



TUNNELLING BEHAVIOR: EXPLORING CORPORATE GOVERNANCE AND OWNERSHIP STRUCTURE

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Abstract

This study examines how ownership structure and corporate governance quality affect tunneling behavior in Indonesia, with a focus on the moderating role of the number of subsidiaries. Quantitative research techniques and secondary data from the Indonesia Stock Exchange, business websites, and pertinent periodicals were used in the study. From 2016 to 2019, 474 observations from listed companies on the IDX—excluding non-financial firms—made up the sample. STATA 14.2 software was used to perform statistical studies, such as Pearson Correlation, OLS Regression, and Moderated Regression. The findings show that tunneling behavior is positively impacted by managerial ownership, government ownership, and corporate governance quality, but negatively by domestic ownership. However, tunnelling behavior is not much impacted by foreign ownership. While domestic ownership has a negative impact. Foreign ownership, on the other hand, does not significantly affect tunnelling behaviour. Notably, the number of subsidiaries strengthens the relationship between corporate governance quality and tunnelling behaviour.

Keywords: Corporate governance quality; ownership structure; tunnelling behaviour; subsidiaries.

Abstrak

Penelitian ini menguji bagaimana struktur kepemilikan dan kualitas tata kelola perusahaan mempengaruhi perilaku tunneling di Indonesia, dengan fokus pada peran moderasi jumlah anak perusahaan. Teknik penelitian kuantitatif dan data sekunder dari Bursa Efek Indonesia, situs web bisnis, dan majalah terkait digunakan dalam penelitian ini. Dari tahun 2016 hingga 2019, 474 observasi dari perusahaan yang terdaftar di BEI - tidak termasuk perusahaan non-keuangan - menjadi sampel penelitian. Perangkat lunak STATA 14.2 digunakan untuk melakukan studi statistik, seperti Korelasi Pearson, Regresi OLS, dan Regresi Termoderasi. Temuan menunjukkan bahwa perilaku tunneling dipengaruhi secara positif oleh kepemilikan manajerial, kepemilikan pemerintah, dan kualitas tata kelola perusahaan, tetapi secara negatif oleh kepemilikan domestik. Namun, perilaku tunneling tidak banyak dipengaruhi oleh kepemilikan asing, sedangkan kepemilikan domestik memiliki dampak negatif. Kepemilikan asing, di sisi lain, tidak secara signifikan mempengaruhi perilaku tunnelling. Khususnya, jumlah anak perusahaan memperkuat hubungan antara kualitas tata kelola perusahaan dan perilaku tunnelling.

Kata kunci: Kualitas tata kelola perusahaan; struktur kepemilikan; perilaku tunnelling; anak perusahaan.

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1. Introduction

The primary factor to consider while setting up a company is the inclusion of proprietors within the organizational framework. (Hardana, A., 2022). The owners or shareholders significantly influence the company's sustainability by providing resources for its business activities. (Atasnassoy J & Mandell A, 2018). Shareholders' influence can be broadly categorized into dispersed and concentrated ownership structures. (Hardana, A., 2022). The main difference between these forms lies in the decision-making process. (Babar, M. & Habib A, 2021). Within a concentrated ownership setup, dominant shareholders possess the authority to appoint management who will act in alignment with their interests, while other shareholders have limited authority in selecting management. (Babar, M. & Habib A, 2021).

Consequently, controlling shareholders appear to be part of the company's management, leading to conflicts where they may engage in expropriation or increase their welfare above non-controlling shareholders through company transactions. (Hardana, A., 2024). Furthermore, (Hardana, A., 2022).reveals that when controlling shareholders have power over other shareholders, they use it to influence corporate decisions in their favour. Decisions made by controlling shareholders are typically aimed at obtaining special benefits from the policy control they have acquired, as expressed by. (Hasibuan et al., 2022). Two possible ways controlling shareholders can gain special benefits from policy control are through operational policies and contractual policies with other parties. (Utami et al., 2023).

