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The Effects of Tunneling Incentive, Bonus Mechanism, and Firm Size on Transfer Pricing

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Abstract

This research is conducted to examine how tunneling incentive, bonus mechanism, and firm size influence transfer pricing among banking companies listed on the Indonesia Stock Exchange (IDX) throughout 2022–2024. The study employs a purposive sampling technique, selecting data from annual reports of banks that meet predetermined criteria, yielding a total of 102 firm-year observations. The analysis utilizes panel data regression to test the hypotheses. Findings reveal that both tunneling incentive and bonus mechanism positively affect transfer pricing, indicating that the personal motives of majority shareholders and performance-based managerial rewards may stimulate transfer pricing behavior. Conversely, firm size shows a negative relationship with transfer pricing, suggesting that larger institutions tend to limit such activities due to greater oversight from regulators. The outcomes of this research offer meaningful implications for policymakers, investors, and corporate leaders in comprehending the determinants of transfer pricing practices within the banking industry.

Keywords: Tunneling Incentive, Bonus Mechanism, Firm Size, Transfer Pricing

INTRODUCTION

In the era of globalization, business operations have expanded significantly across borders. Advances in technology and information exchange have reduced many barriers to the flow of goods, services, capital, and resources. As a result, multinational corporations (MNCs) are increasingly involved in cross-border transactions involving goods, services, and equity (Stevanni and Herijawati 2024).

According to the OECD, over 70% of global trade involves intra-group transactions ((Merle, Al-Gamrh, and Ahsan 2019)), which often occur between affiliated entities within MNCs. Due to their complexity, determining appropriate transfer prices can be challenging. Transfer pricing refers to the pricing of goods, services, or intangible assets exchanged between related parties—domestically or internationally—based on the arm's length principle (Cledy and Amin 2020).

Although transfer pricing serves as a tool for internal performance evaluation, it is also used as a means of shifting profits to low-tax jurisdictions. This practice is not limited to manufacturing or trading sectors it is also found in banking, where business structures and intercompany

relationships are often complex (Sitanggang and Firmansyah 2021).

Several factors may influence transfer pricing decisions. This study examines three key factors: tunneling incentive, bonus mechanism, and firm size. Tunneling incentive refers to the transfer of company resources by controlling shareholders for personal benefit, often at the expense of minority shareholders an issue relevant in countries with concentrated ownership like Indonesia (Herlina and Murniati 2023).

Bonus mechanisms are performance-based compensation schemes that may encourage managers to manipulate profits through transfer pricing (Ginting, Hantono, and Susanto 2023). Meanwhile, firm size may influence transfer pricing both positively and negatively. Larger firms are subject to greater scrutiny, but their scale and complexity may enable more sophisticated tax planning (Susilawati, Nizarudin, and Yunita 2024).

Previous studies show that the factors influencing transfer pricing have produced varied results. Safira, Abduh and Putri (2021) found that tunneling incentive and bonus mechanism positively affect transfer pricing, while Stevanni and Herijawati (2024) reported no significant effect of tunneling incentive. Similarly, Herlina and Murniati (2023) found that the bonus mechanism does not influence transfer pricing decisions. For firm size, Cledy and Amin (2020) revealed a negative effect, whereas Susilawati, Nizarudin, and Yunita (2024) found a positive one. These mixed findings suggest that the impact of tunneling incentive, bonus mechanism, and firm size on transfer pricing remains inconclusive, encouraging further investigation in the banking sector.

Although prior research has addressed these variables in various industries, limited studies have focused on the banking sector. Given the high volume of affiliated transactions and the complex ownership structures in banks, this study aims to analyze the influence of tunneling incentive, bonus mechanism, and firm size on transfer pricing practices in banking companies listed on the Indonesia Stock Exchange during 2022–2024. Based on previous theories and research, the framework of thought formed for the proposed hypothesis is as follows : H1: Tunneling incentive has a positive effect on transfer pricing, H2: Bonus mechanism has a positive effect on transfer pricing, and H3: Firm size has a positive effect on transfer pricing.

