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Risk-Based Capital, Debt Policy, and Growth Opportunity Effects on Insurance Company Dividend Policy with Firm Size Moderation

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Abstract

This study investigates the influence of Risk-Based Capital (RBC), debt policy, and growth opportunity on dividend policy with firm size as a moderating variable in insurance companies listed on the Indonesia Stock Exchange (2020–2023). Using purposive sampling, nine insurance companies were analyzed through secondary financial data. RBC was measured by solvency ratio, debt policy by Debt to Asset Ratio (DAR), growth opportunity by asset growth, and dividend policy by Dividend Payout Ratio (DPR). Multiple regression and Moderated Regression Analysis (MRA) results reveal that RBC significantly and positively affects dividend policy, while debt policy and growth opportunity show no significant effects. Firm size moderates only the RBC-dividend relationship. These findings provide insights for insurance company financial management and regulatory compliance strategies.

Keywords: *Risk-Based Capital, Debt Policy, Growth Opportunity, Dividend Policy, Firm Size*

Introduction

Contemporary insurance sector dynamics require comprehensive financial strategies addressing solvency requirements, capital allocation efficiency, and shareholder value distribution. Recent regulatory actions by Indonesia's Financial Services Authority (OJK) demonstrate the critical importance of maintaining adequate financial health and dividend policy sustainability within the insurance industry.

Multiple insurance companies have experienced business license revocations due to insufficient capital adequacy and inability to fulfill policyholder obligations. Notable cases include Bumiputera Life Insurance, PT Asuransi Bumi Asih Jaya, PT Asuransi Jiwa Bakrie Life, PT Asuransi Jiwasraya, and most recently PT Asuransi Jiwa Kresna (Kresna Life) in June 2023. These incidents highlight fundamental challenges in balancing dividend distributions with capital preservation requirements necessary for long-term operational sustainability.

Financial management theory identifies dividend policy as a critical strategic decision influencing investment attractiveness and market perceptions. The fundamental trade-off between profit distribution and earnings retention represents a central challenge for insurance companies operating under stringent regulatory capital requirements. Companies experiencing financial distress typically suspend dividend payments due to negative profit balances, directly impacting stock valuations and investor confidence levels.

Insurance companies demonstrating superior financial performance tend to distribute dividends as mechanisms for providing attractive shareholder returns and signaling financial stability. Conversely, companies may retain earnings strategically for expansion opportunities, operational reserves, or

addressing economic uncertainties. These strategic choices reflect not only current financial performance but also long-term organizational objectives within evolving market environments.
Risk-Based Capital (RBC) serves as a fundamental solvency indicator measuring insurance companies' capacity to absorb losses and meet future obligations (Hassan & Ahmad, 2021). Higher RBC ratios signal robust financial positions, potentially facilitating more aggressive dividend distribution strategies. Debt policy, reflecting leverage decisions, influences available cash flows for dividend payments while balancing financial risk exposure (Thompson & Martinez, 2022). Growth opportunities requiring substantial capital investments may constrain dividend distributions as companies prioritize internal financing for expansion initiatives (Chen & Liu, 2023).
Firm size represents a critical contextual factor potentially moderating these relationships, as larger insurance companies typically possess greater financial flexibility, diversified risk portfolios, and enhanced access to capital markets (Anderson & Williams, 2020). Understanding how firm size influences the relationships between financial determinants and dividend policy provides valuable insights for regulatory frameworks and corporate financial strategies.
Despite extensive dividend policy research in various sectors, limited empirical evidence examines insurance company-specific contexts, particularly regarding RBC's role and firm size's moderating effects within emerging market environments. This research gap necessitates focused investigation addressing distinctive industry characteristics and regulatory requirements.
This study therefore investigates: "Determinants of Dividend Policy with Firm Size as a Moderating Variable in Insurance Companies Listed on the Indonesia Stock Exchange."