Contractual policies with other parties involve transactions conducted by the company with external or related parties. (Lismawati., 2023). The control and significant influence of controlling shareholders enable them to establish policies that benefit themselves, increasing the risk of tunneling. (Hardana, A., 2022). Tunnelling behaviour denotes the actions conducted by majority shareholders involving the transfer of assets and withdrawal of profits from the company through dealings with affiliated parties. (Hardana, A., 2022).This explanation is also supported by (Batubara et al., 2024), who assert that transactions with affiliated parties are frequently utilized with the intention of tunnelling. Controlling shareholders tend to create policies that aim to transfer excess resources rather than distribute them as dividends. (Hardana, A., 2022). The group ownership structure in Indonesia increases the potential for tunnelling, as companies are more likely to engage in transactions with related parties. Furthermore, the weak regulations regarding the protection of minority shareholders in developing countries like Indonesia encourage companies to conduct transactions with multiple parties, which also have the potential for tunneling. (Hardana, A., 2023).

The studies by [25,46] provide empirical evidence of tunnelling behaviour exhibited by companies, such as transfer pricing practices, intra-company borrowing and lending,

and direct fraud and theft. (Hardana, A., 2022) classify transactions that can expropriate minority shareholders, encompassing asset acquisitions, asset disposals, equity transfers, trade arrangements, and monetary disbursements. (Mutiah et al., 2023).. After conducting further research, tunnelling through transactions with related parties among companies in China should be highlighted, particularly concerning the misuse of assets. [36] Also, it explains that merger and acquisition strategies have the potential for tunnelling.

Many researchers have conducted studies related to tunnelling behaviour and propping behaviour by controlling shareholders through transactions with related parties, including. (Hardana, A., 2022).. (Hardana, A., 2022) examine companies' motivations in engaging in transactions with related parties, often related to tunnelling. Companies benefit from such transactions, including lower transaction costs and increased firm value (Butar-Butar S, 2020). or shorter negotiation processes. (Hardana, A., 2022). However, (Hardana, A., 2022) also suggests that there may be intentions to engage in tunnelling or earnings management behind transactions with related parties.

Furthermore, research by (Hardana, A., 2023) demonstrates a connection between politically connected companies in Indonesia and transactions with related parties as a form of tunnelling, supported by (Hardana, A., 2022), also revealing the link between corporate governance structure and management policies, including policies related to transactions with related parties. (Hardana, A., 2024) their research shows that Indonesia has a predominantly group-based business structure and government ownership, making tunnelling practices highly likely. (Hardana, A., 2023) mention that 73% of companies in Indonesia belong to business groups.

More research is still needed on tunnelling behaviour with variables of corporate governance quality and firm ownership structure in Indonesian companies. (Halimah et al., 2023). Most existing studies are conducted outside of Indonesia but with similar corporate governance structures, such as the two-tier corporate board system, as seen in the research by (Hardana, A., 2022) in China, Germany, Japan, and the Netherlands. This motivates researchers to investigate tunnelling behaviour in Indonesia using a combination of variables, including corporate governance quality, ownership structure, the moderating variable of the number of subsidiaries owned by the company, and several other control variables.

2. Literature Review

2.1. Social Influence Theory

Social Influence Theory: Content created by other users is often viewed as more authentic and can influence others' decisions to participate in or visit a tourist attraction. UGC can serve as a form of social recommendation that shapes travelers' perceptions and

interests. Perception Formation Theory: UGC, especially in the form of photos, reviews or videos, contributes to the formation of travelers' perceptions of a particular destination, which in turn influences their intention to visit.

In 1941, two psychologists, Neil Miller and John Dollard in their experimental report said that imitation is the result of the learning process imitated from others. The learning process is called "social learning". Human imitation behavior occurs because humans feel they have gained extra when we imitate others, and get punished when we don't imitate them. According to Bandura, most human behavior is learned through imitation or the presentation of behavioral examples (modeling). In this case, parents and teachers play an important role as a model or figure for children to imitate reading behavior.