METHODS

The research focuses on banking companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period. The sample was selected using a purposive sampling method, which is a non-probability sampling technique based on specific criteria aligned with the objectives of the study. This study uses secondary data obtained from annual financial reports downloaded from the official IDX website (www.idx.co.id). This method was chosen to ensure that the selected sample aligns with the characteristics of companies relevant to transfer pricing issues in the banking sector.

Table 1. Operational definition of variables

Variables	Measurement
Transfer Pricing	Related Party Receivables / Total Receivables
Tunneling Incentive	Largest Shareholder Ownership / Total Outstanding Shares
Bonus Mechanism	Net Income (Year t) / Net Income (Year t–1)
Firm Size	Firm Size = Ln (Total Assets)

Transfer pricing is measured using the ratio of related party receivables to total receivables. In the banking context, this proxy is relevant as intercompany loans or receivables between affiliated entities are common and can be used to shift profits. A higher proportion of related party receivables indicates a greater potential for transfer pricing practices, especially if interest rates applied deviate from the arm's length principle (Ginting, Hantono, and Susanto 2023).

Tunneling incentive is measured by the

proportion of shares owned by the largest shareholder to the total outstanding shares. A higher percentage indicates greater control by the majority shareholder, which may be used to facilitate transactions that benefit them at the expense of minority shareholders (Wijaya and Amalia 2020).

The bonus mechagintinism is measured using the ratio of current year net income to the previous year's net income. This ratio reflects the incentive structure in which performance-based rewards are linked to profit growth. A higher ratio may indicate stronger motivation for earnings manipulation through transfer pricing (Kamalia and Ratnawati 2024)

Firm size is measured using the natural logarithm of total assets. This approach is used to normalize asset values and minimize scale distortion while still reflecting the true economic size of the company. Total assets are considered a stable and comprehensive indicator compared to revenue or equity (Hadmoko and Irawan 2022).

the period 2022–2024. 2) Companies that published annual financial reports on the IDX consecutively from 2022 to 2024. 3) Banking companies that presented their annual financial reports in Indonesian Rupiah during 2022–2024. 4) Companies that did not report losses during the 2022–2024 period. 5) Banking companies that recorded related party receivables in their financial statements during 2022–2024.

Based on the results of the descriptive statistics test in Table 4.2, each variable has a total of 102 observations. The interpretation is as follows: 1) The dependent variable in this study is variable Y, which is a proxy for transfer pricing. The minimum value is 0.0001 and the maximum value is 0.7686. The average (mean) is 0.0504, while the median is 0.0109, indicating that more than half of the data falls below the mean.

The standard deviation is 0.1273, suggesting that the data variation between companies is

Descriptive statistics

Table 2. Descriptive statistic research

	TP	TI	MB	UP
Mean	0,0504	0,5798	1,4147	0,0504
Median	0,0109	0,5494	1,1816	0,0109
Max	0,7686	0,9340	8,1013	0,7686
Min	0,0001	0,2140	0,3427	0,0001
Std. Dev	0,1273	0,2909	0,9989	0,1273
Obs.	102	102	102	102

Source: E-views 12 (2025).

RESULTS

In this study, the sample was selected using the purposive sampling method, which involves selecting samples based on specific characteristics determined by the researcher to obtain relevant information. The study utilizes secondary data in the form of annual financial reports. The purpose of this method is to obtain a sample that meets the established criteria and data availability.

The criteria used for sample selection are as follows: 1) Banking companies listed on the Indonesia Stock Exchange (IDX) during

relatively low. 2) The independent variable TI (tunneling incentive) has a minimum value of 0.2140 and a maximum value of 0.9340. The mean is 0.5798, and the median is 0.5494, indicating a slightly right-skewed distribution. The standard deviation is 0.2909, showing a moderate level of variation. 3) The independent variable MB (bonus mechanism) has a minimum value of 0.3427 and a maximum value of 8.1013.