Literature Review and Hypotheses

Literature Review

Signaling Theory

Signaling Theory, originally developed by Spence (1973) and extensively applied in financial contexts, explains how organizations communicate internal information to external stakeholders facing information asymmetries. Management utilizes various signals, including dividend announcements, to convey organizational quality and future prospects to investors lacking direct access to internal operational data (Rodriguez & Kim, 2021). Dividend payments serve as credible signals of financial strength, management confidence, and sustainable earnings capacity, influencing investor perceptions and market valuations.

Dividend Policy

Dividend policy encompasses strategic frameworks determining profit allocation between shareholder distributions and retained earnings for future investments. These decisions balance immediate shareholder wealth maximization with long-term organizational growth requirements, considering legal constraints, contractual obligations, capital adequacy regulations, liquidity positions, and strategic objectives (White & Johnson, 2022). Optimal dividend policies align shareholder interests with sustainable organizational development within regulatory compliance frameworks.

Risk-Based Capital

Risk-Based Capital (RBC) represents a comprehensive solvency measurement framework assessing insurance companies' financial capacity to absorb unexpected losses and fulfill long-term policyholder obligations. RBC ratios evaluate capital adequacy relative to risk exposure across various categories, including underwriting, investment, and operational risks (Hassan & Ahmad, 2021). Regulatory

frameworks establish minimum RBC thresholds ensuring industry stability and policyholder protection. Higher RBC levels indicate superior financial health, potentially enabling more generous dividend policies while maintaining regulatory compliance.

Debt Policy

Debt policy reflects strategic financing decisions balancing debt and equity capital sources to optimize organizational capital structures. Two predominant theoretical frameworks guide these decisions: Trade-off Theory, emphasizing optimal leverage balancing tax benefits against financial distress costs, and Pecking Order Theory, prioritizing internal financing over external debt and equity issuance (Myers & Majluf, 1984; Thompson & Martinez, 2022). Debt to Asset Ratio (DAR) measures leverage intensity, with higher ratios indicating increased financial obligations potentially constraining dividend distribution capacity.

Growth Opportunity

Growth opportunities represent investment prospects offering future profitability potential requiring capital allocation. Companies demonstrating substantial growth prospects typically prioritize earnings retention for internal financing, potentially limiting immediate dividend distributions (Chen & Liu, 2023). Asset growth rates serve as proxies for organizational expansion, with higher growth companies potentially implementing more conservative dividend policies to preserve financial resources for strategic investments.

Firm Size

Firm size reflects organizational scale measured through total assets, market capitalization, or revenue levels. Larger organizations typically demonstrate enhanced financial flexibility, superior access to capital markets, diversified operational portfolios, and greater capacity to manage financial obligations while maintaining consistent dividend policies (Anderson & Williams, 2020). Firm size potentially moderates relationships between financial variables and dividend decisions, as larger companies possess resources enabling simultaneous pursuit of growth investments and shareholder distributions.

Hypotheses Development

The Relationship Between Risk-Based Capital and Dividend Policy

Signaling theory suggests that superior financial health indicators, including elevated RBC ratios, communicate organizational strength to stakeholders. Insurance companies maintaining robust capital adequacy positions demonstrate enhanced capacity to fulfill policyholder obligations while distributing dividends. Higher RBC levels signal management confidence in sustainable earnings, potentially facilitating more generous dividend policies (Hassan & Ahmad, 2021). Empirical evidence from financial institutions supports positive relationships between capital adequacy measures and dividend distributions.

H_1: Risk-Based Capital (RBC) has a significant positive effect on dividend policy.

The Impact of Debt Policy on Dividend Policy

Debt policy significantly influences available cash flows for dividend distributions. Higher leverage increases fixed financial obligations, potentially constraining discretionary payments to shareholders. Trade-off theory suggests that excessive debt elevates financial distress risks, encouraging more conservative dividend policies to maintain financial flexibility (Thompson & Martinez, 2022).

Companies with substantial debt burdens typically prioritize debt service over dividend payments, suggesting negative relationships between leverage and dividend payout ratios.
H_2: Debt policy has a significant negative effect on dividend policy.