2.2. Theory of Planned Behavior

Theory of Planned Behavior (TPB): The intention to perform an action (such as travel) can be influenced by attitudes towards the action, subjective norms, and perceived behavioral control. In this context, UGC can influence travelers' attitudes and subjective norms towards tourist destinations.

The theory of planned behavior (TPB) is the initial source for the theory of reasoned action developed by Ajzen in 1980 to predict a person's behavioral intentions at a specific time and place (Ariyani & Ayu 2023). Theory of planned behavior is an extension of the theory of reasoned action (TRA) developed by Icek Ajzen and Martin Fisbein in 1980. Ajzen and Fisbein developed the theory of planned behavior by adding constructs that did not yet exist in the theory of reasoned action. In the theory of reasoned action, namely perceived behavioral control. behavioral control). The theory of planned behavior aims to predict and understand the impact of behavioral intentions, identify strategies to change behavior and explain real human behavior a behavior and explain real human behavior. The theory of planned behavior assumes that humans who are rational will use existing information systematically and then understand the impact of their behavior beforehand. information systematically and then understand the impact of their behavior before deciding to realize the behavior decide to realize the behavior. (Lismawati et al., 2023).

2.3. Stimulus-Organism-Response

S-O-R (Stimulus-Organism-Response) Model: In this model, user-generated content serves as an external stimulus that influences travelers' reactions or intentions (response) through internal processes (organism), such as emotions and attitudes. . (Utami et al., 2023).

This theory bases the assumption that the cause of behavior change depends on the quality of the stimulus that communicates with the organism. This means that the quality of the communication source (soerces) such as credibility, leadership, speaking

style greatly determine the success of changing the behavior of a person, group or society. The SOR theory (Stimulus, Organism, Response) is the communication process that causes a specific reaction, so that someone can expect and predict the can expect and estimate the suitability between the message and communicant's reaction. The elements in this model are the message (Stimulus), communicant (Organism), and effect (Response). . (Hardana et al., 2023).

Stimulus or message delivered to communicants may be accepted or may be rejected. Communication will take place if the communicant's attention. The next process the communicant understands. This communicator's ability to continue the next process After processing it and accepting it, then there is a willingness to change attitudes. change attitudes.

3. RESEARCH METHODS

3.1 Data Sources and Samples

This study relies on secondary data sources. The research utilizes time series data for the period from 202- to 2023. This period was chosen to incorporate the latest data and complement previous studies, which predominantly used data until 2015. As such, the objective of this study is to investigate potential variations in findings compared to previous research that explored comparable variables. Data for this study were sourced from audited annual reports of all companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023, excluding those in the financial sector. The data were accessed through the website www.idx.co.id and OSIRIS. Additionally, data related to variables not available from these sources were collected from the respective company websites, relevant journals, or through a Google search.

The population under study comprises all the companies listed on the Indonesia Stock Exchange (IDX) from 2020 to 2023, except those from the financial sector. This selection process led to a sample size of 474 entities from the entire population. The data used in this study are derived from the companies' annual reports, specifically in organizational structure, corporate governance, and financial statements published by the companies from 2020 to 2023 and audited. The researcher adopted a purposive sampling technique, which involves deliberately selecting samples based on predetermined criteria to include them in the study. The criteria include the absence of delisting for the selected companies and the availability of complete data regarding the variables under investigation.

3.2 Variable Measurement

Dependent Variable

Tunnelling behaviour refers to a company's conduct of transactions with related parties, which can be used to divert resources out of the company for the benefit of

majority shareholders. Therefore, there is a possibility of expropriation against minority shareholders. While not all transactions with related parties necessarily lead to expropriation, such transactions can serve as the primary means for companies to engage in tunneling. (Chatzopoulou et al., 2021). This study measures cash flow tunnelling behaviour, where companies engage in transactions with related parties related to cash payments or receivables to related parties. Following the research by (Siregar et al., 2022), the indicator used to measure tunnelling behaviour (TUNNEL) based on the ratio of receivables from related parties (OREC) is determined as follows:

$OREC = \text{related party receivables} / \text{total assets}$

The proportion of receivables to related parties can be used to reflect company transactions that conceal benefits for majority shareholders. For example, they may record the amounts owed to related entities or individuals in the "other receivables" category without proper disclosure, effectively hiding these transactions from minority shareholders or regulators. Therefore, the impact of receivables on related parties can be used to record fictitious receivables.