The mean is 1.4147 and the median is 1.1816, indicating a slightly right-skewed distribution. The standard deviation is 0.9899, which reflects

a relatively high variation. 4)The independent variable UP (firm size) has a minimum value of 12.5203 and a maximum of 15.3851. The mean is 13.9334 and the median is 14.0965. The standard deviation is 0.7235, indicating a moderate spread of the data.

Panel data regression estimation

Based on the multicollinearity test using the Variance Inflation Factor (VIF), all independent variables have VIF values below 10, ranging from 1.02 to 1.05. This indicates that the regression model does not suffer from multicollinearity, meaning there is no strong linear relationship among the independent variables in the model.

Table 3. Conclusion of estimation model

No.	Test	Model	Prob. Value	Result
1.	Chow	CEM vs FEM	0,0071	FEM
2.	Hausman	REM vs FEM	0,0701	REM
3.	Lagrange Multiplier	CEM vs REM	0,4710	CEM

Source: E-views 12 (2025).

The results indicate that the Common Effect Model (CEM) is the most appropriate panel data regression model used in this research.

Classic assumption test

Normality test

Table 4. Normality test

Jarque-Bera	**1,5580**
Probability	0,4588

Source: E-views 12 (2025).

Based on the results of the normality test using the Jarque-Bera method, the probability value obtained is 0.458856. Since this value is greater than 0.05, it can be concluded that the residuals are normally distributed, indicating that the classical assumption of normality is fulfilled.

Autocorelation test

Table 7. Heteroscedasticity test result

Heteroskedasticity Test: Arch	
	Prob
F- Statistic	0,1394
Obs*R-squared	0,1367

Source: E-views 12 (2025).

Based on the results of the heteroskedasticity test using the ARCH method, the probability value of the F-statistic is 0.1394, and the probability value of Obs*R-squared is 0.1367. Since both values are greater than 0.05, it can be concluded that there is no indication of heteroskedasticity in the regression model. This indicates that the data meet the assumption of homoskedasticity, and the model is appropriate for further analysis.

Table 5. Normality test

Breusch-Godfrey LM Test			
Obs*R-squared	2,2149	Prob. Chi-Square	0,1367

Source: E-views 12 (2025).

Multicollinearity test

Table 6. Multicollinearity test result

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
Constanta	2,4863	14016,51	N/A
TI	0,0051	92,7979	1,0218
MB	0,0330	3016,652	1,0466
UP	0,2122	13706,28	1,0568

Source: E-views 12 (2025).

F test result

Table 8. F test result

F-statistic	20,1634
Prob (F-statistic)	0,0000
R-squared	0,3816
Adjusted R-Squared	0,3627

Source: E-views 12 (2025).

Based on the table above, the Prob. F-statistic value is 0.00000, which is less than 0.05. Therefore, the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected, indicating that tunneling incentive, bonus mechanism, and firm size simultaneously have a significant effect on transfer pricing.

Adjusted R_2 result

Table 9. Adjusted R_2 result

F-statistic	20,1634
Prob (F-statistic)	0,0000
R-squared	0,3816
Adjusted R-Squared	0,3627

Source: E-views 12 (2025).

Based on the table above, the adjusted R-squared value is 0.3627 or 36.27%. This value indicates that the independent variables—tunneling incentive, bonus mechanism, and firm size—are able to explain 36.27% of the variation in the transfer pricing variable. The remaining 63.73% (100% – adjusted R-squared) is explained by other variables not included in this research model.

T test result

The partial effect of each independent variable on the dependent variable is as follows : 1) The probability value for the tunneling incentive variable is 0.0000 (< 0.05), with a positive β coefficient of 0.9798. Therefore, H_1 is accepted, indicating that tunneling incentive has a significant positive effect on transfer pricing. 2) The probability value for the bonus mechanism variable is 0.0182 (< 0.05), with a positive β coefficient of 1.1137. Thus, H_2 is accepted, meaning that the bonus mechanism has a significant positive effect on transfer pricing. 3) The probability value for the firm size variable is 0.0044 (< 0.05), with a negative β coefficient of –0.2129. Therefore, H_3 is rejected, indicating that firm size has a significant effect in a negative direction on transfer pricing.