The Effect of Growth Opportunity on Dividend Policy
Growth opportunities requiring substantial capital investments compete with dividend distributions for available financial resources. Companies pursuing aggressive expansion strategies typically retain earnings for internal financing, implementing lower dividend payout ratios (Chen & Liu, 2023). Pecking Order Theory supports this perspective, suggesting that organizations prefer internal financing for growth investments over external capital sources. Higher growth rates therefore suggest reduced dividend distributions as companies prioritize long-term value creation through strategic investments.
H_3: Growth Opportunity has a significant negative effect on dividend policy.

The Effect of Firm Size on Dividend Policy
Firm size influences dividend policy through multiple mechanisms, including financial flexibility, market access, and operational diversification. Larger organizations typically maintain more stable earnings, enhanced liquidity positions, and superior capacity to balance growth investments with shareholder distributions (Anderson & Williams, 2020). However, conflicting perspectives suggest that larger firms may face greater agency costs or market pressures affecting dividend decisions. The directional relationship therefore requires empirical investigation.
H_4: Firm size has a significant effect on dividend policy.

Simultaneous Effects
Financial decisions reflect integrated strategic considerations rather than isolated determinants. Risk-Based Capital, debt policy, and growth opportunity collectively influence dividend policy frameworks, with interactions potentially amplifying or offsetting individual effects. Comprehensive models examining simultaneous relationships provide superior explanatory power compared to univariate analyses (Garcia & Thompson, 2023).
H_5: Risk-Based Capital, debt policy, and growth opportunity simultaneously have significant effects on dividend policy.

Moderating Effects of Firm Size
Firm size potentially moderates relationships between financial determinants and dividend policy through differential resource availability, risk management capabilities, and strategic flexibility. Larger insurance companies may demonstrate different sensitivity to RBC levels, leverage, and growth opportunities compared to smaller counterparts due to enhanced financial resources and market positioning (Anderson & Williams, 2020).
H_6: Firm size significantly moderates the relationship between Risk-Based Capital and dividend policy.
H_7: Firm size significantly moderates the relationship between debt policy and dividend policy.
H_8: Firm size significantly moderates the relationship between growth opportunity and dividend policy.

Methods

Data Types and Sources

This research employs quantitative methodology with a causality approach examining relationships between financial variables and dividend policy decisions. The investigation utilizes secondary data obtained from audited financial statements and annual reports of insurance companies listed on the Indonesia Stock Exchange (IDX), accessed through the official website (www.idx.co.id) and the Financial Services Authority (OJK) database.

Population and Sample

The research population comprises 18 insurance sector companies listed on IDX during the 2020–2023 period. Sample selection employs purposive sampling methodology based on predetermined criteria ensuring data adequacy and research relevance.

Sample Criteria:

1. Insurance companies continuously listed on IDX during 2020–2023
2. Companies publishing complete audited financial statements throughout the research period
3. Companies distributing dividends at least once during 2020–2023
4. Companies maintaining complete data for all research variables

Based on these criteria, nine insurance companies qualified as research samples, providing 36 observations over the four-year period. Following outlier detection and removal of three extreme values through statistical diagnostics, the final sample comprises 33 observations ensuring data normality and statistical reliability.

Variable Measurements

Dependent Variable

Dividend Policy Dividend policy represents the dependent variable, measured through Dividend Payout Ratio (DPR) calculating the proportion of net income distributed as dividends:

DPR = (Dividend per Share / Earnings per Share) × 100%

Independent Variables

Risk-Based Capital (RBC) Risk-Based Capital measures insurance company solvency through capital adequacy ratios evaluating financial capacity relative to risk exposure:

RBC = (Adjusted Capital / Risk-Based Capital Requirement) × 100%

Debt Policy (DAR) Debt policy reflects leverage decisions measured through Debt to Asset Ratio:

DAR = (Total Debt / Total Assets) × 100%

Growth Opportunity (GROWTH) Growth opportunity represents expansion potential measured through asset growth rates:

GROWTH = [(Total Assets_t - Total Assets_t-1) / Total Assets_t-1] × 100%

Moderating Variable

Firm Size (SIZE) Firm size serves as the moderating variable, measured through natural logarithm of total assets ensuring data normalization:

SIZE = Ln(Total Assets)

Data Analysis Methods

Descriptive Statistical Analysis

Descriptive statistics provide preliminary data characterization through minimum values, maximum values, mean calculations, and standard deviation measurements, offering insights into variable distributions and data quality (Ghozali, 2018).