Independent Variable

Firm's Ownership Structure

This study divides ownership types (SHARE) in companies into four categories: managerial ownership, domestic ownership, foreign ownership, and government ownership. Following [47] categorization of ownership, this research makes several modifications to determine the measurements for each ownership type, thereby establishing these variables' general and specific relationships with the dependent variable. The measurement of ownership is done using dummy variables to determine the dummy effects of each ownership type on tunnelling behaviour in companies. The following are explanations of the four ownership types and their measurements in this study:

a. Managerial Ownership

Managerial ownership (SHARE) refers to the condition where the managers of a company also hold a portion of its shares. In this study, managerial ownership is measured by the company's presence or absence of management ownership using a dummy variable. The measurement is also conducted for the other three types of ownership. A dummy variable of 1 indicates the presence of managerial ownership in the company, and 0 indicates otherwise.

b. Domestic ownership

Domestic ownership (DSHARE) is defined as the participation of the public and general public through shareholding in a company. Individuals or entities hold the company's shares as part of their capital participation. Domestic ownership is measured by

assigning a dummy variable of 1 if there is domestic ownership in the company and 0 if otherwise.

c. Foreign ownership

Foreign ownership (FSHARE) is indicated by foreign institutional investors with capital participation in a domestic company. Like domestic ownership, foreign ownership reflects individual and foreign entity shareholders in a domestic company. A dummy variable represents the measurement of foreign ownership. The dummy variable is assigned a value of 1 if foreign ownership exists in the company and 0 if otherwise.

d. Government ownership

Government ownership (GSHARE) refers to the ownership of company shares by the government typically in state-owned enterprises that have gone public. Similar to the previous three types of ownership, government ownership is measured by assigning a dummy variable. The dummy variable is assigned a value of 1 if government ownership exists in the company and 0 if otherwise.

Corporate Governance Quality

Table 1. Construction of Corporate Governance Quality Index (CGQI)

Corporate Governance	Definition	Measurement
BOD size	Number of directors in the company	Dummy 1 if the number of directors in the company exceeds the average director in other companies in the year concerned, and dummy 0 otherwise
Independent director size	Number of independent directors in the company	Dummy 1 if the number of independent directors in the company exceeds the average of independent directors in other companies in the year concerned, and dummy 0 otherwise
BOC size	Number of commissioners in the company	Dummy 1 if the number of commissioners in the company exceeds the average commissioners in other companies in the year concerned, and dummy 0 otherwise
Independent commissioner size	Number of independent commissioners in the company	Dummy 1 if the number of independent commissioners in the company exceeds the average independent commissioners in other companies in the year concerned, and dummy 0 otherwise
Board meeting	Number of Board of Directors meetings in a year	Dummy 1 if the number of directors' meetings in the company exceeds the average of the directors' meetings in other companies in the year concerned, and dummy 0 otherwise
Ownership concentration	The percentage of ownership held by the highest shareholder in the company	Dummy 1 if the percentage of the highest shareholder in the company exceeds the average percentage of the highest shareholder in other companies in the year concerned, and dummy 0 otherwise
Managerial shareholding	Whether or not there is share ownership by company management	Dummy 1 if there is share ownership by company management, and dummy 0 otherwise
Audit Firm	Public Accounting Firm (KAP) that audits financial reports company	Dummy 1 if KAP includes BIG 4, and dummy 0 otherwise

The Organisation for Economic Cooperation and Development (OECD) has developed an assessment of good corporate governance using the Corporate Governance Quality Index (CGQI), which measures the quality of corporate governance mechanisms.