DISCUSSION

Based on the empirical results Table 10, the first hypothesis is accepted: tunneling incentive has a positive effect on transfer pricing (p = 0.0000; β = 1.196623). In line with agency theory, concentrated ownership enables controlling shareholders to influence managerial decisions in ways that maximize private benefits. When tunneling incentives are high, related-party transactions—implemented via transfer pricing—become an effective channel to shift profits across group entities. This finding is consistent with Safira, Abduh and Putri (2021) and Tarmidi and Novitasari (2022), which document a significant positive association between tunneling incentives and transfer pricing.

The second hypothesis is also accepted: the bonus mechanism positively affects transfer

Table 10. T test result

	Coefficient	t-statistic	Prob
Constanta	-7,1650	-4,5056	0,0000
TI	0,9798	6,2575	0,0000
MB	1,1137	2,4016	0,0182
UP	-0,2129	-2,9128	0,0044

Source: E-views 12 (2025).

pricing ($p = 0.0402$; $\beta = 0.958131$). Consistent with positive accounting theory specifically the bonus plan hypothesis managers have incentives to take actions that increase reported earnings in order to meet performance targets and secure higher compensation. Transfer pricing with related parties can be used to manage reported profits toward bonus thresholds. These results align with Yaramah et al. (2025), which show that profit-based bonus schemes can encourage earnings management through intercompany pricing.

By contrast, the third hypothesis is not supported: firm size exhibits a significant negative effect on transfer pricing ($p = 0.0042$; $\beta = -0.211356$), whereas H_3 predicted a positive effect. A plausible explanation is that larger firms face greater scrutiny from investors, the public, and tax authorities, and therefore choose more conservative reporting to protect reputation and compliance—consistent with signaling theory. This result is in line with Wulandari and Fitrianti (2024). (2021) and Cledy and Amin (2020), which suggest that large firms tend to avoid risky transfer pricing practices, while smaller firms may be relatively more aggressive.

CONCLUSION

Based on the results of the analysis and discussion regarding the effects of tunneling incentive, bonus mechanism, and firm size on transfer pricing in banking companies listed on the Indonesia Stock Exchange (IDX) during the 2022–2024 period, the following conclusions can be drawn: 1) Tunneling incentive has a positive effect on transfer pricing. 2) Bonus mechanism has a positive effect on transfer pricing. 3) Firm size has a negative effect on transfer pricing.

Future studies are recommended to expand the research scope by examining sectors other than banking, such as manufacturing, mining, or property, to obtain broader comparative results. Researchers may also consider using alternative or additional indicators for the independent and dependent variables to capture transfer pricing practices from different perspectives. In addition, extending the research period to a longer time frame could provide a more comprehensive and stable understanding of transfer pricing behavior.

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REFERENCES

Cledy, Helti, and Muhammad Nuryatno Amin. 2020. "Pengaruh Pajak, Ukuran Perusahaan, Profitabilitas Dan Leverage Terhadap Keputusan Perusahaan Untuk Melakukan Transfer." *Jurnal Akuntansi Trisakti* 7(2): 247–64. doi:10.25105/jat.v7i2.7454.

Ginting, Wenny Anggeresia, Hantono Hantono, and Asen Susanto. 2023. "Indikasi Transfer Pricing Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia." *Keunis* 11(2): 157. doi:10.32497/keunis.v11i2.4297.

Hadmoko, Febriyadi Tri, and Ferry Irawan. 2022. "Determinants of Transfer Pricing Aggressiveness and the Mediation Role of Tax Burdens: Evidence from Indonesia." *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen* 19(1): 41–59. doi:10.31106/jema.v19i1.13901.