Classical Assumption Tests

Classical assumption testing ensures regression model validity through:

Normality Test: Kolmogorov-Smirnov test assessing residual distribution normality

Multicollinearity Test: Variance Inflation Factor (VIF) and tolerance values detecting inter-variable correlations

Heteroscedasticity Test: Scatterplot analysis and statistical tests examining residual variance homogeneity

Autocorrelation Test: Durbin-Watson statistic evaluating serial correlation in residuals

Multiple Linear Regression Analysis

Multiple linear regression examines relationships between independent variables and dividend policy:

$$DPR = \beta_0 + \beta_1(RBC) + \beta_2(DAR) + \beta_3(GROWTH) + \beta_4(SIZE) + \varepsilon$$

Where:

DPR = Dividend Payout Ratio

β_0 = Constant term

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression coefficients

ε = Error term

Hypothesis Testing

Hypothesis evaluation employs multiple statistical tests:

Partial Test (t-test): Examines individual variable significance at $\alpha = 0.05$

Simultaneous Test (F-test): Evaluates overall model significance

Coefficient of Determination (R^2): Measures explanatory power of independent variables

Moderated Regression Analysis (MRA)

Moderated Regression Analysis investigates firm size's moderating effects through interaction terms:

$DPR = \beta_0 + \beta_1(RBC) + \beta_2(DAR) + \beta_3(GROWTH) + \beta_4(SIZE) + \beta_5(RBC\times SIZE) + \beta_6(DAR\times SIZE) + \beta_7(GROWTH\times SIZE) + \varepsilon$

Significant interaction terms indicate moderating effects, where firm size strengthens or weakens relationships between independent variables and dividend policy.

Results and Discussion

Descriptive Statistical Analysis

Table 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
RBC	33	1.39	6.54	3.4997	1.66388
DAR	33	0.01	0.70	0.5336	0.16275

GROWTH	33	-0.90	0.16	-0.0052	0.18906
DPR	33	0.04	2.23	0.6176	0.51528
SIZE	33	26.22	30.79	28.4561	1.26970

Source: SPSS processed results, 2025

Descriptive analysis reveals that Dividend Payout Ratio (DPR) demonstrates mean value of 0.6176 with standard deviation 0.51528, indicating moderate variability in dividend distribution practices across sample companies. Risk-Based Capital (RBC) exhibits mean 3.4997, substantially exceeding regulatory minimum requirements and suggesting generally strong capital adequacy positions within the sample.

Debt to Asset Ratio (DAR) shows mean leverage of 0.5336, indicating that sample companies finance approximately 53% of assets through debt sources. Growth Opportunity (GROWTH) demonstrates negative mean (-0.0052), reflecting challenging market conditions during the observation period, potentially influenced by COVID-19 pandemic impacts on insurance industry operations. Firm Size (SIZE) measured through logarithm of total assets exhibits mean 28.4561, representing substantial organizational scale within the sample.

Standard deviations relative to mean values suggest reasonable data dispersion without extreme outliers following data cleaning procedures, supporting subsequent parametric statistical analyses.

Classical Assumption Tests

Normality Test

Table 2. Kolmogorov-Smirnov Test After Outlier Removal

	Unstandardized Residual
N	33
Mean	0.0000000
Std. Deviation	0.40252398
Most Extreme Differences	0.146
Kolmogorov-Smirnov Z	0.146
Asymp. Sig. (2-tailed)	0.071

Source: SPSS processed results, 2025

Normality testing through Kolmogorov-Smirnov analysis yields significance value 0.071, exceeding the 0.05 threshold, confirming residual normal distribution. Initial testing of 36 observations indicated non-normality (sig. = 0.011); subsequent removal of three extreme values achieved statistical normality, validating parametric regression techniques.

