., 2021). It may also lead to fraud practices (Jiang & Zhao, 2020) and poor firm performance (Andres et al., 2013). Bianchi et al. (2019) show that auditors' networks result in tax avoidance. Indonesian firms having directors with political connections (see Firmansyah et al., 2022; Rustiarini & Sudiartana, 2021) and military connections (Wahab et al., 2024) are found to be associated with tax avoidance.

Further, tax avoidance practices might be a result of influence from close directors (Brühne & Schanz, 2022). The interaction of social actors may lead to social contagion. Additionally, empirical research by degl'Innocenti & Rablen (2020) provides insight into the fact that taxpayers' decisions are based on their observations of their peers' behavior. Communication channels in the social structure determine how taxpayers behave with respect to tax decisions (Onu & Oats, 2016).

Compliance risk may arise when firms manage and carry out their firm's economic activities in different geographical areas (PWC, 2024; Deloitte, 2014). Tax sovereignty is different in each jurisdiction, and thus, it will influence the dynamic of the company's economic activities. Without the aim to avoid tax, companies can create chains in different geographics more for strategic reasons. However, the number of operational chains in different tax jurisdictions. Should deal with different tax systems (e.g., regulation, authority). Given that, the risk of complying with different rules may arise. The extent of tax avoidance may be influenced by taxpayers' preferences on tax risk (Christensen et al., 2015). Firms might refrain from avoiding tax when the tax risk level is high (Guenther et al., 2013; Dyreng et al., 2019) and, thus, may lead to unintended consequences (e.g., scrutiny). Directors play a crucial role in balancing tax avoidance with the level of tax risk (Beasley et al., 2021; Brühne & Schanz, 2022). Thus, the level of tax risk is important to be considered due to future uncertainties (Brühne & Schanz, 2022). Given that, we predict that the component of *ex-ante* tax risk (i.e., compliance risk), may moderate the association of director network and tax avoidance. Given the above argument, we conjecture the moderating role of compliance risk on tax avoidance. Accordingly, the following hypotheses is developed:

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

H1: Director network affect tax avoidance positively

H2: Compliance risk moderates the positive association of director network and tax avoidance

Research Method

As we reflect on our study's methodology on the epistemological basis of SNT, we quantify social relationships and look at the consequences of social networks. We proxy director network with centrality by applying social network analysis (SNA).

Data

We collect data from S&P Capital IQ Database. The samples are Indonesian publicly listed firms from the year 2017-2022. We take all firms to capture director ties in the multiple firms. Based on previous research guidelines (see Drake et al., 2019; Dyreng et al., 2010), we less out financial firms, missing values, and firms with negative tax income. All missing values are deleted to create a balanced panel. Starting off with 5,004 (6 years, 834 firms) firm-year observations, we finally came up with 1,848 (6 years, 308 firms) firm-year observation.

Table 1: Variable Measurements

Variables	Proxy	Notes	Formula	Scholars
Director Network	Degree Centrality	To measure well-connected node	DEGREEi = $\sum_{i \neq t} X$it	Miranda et al., 2018
	Eigenvector Centrality	To measure influential node	λ.EIGENVALUE = E. EIGENVECTOR	Miranda et al., 2018
Tax Avoidance	Long-Run Tax Avoidance	To measure long-terms tax avoidance	$TAXAV_i = \frac{\sum_{t=1}^{N} \text{Cash Tax Paid}}{\sum_{t=1}^{N} (\text{Pre-tax income it-Special Item it})}$	Dyreng and Maydew, 2008
Compliance Risk	Compliance Tax Risk	To measure tax risk specifically in terms of compliance	The total value of compliance risk (refer to table 2)	Neuman et al., 2020
Control Variables	Firm Characteristics	All control variables based on previous research deemed as determinant of tax avoidance	PERFORMANCE; ASSET; CAPITAL INTENSITY; LEVERAGE; NET OPERATING LOSS; RND; INTANGIBLE ASSET; TAX VOLATILITY	Dyreng et al., 2017; Hasan et al., 2022; Hsieh et al., 2018; Thomsen & Watrin, 2018; Guenther et al., 2019; Drake et al., 2019

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Table 2: Compliance Risk Component