Several researchers have used various proxies as measures of corporate governance, such as audit committees and independent commissioners in the studies conducted by (Hardana, A., 2022), the number of board meetings (Hardana, A., 2022), board size (Hardana, A., 2022) and other related variables. However, measuring corporate governance using a single factor is considered less accurate in defining corporate governance. Therefore, following the study by (Hardana, A., 2022), a framework for the corporate governance quality index (CGQI) was developed in this research to measure the effectiveness of governance in the studied companies by averaging the weights of the components of corporate governance itself. Based on this research, Table 1 develops a similar definition with some modifications to obtain a CGQ Index value.

Companies with concentrated ownership can form a business group comprising a parent company and its subsidiaries. The parent company may have more subsidiaries, increasing the possibility of expropriation. In this study, the number of subsidiaries owned by a company is used as a moderating variable that weakens or strengthens the relationship between the independent variable, corporate governance quality, and the dependent variable, tunnelling behaviour. Therefore, the measurement of the number of subsidiaries (SUBS) is based on the research by (Hardana, A., 2022), where a dummy variable is assigned a value of 1 if the number of subsidiaries in a company is above the average number of subsidiaries in other companies, and a value of 0 otherwise.

3.3 Control Variable

Firm's Size (Hardana, A., 2022) defined firm size (SIZE) by looking at the total book value of the company's assets at the end of the year. Knowing the total assets can be used to assess the company's condition reflected in the asset position after the respective year has

passed. SIZE can be determined from the natural logarithm of the total company assets at the end of the year.

Firm's Age According to (Hardana, A., 2022), the longer a company has been established, the better its corporate governance tends to be, which can create more value for its shareholders. Therefore, based on that research, the firm age (AGE) measurement is determined by looking at the company's establishment year.

Audit Committee (Hardana, A., 2022) explained that the presence of an audit committee can assist the performance of the Board of Commissioners in their oversight function. This enables prompt follow-up and shortens the reporting chain in case of internal issues related to the company's business activities. Following [9], the measurement of the audit committee variable (ACOMM) is defined as a dummy variable, taking the value of 1 if an audit committee exists in the company and 0 otherwise.

Return on Asset (ROA)

This study uses one proxy for company profitability: return on assets (ROA). ROA measures a company's effectiveness in utilizing its assets to generate profit. In this study, ROA is used as a control variable, consistent with the explanation by (Hardana, A., 2022) that ROA can help investors and management assess how well a company converts its investments in company assets into profits. ROA can be calculated by dividing net income by the total book value of assets.

Research Model

To test the influence of a firm's ownership structure (SHARE) on a firm's tunnelling behaviour (TUNNEL) according to hypothesis 1, a multiple linear regression equation is formulated as follows:

$$TUNNEL = \alpha + \beta_1SHARE + \beta_2SUBS + \beta_3SIZE + \beta_4AGE + \beta_5ACOMM + \beta_6ROA + \varepsilon$$

To test the influence of corporate governance quality (CGQI) on a firm's tunnelling behaviour (TUNNEL) according to hypothesis 2, a multiple linear regression equation is formulated as follows:

$$TUNNEL = \alpha + \beta_1CGQI + \beta_2SUBS + \beta_3SIZE + \beta_4AGE + \beta_5ACOMM + \beta_6ROA + \varepsilon$$

To examine the moderating effect of the number of subsidiaries on the influence of corporate governance quality on a firm's tunnelling behaviour, an interaction between the corporate governance quality index (CGQI) and the number of subsidiaries (SUBS) is created as CGQI x SUBS. Hence, the multiple linear regression equation is formulated as follows:

$$TUNNEL = \alpha + \beta_1CGQI * SUBS + \beta_2CGQI + \beta_3SUBS + \beta_4SIZE + \beta_5AGE + \beta_6ACOMM + \beta_7ROA + \varepsilon$$

This study will conduct several analyses to test the hypotheses, including descriptive statistical analysis, Pearson correlation analysis, multiple linear regression analysis, and moderation regression analysis.