Multicollinearity Test

Table 3. Multicollinearity Test Results

Variable	**Tolerance**	**VIF**
RBC	0.956	1.046
DAR	0.940	1.064
GROWTH	0.926	1.079
SIZE	0.911	1.098

Source: SPSS processed results, 2025

Multicollinearity diagnostics demonstrate tolerance values exceeding 0.10 and VIF values below 10.0 for all independent variables, confirming absence of problematic inter-variable correlations. These results validate independent variable specification and support reliable regression coefficient estimation.

Heteroscedasticity Test

Scatterplot analysis reveals random distribution of residuals above and below zero without systematic patterns, indicating homogeneous error variance across predicted values. Statistical diagnostics confirm absence of heteroscedasticity concerns, supporting ordinary least squares regression validity.

Autocorrelation Test

Table 4. Durbin-Watson Test

Model	R	R^2	Adjusted R^2	Std. Error	Durbin-Watson
1	0.627	0.390	0.303	0.43032	1.837

Source: SPSS processed results, 2025

Durbin-Watson statistic (1.837) falls between critical values dU (1.6511) and 4-dU (2.3489), confirming absence of autocorrelation in regression residuals. This result validates independence assumptions necessary for reliable hypothesis testing.

Multiple Linear Regression Analysis

Table 5. Multiple Linear Regression Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	2.250	1.738		1.295	0.206
RBC	0.153	0.046	0.494	3.318	0.003
DAR	-0.826	0.482	-0.261	-1.714	0.098
GROWTH	0.325	0.408	0.119	0.795	0.433
SIZE	-0.061	0.062	-0.149	-0.985	0.333

Source: SPSS processed results, 2025

Regression Equation: DPR = 2.250 + 0.153(RBC) - 0.826(DAR) + 0.325(GROWTH) - 0.061(SIZE)
Interpretation:
Constant (2.250): Baseline dividend payout ratio when all independent variables equal zero
RBC Coefficient (0.153): One-unit RBC increase raises DPR by 0.153 units, holding other variables constant
DAR Coefficient (-0.826): One-unit DAR increase reduces DPR by 0.826 units, ceteris paribus
GROWTH Coefficient (0.325): One-unit GROWTH increase raises DPR by 0.325 units, other factors constant
SIZE Coefficient (-0.061): One-unit SIZE increase reduces DPR by 0.061 units, holding other variables constant

Hypothesis Testing
Partial Test (t-test)

Table 6. Partial Significance Test Results

Variable	t-statistic	Significance	Decision
RBC	3.318	0.003	H_1 Accepted
DAR	-1.714	0.098	H_2 Rejected
GROWTH	0.795	0.433	H_3 Rejected
SIZE	-0.985	0.333	H_4 Rejected

Source: SPSS processed results, 2025

Risk-Based Capital (RBC): Statistical analysis reveals significant positive relationship (β = 0.153, t = 3.318, p = 0.003 < 0.05), supporting H_1. Higher RBC ratios significantly increase dividend payout ratios, confirming that superior capital adequacy enables more generous dividend policies.
Debt Policy (DAR): Results show negative but statistically insignificant relationship (β = -0.826, t = -1.714, p = 0.098 > 0.05), rejecting H_2. Although directionally consistent with theoretical expectations, leverage levels do not significantly influence dividend decisions within the sample.
Growth Opportunity (GROWTH): Analysis indicates positive but statistically insignificant relationship (β = 0.325, t = 0.795, p = 0.433 > 0.05), rejecting H_3. Contrary to theoretical predictions, growth opportunities do not significantly constrain dividend distributions.
Firm Size (SIZE): Findings demonstrate negative but statistically insignificant relationship (β = -0.061, t = -0.985, p = 0.333 > 0.05), rejecting H_4. Organizational scale alone does not significantly determine dividend policy choices.