COOMPLIANCE RISK COMPONENT	FORMULA
CR_GSG	Variables representing merger and acquisition activities. It is computed as industry-year quartile rank of cash paid for the acquisition of a company (IQ_CASH_ACQUIRE) divided by lagged total assets. The variable equals zero for firms that did not have mergers and acquisition.
CR_SIZ	Variable representing firm size. It is computed as industry-year quartile rank of the natural logarithm of assets (IQ_TOTAL_ASSET).
CR_DTL	Variable representing tax deferrals. It is computed as industry-year quartile rank of deferred tax liabilities (IQ_DEF_TAX_LIAB_CURRENT & IQ_DEF TAXLIAB_LT) divided by lagged total assets. The variable is zero for firms without tax deferrals.
COMPLY	Total compliance risk

Notes: IQ_ denotes codes that is extracted from S&P Global IQ database.

Baseline Model

To test the hypotheses, we employ this baseline model:

$$TAXAV = \beta0 + \beta1CENTRALITY_{it} + \beta2COMPLY_{it} + \beta3CENTRALITY*COMPLY + \beta4RATEVOL_{it} + \beta5CASHVOL_{it} + \beta6PERFORM_{it} + \beta7CAPITALINTEN_{it} + \beta8LEVERAGE_{it} + \beta9NOL_{it} + \beta10RND_{it} + \beta11SGNA_{it} + \beta12INTANGIBLE_{it} + \beta13ASSET_{it} + Year\ FE_{it} + \varepsilon_{it}$$

The model will be regressed separately based on the centrality types, which are EIGENVECTOR and DEGREE. The sign of * indicates interaction between independent variables to serve as moderating variables (e.g., CENTRALITY*COMPLY). We employ the ordinary least square (OLS) model with fixed effect regression controlling year effects. The baseline model will be regressed in two separate parts, as the centrality value consists of EIGENVECTOR centrality and DEGREE centrality.

Analysis and Discussion

Diagnostic Test

We perform natural logarithmic transformation for firm-specific variables that have high values (ASSET, SGNA, CASHVOL). Other variables except TAXAV and dummy variables (e.g., NOL, RND, INTANGIBLE) are winsorized at 1 and 99 percent. We winsorize TAXAV to 1 if TAXAV is greater than 1 (see Brown and Drake, 2014). All of the transformation is done to mitigate the risk of normality.

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

The variance inflation factors have a value below 10 for all models. Hence, there is no serious risk of multicollinearity in all models. Calculation of the t-statistic in all models is conducted with White's robust standard errors to control the risk of heteroscedasticity and autocorrelation (Ibrahim & Arundina, 2022). In addition, based on the Hausman specification test, the fixed effect is the best specification ($p < 0.05$).

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Table 3: Diagnostic Test

Model	Saphiro-wilk	Breusch–Pagan/Cook–Weisberg	Run-test random order	Variance Inflation Factor test
EIGENVECTOR	$p < 0.05$	$p < 0.05$	$p < 0.05$	3.34
DEGREE	$p < 0.05$	$p < 0.05$	$p < 0.05$	3.51

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Summary Of Statistic

Most of the variables (TABLE 4) show a high degree of variability. The remaining has a similar value and lower value compared to the standard deviation. The mean of TAXAV is 22, suggesting that the average Indonesian multinational firms pay below Indonesia's statutory tax rate (25%). The findings in Pearson correlation (Table 5) show that the correlation is below 0.8, supporting the diagnostic test (TABLE 3) that there is no serious issue of multicollinearity.

Table 4: Summary Of Statistics

Descriptive Statistics	N	Mean	Std. Dev	Min	Max
Dependent Variables					
TAXAV	1,848	0.22	0.23	0	1
Independent Variables					
EIGENVECTOR	1,848	0.07	0.11	0	1
DEGREE	1,848	5.33	3.43	0	17
COMPLY	1,848	6.65	1.38	5	10
Control Variables					
RATEVOL	1,848	0.06	0.29	0	5.43
CASHVOL	1,848	7.10	4.32	-5.99	15.35
PERFORM	1,848	5.84	9.19	-68.0	157.3
CAPITALINTEN	1,848	0.32	0.26	0	0.99
LEVERAGE	1,848	0.19	0.23	0	3.93
NOL	1,848	0.10	0.31	0	1
RND	1,848	0.01	0.10	0	1
SGNA	1,848	9.93	4.69	0	16.77
INTANGIBLE	1,848	0.29	0.45	0	1
ASSET	1,848	11.99	5.50	0	19.82