Herlina, Herlina, and Sitti Murniati. 2023. "Effect of Effective Tax Rate, Tunneling Incentive, and Bonus Mechanism on Transfer Pricing Decision." *Atestasi : Jurnal Ilmiah Akuntansi* 6(2): 403–

18. doi:10.57178/atestasi.v6i2.696.

Kamalia, B D, and J Ratnawati. 2024. "Indikasi Transfer Pricing Pada Perusahaan Sektor Barang Konsumsi Di BEI Tahun 2019-2022." *Juara: Jurnal Riset Akuntansi* 14(1): 134–53.

Merle, Ronan, Bakr Al-Gamrh, and Tanveer Ahsan. 2019. "Tax Havens and Transfer Pricing Intensity: Evidence from the French CAC-40 Listed Firms." *Cogent Business and Management* 6(1). doi:10.1080/23311975.2019.1647918.

Safira, Mutia, Arridho Abduh, and Sonia Sischa

Eka Putri. 2021. "Pengaruh Pajak, Mekanisme Bonus, Kepemilikan Asing, Tunneling Incentive Dan Exchange Rate Terhadap Keputusan Perusahaan Melakukan Transfer Pricing." *The Journal of Taxation: Tax Center* 2(1): 116–37. https://ejournal.uin-suska.ac.id/index.php/jot/article/view/14251.

Sitanggang, Raymondo, and Amrie Firmansyah. 2021. "Transaksi Dengan Pihak Berelasi Dan Praktik Transfer Pricing Di Indonesia." *Jurnal Pajak dan Keuangan Negara (PKN)* 2(2): 34–52. doi:10.31092/jpkn.v2i2.1180.

Stevanni, and Etty Herijawati. 2024. "Pengaruh Profitability, Tunneling Incentive, Debt Covenant, Exchange Rate, Dan Bonus Mechanism Terhadap Transfer Pricing." *eCo-Buss* 7(1): 191–205. doi:10.32877/eb.v7i1.1281.

Susilawati, Susi, Abu Nizarudin, and Anggraeni Yunita. 2024. "Pengaruh Ukuran Perusahaan, Kepemilikan Asing Dan Profitabilitas Terhadap Transfer Pricing (Pada Perusahaan Pertambangan Yang Terdaftar Di BEI Tahun 2018-2022)." *Indo-Fintech Intellectuals: Journal of Economics and Business* 4(2): 406–19. doi:10.54373/ifijeb.v4i2.1268.

Tarmidi, SE., M.Ak., BKP., Deden, and Natalia Desy Novitasari. 2022. "Transfer Pricing: Dampak Beban Pajak, Tunneling Incentive, Dan Profitabilitas." *Jurnal Akuntansi dan Bisnis Krisnadwipayana* 9(2): 691. doi:10.35137/jabk.v9i2.658.

Wijaya, Indra, and Anisa Amalia. 2020. "Pengaruh Pajak, Tunneling Incentive, Dan Good Corporate Governance Terhadap Transfer Pricing." *Jurnal Profita* 13(1): 30. doi:10.22441/profita.2020.v13i1.003.

Wulandari, Astri, and Dini Fitrianti. 2024. "Pengaruh Pajak, Intangible Assets, Dan Ukuran Perusahaan Terhadap Transfer Pricing." *Jurnal Akuntansi Keuangan dan Bisnis* 2(2): 534–41. https://jurnal.ittc.web.id/index.php/jakbs/index.

Yaramah, Wati, Dirvi Surya Abbas, Maharani Nur Restu Wibowo, Miyah Maulidah Setiawan, and Putri Lindeawati. 2025. "Pengaruh Profitabilitas, Tunneling Incentive, Mekanisme Bonus, Dan Intangible Aset Terhadap Transfer Pricing Dengan Tax Minimization Sebagai Variabel Moderasi." *Jurnal Riset Akuntansi Politala* 8(1): 174–87. doi:10.34128/jra.v8i1.446.w