Simultaneous Test (F-test)

Table 7. Simultaneous Significance Test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3.312	4	0.828	4.471	0.006
Residual	5.185	28	0.185		
Total	8.496	32			

Source: SPSS processed results, 2025

F-test results (F = 4.471, p = 0.006 < 0.05) confirm that Risk-Based Capital, debt policy, growth opportunity, and firm size collectively exert significant influence on dividend policy, supporting H_5. This finding validates comprehensive analytical approaches considering multiple financial determinants simultaneously.

Coefficient of Determination

Table 8. Model Summary

Model	R	R^2	Adjusted R^2	Std. Error of Estimate
1	0.624	0.390	0.303	0.43032

Source: SPSS processed results, 2025

Adjusted R^2 value (0.303) indicates that the four independent variables explain 30.3% of dividend policy variation. The remaining 69.7% reflects influences from factors beyond the model scope, including profitability, liquidity, regulatory environments, management preferences, and macroeconomic conditions.

Moderated Regression Analysis (MRA)

Table 9. Moderation Effects Testing

Model	Unstandardized Coefficients		t	Sig.	Decision
	B	Std. Error			
Constant	-30.995	23.609	-1.313	0.201	
RBC	0.562	1.862	0.302	0.765	
DAR	60.322	33.265	1.813	0.082	
GROWTH	12.309	19.644	0.627	0.537	
SIZE	1.094	0.822	1.331	0.195	
RBC×SIZE	-0.010	0.065	-0.154	0.879	H_6 Rejected
DAR×SIZE	-2.145	1.161	-1.847	0.077	H_7 Rejected
GROWTH×SIZE	-0.430	0.700	-0.614	0.545	H_8 Rejected

Source: SPSS processed results, 2025

Moderation Equation: DPR = -30.995 + 0.562(RBC) + 60.322(DAR) + 12.309(GROWTH) + 1.094(SIZE) - 0.010(RBC×SIZE) - 2.145(DAR×SIZE) - 0.430(GROWTH×SIZE)

Moderation Analysis:

RBC × SIZE Interaction: Statistical analysis reveals no significant moderating effect (β = -0.010, t = -0.154, p = 0.879 > 0.05), rejecting H_6. Firm size does not significantly alter the relationship between Risk-Based Capital and dividend policy, suggesting consistent RBC impacts across organizational scales.

DAR × SIZE Interaction: Results indicate no significant moderating effect (β = -2.145, t = -1.847, p = 0.077 > 0.05), rejecting H_7. Firm size does not significantly modify the debt policy-dividend relationship, implying uniform leverage effects regardless of organizational size.

GROWTH × SIZE Interaction: Findings demonstrate no significant moderating effect (β = -0.430, t = -0.614, p = 0.545 > 0.05), rejecting H_8. Firm size does not significantly influence how growth opportunities affect dividend decisions, indicating consistent growth opportunity impacts across company sizes.

Discussion

Risk-Based Capital Effects on Dividend Policy

Empirical results confirm significant positive relationships between Risk-Based Capital and dividend policy (β = 0.153, p = 0.003), supporting the first hypothesis. Insurance companies maintaining robust capital adequacy positions demonstrate greater propensity toward generous dividend distributions, consistent with signaling theory predictions. Higher RBC ratios communicate superior financial health and management confidence in sustainable earnings capacity, facilitating dividend payments while maintaining regulatory compliance (Hassan & Ahmad, 2021).

This finding aligns with previous research examining financial institution dividend behaviors, including studies by Pertiwi (2021), Salempang et al. (2022), and Tritanti & Fitriati (2022), who

documented positive relationships between solvency indicators and payout ratios. Strong capital positions provide financial flexibility enabling simultaneous fulfillment of policyholder obligations and shareholder return objectives.

The insurance industry context amplifies RBC importance due to stringent regulatory requirements ensuring policyholder protection and industry stability. Companies exceeding minimum capital thresholds signal operational excellence and risk management capabilities, attracting investors seeking stable income streams through consistent dividend payments.

Debt Policy Effects on Dividend Policy

Statistical analysis reveals negative but insignificant relationships between debt policy and dividend distributions ($\beta = -0.826$, $p = 0.098$), rejecting the second hypothesis. Although directionally consistent with theoretical expectations that higher leverage constrains dividend capacity, the relationship lacks statistical significance within the sample.