Table 2. Variable Definition

Variable	Definition
TUNNEL	tunnelling proxy in the form of a proportion of receivables from related parties
SHARE	dummy value of each type of ownership
CGQI	the value of the CGQ Index in the company in the year concerned
SUBS	dummy value of the company's subsidiaries
SIZE	natural logarithm of the company's total assets at the end of the year
AGE	natural logarithm of the company's age since the company was founded
ACOMM	dummy score of the audit committee
ROA	company profitability is calculated from net income divided by total assets

4. RESULT AND DISSCUSSION

4.1 Descriptive Statistics

This study utilizes descriptive statistical analysis of the variables used in the research. Descriptive statistics are presented in Table 3, which displays the minimum value, maximum value, mean value, and median value of the dependent variable tunnelling behaviour (TUNNEL), the independent variable firm's ownership structure (SHARE), and the variables corporate governance quality (CGQI), moderation variable number of subsidiaries (SUBS), as well as control variables return on asset (ROA), firm size (SIZE), firm age (AGE), and audit committee (ACOMM).

The variable tunnelling behaviour (TUNNEL) is a proxy for the proportion of related party receivables to total assets in the current year. The minimum value of 0 is observed for some companies that did not have related party receivables during the research year, such as PT Akbar Indo Makmur Stimec Tbk, PT Maming Enam Sembilan Mineral Tbk., PT Bhakti Agung Propertindo Tbk., PT Bumi Benowo Sukses Sejahtera Tbk., PT Berlian Laju Tanker Tbk, PT Cowell Development Tbk., PT Dewata Freightinternational Tbk., PT Surya Esa Perkasa Tbk., and several other companies listed in the tabulated data. The maximum value of 0.855 is observed for PT Adaro Energy Tbk. The average value of this variable is 0.040, while the median value is 0.007. A mean value of 0.040 means that the companies used in this research sample, on average, have a proportion of 4% of receivables to related parties compared to their total assets. This indicates that 4% of the total asset value of the companies can flow out for tunnelling behaviour purposes.

Based on the mean value of tunnelling behaviour (TUNNEL) in this research, which is 0.040, we compared tunnelling studies using similar proxies and found that there are not many differences in this tunnelling value when compared to other countries, such as China, India, Hong Kong, and even similar studies conducted in Indonesia. (Hardana, A., 2022) conducted research in China on the independent directors' monitoring effect on controlling shareholders' tunnelling behaviours. The study showed an average tunnelling value of 0.038. Meanwhile, research in India

conducted by [4] regarding the moderation effect of independent boards in the relationship between related party transactions and banks' financial performance showed an average related party transactions value of 0.03. Furthermore, research in Hong Kong conducted by (Hardana, A., 2022) on Capital-Market Liberalization and Controlling Shareholders' Tunneling showed an average tunnelling value of 0.0161. When compared to research in these three countries, the tunnelling value in this study is nearly similar, at 0.040, when compared to China (0.038), India (0.03), and Hong Kong (0.0161). We also compared it to a similar study in Indonesia by (Hardana, A., 2022) and found an average tunnelling value of 0.023.

The firm's ownership structure (SHARE) is categorized into four types: managerial ownership (MSHARE), domestic ownership (DSHARE), foreign ownership (FSHARE), and government ownership (GSHARE). Each of these variables is measured using dummy variables, with 1 indicating the presence of a particular type of ownership in a company and 0 indicating otherwise. Thus, the minimum value is 0, and maximum values are 1. Managerial ownership (MSHARE) has an average value of 0.726, indicating that 72.6% of the total sample in this study includes managerial ownership in the shareholders' composition of the company. Domestic ownership (DSHARE) has an average value of 0.970, suggesting that 97% of the overall sample includes domestic ownership in the shareholders' composition of the company. Foreign ownership (FSHARE) has an average value of 0.814, indicating that 81.4% of the total sample includes foreign ownership in the shareholders' composition of the company. Government ownership (GSHARE) has a relatively low average value of 0.032, indicating that only 3.2% of the total sample used has government ownership in the shareholders' composition of the company. Corporate governance quality is proxied by weighing its components, resulting in a corporate governance quality index (CGQI). This variable is measured using a dummy variable, as indicated in Table 3.1, with a minimum value of 0 and a maximum value of 1. The average value of this variable is 0.459, and the median value is 0.375. PT Surya Citra Media Tbk. has an index value of 1.00, indicating that it meets all the measurement components of corporate governance in this study.