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Table 5: Pearson Correlation

Panel A: Pearson Correlation (n = 1,848, EIGENVECTOR)

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	TAXAV	1.000												
2	EIGENVECTOR	0.172*	1.000											
3	COMPLY	0.294*	0.514*	1.000										
4	RATEVOL	0.329*	0.017	0.064*	1.000									
5	CASHVOL	0.532*	0.416*	0.722*	0.112*	1.000								
6	PERFORM	0.026	0.057	0.168*	0.009	0.328*	1.000							
7	CAPITALINTEN	0.102*	0.118*	0.345*	0.068*	0.249*	0.075*	1.0000						
8	LEVERAGE	0.131*	0.028*	0.199*	0.028	0.105*	-0.052*	0.385*	1.0000					
9	NOL	0.111*	0.363*	0.330*	0.024	0.236*	-0.026	0.119*	0.137*	1.0000				
10	RND	0.058*	0.029	0.033	-0.000	0.070*	-0.029	-0.046*	-0.069*	0.014	1.0000			
11	SGNA	0.364*	0.371*	0.754*	0.049*	0.731*	0.243	0.449*	0.289*	0.245*	0.079*	1.0000		
12	INTANGIBLE	0.142*	0.122*	0.227*	0.008	0.244*	0.005	0.013*	0.014	0.047*	0.094*	0.331*	1.0000	
13	ASSET	0.357*	0.350*	0.746*	0.051*	0.712*	0.229	0.511*	0.329*	0.239*	0.062*	0.675*	0.302*	1.000

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Panel B: Pearson Correlation (n = 1,848, DEGREE)

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	TAXAV	1.000												
2	DEGREE	0.246*	1.000											
3	COMPLY	0.294*	0.575*	1.000										
4	RATEVOL	0.329*	0.065*	0.064*	1.000									
5	CASHVOL	0.532*	0.566*	0.722*	0.112*	1.000								
6	PERFORM	0.026	0.117*	0.168*	0.009	0.328*	1.000							
7	CAPITALINTEN	0.102*	0.165*	0.345*	0.068*	0.249*	0.075*	1.0000						
8	LEVERAGE	0.131*	-0.010*	0.199*	0.028	0.105*	-0.052*	0.385*	1.0000					
9	NOL	0.111*	0.310*	0.330*	0.024	0.236*	-0.026	0.119*	0.137*	1.0000				
10	RND	0.058*	0.095*	0.033	-0.000	0.070*	-0.029	-0.046*	-0.069*	0.014	1.0000			
11	SGNA	0.364*	0.495*	0.754*	0.049*	0.731*	0.243	0.449*	0.289*	0.245*	0.079*	1.0000		
12	INTANGIBLE	0.142*	0.185*	0.227*	0.008	0.244*	0.005	0.013*	0.014	0.047*	0.094*	0.331*	1.0000	
13	ASSET	0.357*	0.463*	0.746*	0.051*	0.712*	0.229	0.511*	0.329*	0.239*	0.062*	0.675*	0.302*	1.000

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Result and Discussion

Director Network And Tax Avoidance

The negative signs of centrality, EIGENVECTOR, and DEGREE show an inverse relationship with TAXAV. Both of the coefficients are statistically significant at 5% and 1% subsequently. Lower TAXAV denotes lower tax payment. With a standard deviation of EIGENVECTOR of 0.11 (table 4), the coefficient of TAXAV (-0.48) represents 22.9% [(0.48/0.23) x0.11] decrease in TAXAV for an increase of one standard deviation in EIGENVECTOR. Alternatively, with a standard deviation of DEGREE of 3.43, the coefficient of TAXAV (-0.01) represents 14.9% [(0.01/0.23) x3.43] decrease in TAXAV for an increase of one standard deviation in DEGREE. The finding is consistent with our conjecture that director networks affect tax avoidance positively.