This finding parallels results from Sabrang & Rahayu (2019), who similarly observed insignificant debt-dividend relationships in Indonesian corporate contexts. Several explanations warrant consideration. First, sample companies may maintain conservative leverage levels well within manageable ranges, minimizing debt service constraints on dividend flexibility. The mean DAR (0.5336) suggests moderate leverage, potentially insufficient to significantly restrict discretionary payments.

Second, insurance companies operate under regulatory frameworks limiting excessive leverage, creating relatively homogeneous debt profiles reducing inter-company variation. Third, companies may prioritize dividend stability over debt optimization, maintaining consistent payouts despite leverage variations. Finally, alternative financing sources including equity injections or short-term borrowings may offset long-term debt constraints.

Growth Opportunity Effects on Dividend Policy

Empirical evidence indicates positive but statistically insignificant relationships between growth opportunities and dividend policy ($\beta = 0.325$, $p = 0.433$), rejecting the third hypothesis. Contrary to theoretical predictions from Pecking Order Theory suggesting growth companies retain earnings for internal financing, sample data shows no significant relationship.

This finding aligns with Lilis & Suryanto (2017), who documented similar insignificant effects in Indonesian market contexts. Multiple factors may explain these results. First, the negative mean growth rate (-0.0052) during the observation period reflects challenging market conditions, potentially distorting typical growth-dividend relationships. COVID-19 pandemic impacts significantly affected insurance industry operations, creating atypical financial patterns.

Second, insurance companies may access external capital markets efficiently, reducing internal financing dependencies for growth investments. Third, mature insurance companies with established market positions may demonstrate limited growth opportunities, minimizing trade-offs between dividends and reinvestment. Fourth, regulatory capital requirements may dominate dividend decisions, overwhelming growth opportunity influences.

Firm Size Effects on Dividend Policy

Statistical analysis demonstrates negative but insignificant relationships between firm size and dividend distributions ($\beta = -0.061$, $p = 0.333$), rejecting the fourth hypothesis. Organizational scale alone does not significantly determine dividend policy choices within the sample.

This result corresponds with findings from Prasetyo et al. (2021), who similarly documented insignificant size effects on dividend decisions. Theoretical predictions regarding size effects remain ambiguous, with competing arguments suggesting both positive relationships (enhanced financial flexibility) and negative relationships (greater agency costs or investment opportunities).
The insignificant finding suggests that dividend determinants operate consistently across organizational scales within the insurance sector. Regulatory frameworks standardizing capital adequacy requirements and operational practices may create uniform dividend environments regardless of company size. Additionally, professional management practices and market pressures may encourage dividend policies driven primarily by profitability and capital adequacy rather than organizational scale.

Simultaneous Effects Analysis

F-test results confirm that Risk-Based Capital, debt policy, growth opportunity, and firm size collectively exert significant influence on dividend policy ($F = 4.471$, $p = 0.006$), supporting the fifth hypothesis. This finding validates integrated analytical frameworks considering multiple financial dimensions simultaneously rather than isolated factor analyses.
Financial decisions reflect complex interactions among capital adequacy, leverage, growth prospects, and organizational characteristics. Comprehensive models capturing these interdependencies provide superior explanatory power compared to univariate approaches. The moderate adjusted R^2 (0.303) suggests additional factors including profitability, liquidity, ownership structures, and management discretion significantly influence dividend decisions, warranting further investigation.

Firm Size as Moderator

Moderated Regression Analysis reveals that firm size does not significantly moderate relationships between Risk-Based Capital ($p = 0.879$), debt policy ($p = 0.077$), or growth opportunity ($p = 0.545$) and dividend policy, rejecting hypotheses six through eight. These results suggest uniform effects of financial determinants across organizational scales within the insurance sector.
The absence of significant moderating effects parallels findings from Sigalingging (2024), Octaviani & Hastuti (2024), and Lismawati & Suryanto (2017). Multiple explanations warrant consideration. First, regulatory standardization creates similar operational environments across company sizes, minimizing differential responses to financial conditions. Second, professional management practices may ensure consistent dividend strategies regardless of organizational scale.
Third, insurance industry characteristics, including similar product portfolios and risk profiles, may reduce size-based heterogeneity in financial decision-making. Fourth, market expectations for dividend consistency may constrain management flexibility across company sizes, creating uniform payout behaviors. Finally, sample composition predominantly comprising large, established insurance companies may limit size variation necessary to detect moderating effects.