The variable number of subsidiaries (SUBS) is measured by assigning a value of 1 if a company's number of subsidiaries is above the average number of subsidiaries of other companies and a value of 0 otherwise. Thus, the minimum value of the data is 0, and the maximum is 1. Based on the tabulated data, PT Medikaloka Hermina Tbk. has the highest number of subsidiaries, with 72, while some companies do not have subsidiaries. The average value obtained from this variable is 0.297.

Firm size (SIZE), as a proxy for company size, is measured by the natural logarithm of total assets. PT Indonesia Pondasi Raya Tbk holds a minimum value of 22.442. Moreover, PT Jakarta Kyoei Steel Works Tbk. has a maximum value of 32.308. The average value is 28.419, while the median value is 28.319, indicating a positive skewness in the data. The company's age is proxied by firm age (AGE), which looks at the year of establishment. The average value of the data is 30.703, while the median value is 31.

The minimum value is held by five companies with an AGE of 6 years, such as PT Anabatic Technologies Tbk., PT Red Planet Indonesia Tbk., PT Sejahtera Bintang Abadi Textile Tbk., PT Selamat Sempurna Tbk., and PT Sona Topas Tourism Industry Tbk., while the maximum value of 60 years is held by PT Waskita Karya (Persero) Tbk. and several other companies listed in the tabulated results. The return on asset (ROA) variable calculates the proportion of net profit to total assets in the current year. This study's average value obtained is 0.019, and the median value is 0.024. The minimum value is -0.802, held by PT Trikonsel Oke Tbk., while the maximum value is 0.832, held by PT Toba Pulp Lestari Tbk.

Table 3. Descriptive Statistics

	<u>Minimum</u>	<u>Maximum</u>	<u>Mean</u>	<u>Median</u>
TUNNEL	0.000	0.855	0.040	0.007
MSHARE	0.000	1.000	0.726	1.000
DSHARE	0.000	1.000	0.970	1.000

FSHARE	0.000	1.000	0.814	1.000
GSHARE	0.000	1.000	0.032	0.000
CGQI	0.000	1.000	0.459	0.375
SUBS	0.000	1.000	0.297	0.000
SIZE	22.442	32.308	28.419	28.319
AGE	6.000	60.000	30.703	31.000
ROA	-0.802	0.832	0.019	0.024
ACOMM	0.000	1.000	0.998	1.000

The audit committee (ACOMM) indicates the presence or absence of an audit committee within the company. ACOMM is measured using a dummy variable, with 1 indicating the presence of an audit committee and 0 indicating otherwise. Thus, the minimum value of the data is 0, and the maximum is 1. The average value shown in the table is 0.998, indicating that 99.8% of the total sample companies have an audit committee in their organizational structure.

Pearson Correlation

This study uses Pearson correlation analysis to examine the direction and strength of the relationship between two variables. The results of the Pearson correlation analysis are presented in Table 4, where asterisks (*) indicate the significance level for each coefficient of a variable. The addition of more asterisks indicates a stronger relationship between the two variables. A positive sign indicates a positive relationship, while a negative sign indicates an inverse relationship between the two variables. In the table below, the variables government ownership (GSHARE), firm size (SIZE), and audit committee (ACOMM) are found to be significantly related to the dependent variable in this study, which is tunnelling behaviour (TUNNEL). In contrast, the remaining variables do not show a significant relationship with the dependent variable. The relationships differ among a firm's ownership structure variables. At a significance level of 5%, managerial ownership (MSHARE) is associated with foreign ownership (FSHARE) and government ownership (GSHARE). At the same time, the remaining variables do not have a significant relationship with this variable. At a significance level of 1%, domestic ownership (DSHARE) is significantly related to foreign ownership