The result highlights the importance of well-connected and influential directors in a firm's tax avoidance. The employment of the centrality concept in this study extends the existing literature (Firmansyah et al., 2022; Rustiarini & Sudiartana, 2021; Wahab et al., 2024) that investigates the role of director ties in Indonesian firms. Given that, we provide evidence that the spillover of tax avoidance information may not only limited to specific context ties (i.e., tax-context, political). Further, we offer insight into the debate of accounting for social learning. This study shows that a firm social network through the director centrality supports the social interaction that allows knowledge transfer in terms of tax compliance issues (Alstadsæter et al., 2019; Sandmo, 2005). It is worth noting that peers may influence tax-related decisions. This result conforms to the SNT that information spillover might be contagious upon certain behaviors (Borgatti & Foster, 2003).

Compliance Risk Moderating Role

TABLE 6 shows a positive sign on the interaction of both EIGENVECTORxCOMPLY and DEGREExCOMPLY, which both are statistically significant at 1% and 0.1% subsequently. The coefficient of $\beta 3 = 0.07$ implies that a 7% increase in the joint effect of eigenvector centrality and compliance risk, the higher value of TAXAV. The coefficient of $\beta 3 = 0.001$ implies a 0.1% increase in the joint effect of eigenvector centrality and compliance risk, the higher value of TAXAV. An increase in TAXAV indicates lower tax avoidance. Overall, the finding reveals that the positive association of director networks and tax avoidance is less effective when compliance risk is high. It suggests that compliance risks prevent firms from engaging in tax avoidance.

Our finding supports the idea that director consideration of tax risk may affect corporate tax decision-making (Brühne & Schanz, 2022). Our finding contributes to the debate on tax risk, specifically on *ex-ante* tax risk. Compliance risk may result in certain obstacles, such as fines imposed by tax authorities and close scrutiny (Agarwal et al., 2021). Thus, such activities with compliance risk may restrain tax avoidance. Our finding supports the idea that uncertain tax positions may impede tax avoidance practices (Dyreng et al., 2019). Finally, we extend the work of Drake et al. (2019) and Guedrib & Marouani (2023) that avoiding tax is dependent upon risk.

Advanced International Journal of Banking, Accounting, and Finance
EISSN: 2682-8537
AIJBAF
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Table 4. Baseline Results

Dependent variable: TAXAV		
	(1)	**(2)**
Intercept	0.16	0.12
	(3,48) ***	(4.10) ***
EIGENVECTOR	-0.48	-
	(-2.13) *	
DEGREE	-	-0.01
		(-2,86) **
COMPLY	-0.02	-0.01
	(-3.14) **	(-3.01) **
EIGENVECTORxCOMPLY	0.07	-
	(3.19) **	
DEGREEXCOMPLY	-	0.00
		(1.90) *
RATEVOL	0.11	0.03
	(4.48) ***	(4.76) ***
CASHVOL	0.02	0.02
	(9.01) ***	(21.93) ***
PERFORM	-0.00	-0.00
	(-4.15) ***	(-8.62) ***
CAPITALINTEN	0.09	0.05
	(1.72)	(3.27) ***
LEVERAGE	0.08	0.03
	(2.10) *	(2.80) **
NOL	0.01	0.00
	(0.77)	(0.84)
RND	0.14	0.02
	(0.33)	(0.47)
SGNA	0.00	0.00
	(0.95) *	(0.93)
INTAN	0.00	-0.00
	(0.32)	(-0.61)
LNASSET	-0.00	-0.00
	(-0.10)	(0.69)
Year FE	YES	YES
Observation	1,848	1,848
R^2	25.9%	35.6%
Adjusted R^2	25.4%	22.1%

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Conclusions And Implications

The source of information is imperative for a firm's decision-making in developing nations. The social network of directors may allow it (Biswas & Kumar, 2022). We use a deductive method to hypothesize the association between director networks and tax avoidance in Indonesian firms. We also consider compliance risk as tax avoidance is under the overarching banner of tax compliance. As previous research shows that information spilled between a social network of taxpayers might be influenced by compliance (see degl'Innocenti & Rablen, 2020), we hypothesize compliance tax risk as a moderating variable that might influence director network association with tax avoidance. Based on that, our results show that the director network in Indonesia allows well-connected and influential board members to share information on tax avoidance. Meanwhile, our results shows that firm's compliance risk may refrain firms from tax avoidance practices.