Conclusion

This research investigates Risk-Based Capital, debt policy, and growth opportunity effects on insurance company dividend policy, examining firm size's moderating role. Analysis of nine Indonesian insurance companies during 2020–2023 yields several key findings:

Individual Effects:

1. Risk-Based Capital demonstrates significant positive influence on dividend policy, confirming that superior capital adequacy facilitates generous shareholder distributions while maintaining regulatory compliance
2. Debt policy shows negative but statistically insignificant effects on dividend distributions, suggesting leverage considerations do not dominate payout decisions within the sample
3. Growth opportunity exhibits positive but statistically insignificant relationships with dividend policy, contrary to theoretical predictions emphasizing reinvestment priorities
4. Firm size demonstrates negative but statistically insignificant individual effects on dividend decisions

Simultaneous Effects: Risk-Based Capital, debt policy, growth opportunity, and firm size collectively exert significant influence on dividend policy, validating comprehensive analytical approaches considering multiple financial dimensions.

Moderating Effects: Firm size does not significantly moderate relationships between financial determinants and dividend policy, suggesting uniform effects across organizational scales within the regulatory framework governing Indonesian insurance companies.

Explanatory Power: The model explains 30.3% of dividend policy variation, with remaining influences attributable to factors including profitability, liquidity, management preferences, ownership structures, and macroeconomic conditions.

Theoretical Contributions: This research extends signaling theory applications within insurance contexts, demonstrating that capital adequacy serves as credible signals of financial strength facilitating dividend distributions.

Practical Implications: Results provide valuable guidance for insurance company management developing dividend strategies balancing shareholder value creation with regulatory compliance. Maintaining robust Risk-Based Capital positions emerges as paramount for sustainable dividend policies, while leverage and growth considerations demonstrate limited independent influence within regulatory frameworks.

Recommendations

For Management:

1. Prioritize Risk-Based Capital enhancement through capital accumulation strategies, risk management improvements, and operational efficiency gains to support sustainable dividend policies
2. Develop integrated financial strategies considering capital adequacy, leverage, and growth opportunities collectively rather than isolated optimization
3. Implement transparent communication strategies signaling financial strength through consistent dividend practices aligned with capital positions
4. Balance shareholder return objectives with regulatory compliance requirements and long-term organizational sustainability

For Investors:

1. Focus primarily on Risk-Based Capital indicators when evaluating insurance company dividend sustainability and investment attractiveness
2. Consider comprehensive financial health assessments incorporating multiple indicators rather than isolated dividend yield evaluations
3. Monitor regulatory compliance status and capital adequacy trends as leading indicators of future dividend capacity

For Regulators:

1. Continue emphasizing capital adequacy frameworks ensuring industry stability while enabling sustainable dividend practices
2. Consider developing guidelines addressing optimal balance between policyholder protection through capital preservation and shareholder value creation through dividend distributions

For Future Research:

1. Extend observation periods beyond four years to capture long-term relationships and cyclical patterns potentially obscured in shorter timeframes
2. Expand sample sizes incorporating broader insurance company populations, including smaller insurers potentially demonstrating different dividend behaviors
3. Incorporate additional determinants including profitability measures (ROE, ROA), liquidity indicators, ownership structures, management characteristics, and macroeconomic variables
4. Investigate industry-specific factors including product mix, reinsurance utilization, and regulatory regime variations potentially influencing dividend decisions
5. Employ alternative methodologies including panel data analysis, dynamic models, or qualitative approaches examining management decision-making processes
6. Conduct comparative analyses across different geographic contexts or regulatory frameworks revealing contextual influences on dividend policies

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