(FSHARE), firm size (SIZE), firm age (AGE), and audit committee (ACOMM). Additionally, the variable number of subsidiaries (SUBS) has a significant negative relationship with this variable. Foreign ownership (FSHARE) is associated with government ownership (GSHARE) with a coefficient of 0.086, suggesting that government capital participation in a company is supported by increased capital participation from individual and institutional investors. It also indicates that the government can be seen as a pioneer in attracting foreign investment into the shareholder composition of Indonesian companies. Another significant positive relationship, with a coefficient of 0.120 at a significance level of 1%, is shown between government ownership (GSHARE) and firm age (AGE), suggesting that the longer a company exists, the higher the tendency for it to be owned by the government.

5. Conclusions And Sugeestions / Recommendations

5.1 Conclusions

In conclusion, this research has revealed valuable insights into the relationship between ownership structure, corporate governance quality, and tunnelling behaviour. Managerial and government ownership contribute to tunnelling behaviour, while domestic ownership is a deterrent. The constructed measure of corporate governance quality positively influences tunnelling behaviour, indicating the importance of managerial share ownership and the special relationship between managers and controlling shareholders in facilitating such actions. Based on the analysis of the average tunnelling values when compared to other countries, the differences in tunnelling values are primarily attributed to the number of research samples used, both in the observation year and the number of companies included. Variations in the corporate sector and industry can also lead to differences in average tunnelling values. For instance, companies in the real estate and infrastructure sectors may be more vulnerable than other sectors. Furthermore, factors influencing tunnelling behaviour can also be observed from the shareholder structure. This is because, in certain industries, management may hold shares in the company where they work, which may have

different structures or characteristics from those in other countries. Lastly, it relates to corporate governance systems. Each country has different regulations regarding governance in various industries. One country may have higher prevention mechanisms against tunnelling than another.

A higher number of subsidiaries does not weaken the impact of corporate governance quality on tunnelling behaviour, suggesting that this variable does not moderate the relationship. However, it is essential to acknowledge the study's limitations, particularly related to data sources and measurements. Using secondary data sources led to some data incompleteness and unavailability, necessitating adjustments and caution in data interpretation. The diverse measurement approaches for tunnelling behaviour proxies and corporate governance components introduced subjectivity into the analysis.

5.2 Recommendations

For company investors, this research serves as a valuable resource for assessing the effectiveness of corporate governance mechanisms in mitigating the risk of expropriation, specifically tunnelling behaviour. It is recommended that investors consider these findings as part of their decision-making process and re-evaluate the governance structure of potential investments. Future researchers are encouraged to refine the measurement approaches utilized in this study, including developing a more comprehensive Corporate Governance Quality Index (CGQ Index) encompassing a more comprehensive range of governance components. Additionally, incorporating alternative measures of tunnelling behaviour and exploring different variables that could moderate the relationship would enrich future studies in this field. By addressing these recommendations, scholars can further enhance our understanding of the intricate dynamics between ownership structure, corporate governance quality, and tunnelling behaviour.

For regulators, in Indonesia, regulations related to protecting minority shareholders are already stipulated in Article 100 of Law No. 8 of 1995 on the Capital Market. However, in practice, it is ineffective. As a result, the implications of this research aim to enhance the effectiveness of these regulations. This includes the establishment of mechanisms for whistleblowing within companies in case suspected deviations are made by the management alongside majority shareholders. Additionally, it involves the creation of mechanisms for reporting transactions with related parties and anti-tunneling procedures within the company.

Finally, for accounting aspects, research on tunnelling behaviour provides broader insights, particularly for accountants and auditors who are involved in testing balance sheet figures in financial reports. They should consider testing the balances of related party receivables. Moreover, management accountants in companies need to analyze financial statements while also considering financial models and mechanisms to prevent the potential transfer of assets, which could be indicative of tunnelling behaviour.

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