Evidently, tax avoidance has contributed to significant losses in middle-income countries such as Indonesia (Cobham & Jansky, 2018; Tax Justice Network, 2020). The ongoing revision of the tax avoidance policy since 2008 reflects Indonesia's commitment to reducing the adverse effects of tax compliance issues. Given that, our significant finding has policy implications and suggests policy improvement. Our findings suggest that to understand firm's tax avoidance, it is important to watch over the social network of the directors because those directors who are in the central position, being well-connected and influential, have access to more information and the power to spill.

Acknowledgement

This article is one of the outputs of the first author's PhD thesis at Universiti Malaya. The author acknowledges the support provided by Universiti Malaya in facilitating the research process. The author would like to express gratitude to the reviewers for providing guidance to improve the paper.

References

Agarwal, A., Chen, S., & Mills, L. (2021). *Entity Structure and Taxes: An Analysis of Embedded Pass-Through Entities*. https://doi.org/10.2308/TAR-2019-0498

Alstadsæter, A., Kopczuk, W., & Telle, K. (2019). Social networks and tax avoidance: evidence from a well-defined Norwegian tax shelter. *International Tax and Public Finance*, *26*(6), 1291–1328. https://doi.org/10.1007/s10797-019-09568-3

Andres, C., Van den Bongard, I., & Lehmann, M. (2013). Is busy really busy? Board governance revisited. *Journal of Business Finance and Accounting*, *40*(9–10), 1221–1246. https://doi.org/10.1111/jbfa.12051

Anesa, M., Gillespie, N., Spee, A. P., & Sadiq, K. (2019). The legitimation of corporate tax minimization. Accounting, Organizations and Society, 75, 17–39. https://doi.org/10.1016/j.aos.2018.10.004

Beasley, M. S., Goldman, N. C., Lewellen, C. M., & McAllister, M. (2021). Board risk oversight and corporate tax-planning practices. Journal of Management Accounting Research, 33(1), 7–32. https://doi.org/10.2308/JMAR-19-056

Bianchi, P. A., Falsetta, D., Minutti-Meza, M., & Weisbrod, E. (2019). Joint audit engagements and client tax avoidance: evidence from the italian statutory audit regime. *Journal of the American Taxation Association*, *41*(1), 31–58. https://doi.org/10.2308/atax-52151

Biswas, S., & Kumar, R. (2022). Bank board network and financial stability in emerging markets. *Emerging Markets Review*. https://doi.org/10.1016/j.ememar.2022.100884

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Bonacich, P. (1972). Factoring and weighting approaches to status scores and clique identification. *The Journal of Mathematical Sociology*, 2(1), 113–120. https://doi.org/10.1080/0022250X.1972.9989806

Borgatti, S. P., & Foster, P. C. (2003). The network paradigm in organizational research: A review and typology. *Journal of Management*, *29*(6), 991–1013. https://doi.org/10.1016/S0149-2063(03)00087-4

Borgatti, S. P., Johnson, J. C., & Everett, M. G. (2018). *Analyzing Social Networks*. Sage Publication.

Borgatti, S. P., Mehra, A., Brass, D. J., & Labianca, G. (2009). Network Analysis in the Social Sciences. *Sciences*, Vol 323, Issue 5916. https://doi.org/10.1126/science.1165821

Brown, J. L., & Drake, K. D. (2014). Network ties among low-tax firms. *Accounting Review*, *89*(2), 483–510. https://doi.org/10.2308/accr-50648

Brühne, A. I., & Schanz, D. (2022). Defining and Managing Corporate Tax Risk: Perceptions of Tax Risk Experts*. *Contemporary Accounting Research*, *39*(4), 2861–2902. https://doi.org/10.1111/1911-3846.12785

Chen, Z., Hope, O. K., Li, Q., & Li, Y. (2024). Offshore activities and corporate tax avoidance. *Journal of Corporate Finance*, 85. https://doi.org/10.1016/j.jcorpfin.2023.102536

Christensen, D. M., Dhaliwal, D. S., Boivie, S., & Graffin, S. D. (2015). Top management conservatism and corporate risk strategies: Evidence from managers' personal political orientation and corporate tax avoidance. *Strategic Management Journal*, *36*(12), 1918–1938. https://doi.org/10.1002/smj.2313

Cobham, A., & Janský, P. (2018), Global distribution of revenue loss from corporate tax avoidance: re-estimation and country results. *Journal of International Development*, 30(2), 206–232. https://doi.org/10.1002/jid.3348

degl'Innocenti, D. G., & Rablen, M. D. (2020). Tax evasion on a social network. *Journal of Economic Behavior and Organization*, *169*, 79–91. https://doi.org/10.1016/j.jebo.2019.11.001

Deloitte. (2014). *Risk transformation and tax Securing the benefits of enhanced tax-risk management*. https://www2.deloitte.com/content/dam/Deloitte/ie/Documents/Tax/2015-deloitte-ireland-risk-transformation and-tax-deloitte-ireland.pdf, accessed June 2016.

Drake, K. D., Lusch, S. J., & Stekelberg, J. (2019). Does Tax Risk Affect Investor Valuation of Tax Avoidance? *Journal of Accounting, Auditing and Finance*, *34*(1), 151–176. https://doi.org/10.1177/0148558X17692674

Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2010). The effects of executives on corporate tax avoidance. *The Accounting Review*, *85*(4), 1163–1189. https://doi.org/10.2308/accr.2010.85.4.1163

Dyreng, S. D., Hanlon, M., Maydew, E. L., & Thornock, J. R. (2017). Changes in corporate effective tax rates over the past 25 years. *Journal of Financial Economics*, *124*(3), 441–463. https://doi.org/10.1016/j.jfineco.2017.04.001

Dyreng, S., & Maydew, E. L. (2008). Long-Run Corporate Tax Avoidance. *The Accounting Review*, *83*(1), 61–82. https://doi.org/10.2308/accr.2008.83.1.61

Firmansyah, A., Wahyudi, F., & Falbo, T. D. (2022). The Role of Corporate Governance and Tax Risk in Indonesia Investor Response to Tax Avoidance and Tax Aggressiveness. JURNAL RISET AKUNTANSI TERPADU, 15(1), 11–27. https://dx.doi.org/10.35448/jrat.v15i1.14033

Freeman, L. C. (1978). Centrality in Social Networks Conceptual Clarification. *Social Network,* 1(3), 215-239. https://doi.org/10.1016/0378-8733(78)90021-7

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

Fuest, C., Hugger, F., & Neumeier, F. (2022). Corporate profit shifting and the role of tax havens: Evidence from German country-by-country reporting data. *Journal of Economic Behavior and Organization*, 194, 454–477. https://doi.org/10.1016/j.jebo.2021.11.016

Guedrib, M., & Marouani, G. (2023). The interactive impact of tax avoidance and tax risk on the firm value: new evidence in the Tunisian context. *Asian Review of Accounting*, 31(2), 203–226. https://doi.org/10.1108/ARA-03-2022-0052

Guenther, D. A., Wilson, R. J., & Wu, K. (2019). Tax uncertainty and incremental tax avoidance. *The Accounting Review*, *94*(2), 229–247. https://doi.org/10.2308/accr-52194

Hanlon, M., & Heitzman, S. (2010). A review of tax research. In *Journal of Accounting and Economics* (Vol. 50, Issues 2–3, pp. 127–178). https://doi.org/10.1016/j.jacceco.2010.09.002

Hasan, I., Kim, I., Teng, H., & Wu, Q. (2022). The effect of foreign institutional ownership on corporate tax avoidance: International evidence. *Journal of International Accounting, Auditing and Taxation*, *46 (100440)*. https://doi.org/10.1016/j.intaccaudtax.2021.100440

Jiang, Y., & Zhao, Y. (2020). Financial fraud contagion through board interlocks: the contingency of status. *Management Decision*, *58*(2), 280–294. https://doi.org/10.1108/MD-12-2018-1355

Larcker, D. F., So, E. C., & Wang, C. C. Y. (2013). Boardroom centrality and firm performance. *Journal of Accounting and Economics*, 55(2–3), 225–250. https://doi.org/10.1016/j.jacceco.2013.01.006

Liao, Y. H., Sang, T. S., & Tsai, Y. T. (2022). Do information sources matter in corporate tax avoidance? The roles of peer effects and director interlocks. *Review of Quantitative Finance and Accounting*, *59*(1), 339–382. https://doi.org/10.1007/s11156-022-01042-2

Li, D., Jiang, Q., & Mai, Y. (2019). Board interlocks and capital structure dynamics: evidence from China. *Accounting and Finance*, *59*(S2), 1893–1922. https://doi.org/10.1111/acfi.12531

Lismont, J., Cardinaels, E., Bruynseels, L., De Groote, S., Baesens, B., Lemahieu, W., & Vanthienen, J. (2018). Predicting tax avoidance by means of social network analytics. *Decision Support Systems*, *108*, 13–24. https://doi.org/10.1016/j.dss.2018.02.001

Mardan, M. & Stimmelmayr, M. (2020). Tax competition between developed, emerging, and developing countries – Same same but different? *Journal of Development Economics* 146 (102491)

Miranda-Lopez, J., Orlova, S., & Sun, L. (2019). CEO network centrality and corporate cash holdings. *Review of Quantitative Finance and Accounting*, *53*(4), 967–1003. https://doi.org/10.1007/s11156-018-0772-z

Neuman, S. S., Omer, T. C., & Schmidt, A. P. (2020). Assessing Tax Risk: Practitioner Perspectives. *Contemporary Accounting Research*, *37*(3), 1788–1827. https://doi.org/10.1111/1911-3846.12556

Nezami, M., Chisam, N., Robert., & Palmatier, W. (2024). Network centrality and firm performance: A meta-analysis. *Journal of the Academy of Marketing Science*, 53, 79–104 https://doi.org/10.1007/s11747-024-01043-8

OECD. (2023). *Tax-to-GDP ratio Revenue Statistics in Asia and the Pacific 2023 ─ Indonesia Range Asia and Pacific Indonesia*.

Advanced International Journal of Banking, Accounting, and Finance
AIJBAF
EISSN: 2682-8537
Volume 7 Issue 22 (June 2025) PP. 41-57
DOI 10.35631/AIJBAF.722003

https://www.oecd.org/content/dam/oecd/en/topics/policy-sub-issues/global-tax-revenues/revenue-statistics-asia-and-pacific-indonesia.pdf

Omer, T. C., Shelley, M. K., & Tice, F. M. (2019). Do director networks matter for financial reporting quality? Evidence from audit committee connectedness and restatements. *Management Science*, *66*(8), 3361–3388. https://doi.org/10.1287/mnsc.2019.3331

Onu, D., & Oats, L. (2016). "Paying tax is part of life": Social norms and social influence in tax communications. *Journal of Economic Behavior and Organization*, *124*, 29–42. https://doi.org/10.1016/j.jebo.2015.11.017

Pomeranz, D., (2014). No Taxation without Information Deterrence and Self-Enforcement in the Value Added Tax. *American Economic Review,* 105, (8), 2539–69

PWC. (2004). *Tax Risk Management*. http://www.pwc.com/en_CA/ca/tax-memo/publications/pwc-cra-risk-assessment-2012 02-06-en.pdf, accessed November 2013.

Rustiarini, N. W., & Sudiartana, I. M. (2021). Board Political Connection and Tax Avoidance: Ownership Structure as A Moderating Variable. *Jurnal Dinamika Akuntansi Dan Bisnis*, *8*(2), 128–144. https://doi.org/10.24815/jdab.v8i2.20760

Sandmo, A. (2005). The Theory of Tax Evasion: A Retrospective View. *National Tax Journal*, 58, 643-663. https://doi.org/10.17310/ntj.2005.4.02

Sismanyudi, D., & Firmansyah, A. (2022). Corporate strategies and tax avoidance: Does corporate social responsibility matter? *Jurnal Ekonomi Dan Bisnis*, *25*(Oktober), 337–364. https://doi.org/10.24914/jeb.v25i2.5413

Thomsen, M., & Watrin, C. (2018). Tax avoidance over time: A comparison of European and U.S. firms. *Journal of International Accounting, Auditing and Taxation*, *33*. https://doi.org/10.1016/j.intaccaudtax.2018.11.002

Wahab, E. A. A., Wardani, D. A. K., Harymawan, I., & Nasih, M. (2024). Military connections, corporate governance and corporate tax avoidance. *Pacific Accounting Review*. https://doi.org/10.1108/PAR-03-2023-0033

Wang, W. K., Lu, W. M., Kweh, Q. L., Nourani, M., & Hong, R. S. (2021). Interlocking directorates and dynamic corporate performance: the roles of centrality, structural holes and number of connections in social networks. *Review of Managerial Science*, *15*(2), 437–457. https://doi.org/10.1007/s11846-019-00347-2