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Market Expansion, Financial Strategy, and Profitability of Indonesian Listed State-Controlled Enterprises

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Abstract: State-controlled enterprises must convert market expansion into sustainable financial performance while balancing commercial and strategic mandates. However, cross-sector evidence on how market growth, financing, and investment jointly relate to profitability in emerging-economy state-controlled firms remains limited. This study examines the associations of revenue growth, financial leverage, and capital expenditure intensity with accounting profitability in 13 Indonesian listed nonfinancial state-controlled enterprises during 2021-2023, producing 39 firm-year observations. Revenue growth represents realized market expansion, while return on assets and operating margin measure profitability. Pooled ordinary least squares models include year effects, asset turnover, and firm-clustered standard errors. Revenue growth is positively associated with both profitability measures, capital expenditure intensity is positive in the baseline models, and leverage is strongly negative for operating margin and for return on assets after distressed firms are excluded. The revenue growth-leverage interaction is not significant. The study's novelty lies in jointly integrating market expansion, financing pressure, and productive investment within a state-ownership setting, showing that these factors operate mainly through additive relationships rather than stable leverage-based moderation.

Keywords: Capital Expenditure, Financial Leverage, Indonesia, Market Expansion, State-Controlled Enterprises.

INTRODUCTION

State-controlled enterprises occupy a distinctive position at the intersection of public policy, commercial discipline, and capital-market accountability. In Indonesia, listed enterprises within the state-owned enterprise portfolio operate in infrastructure, construction, mining, energy, cement, telecommunications, and transportation. They are expected to deliver commercially sustainable returns while supporting national development, public-service continuity, and strategic investment. This dual mandate makes the conversion of market opportunities into financial performance especially important. Expansion that increases sales

but weakens margins, raises refinancing pressure, or produces low-return assets may enlarge the enterprise without creating durable economic value. Conversely, a conservative financing policy that prevents investment in market access, capacity, digital channels, or service quality may protect short-term ratios while constraining long-term competitiveness (Asian Development Bank [ADB], 2023; Ministry of State-Owned Enterprises of the Republic of Indonesia, 2024; OECD, 2024).

The marketing and finance literatures offer complementary explanations for this problem but are frequently examined separately. Marketing scholarship argues that market orientation, customer-facing capabilities, and marketing productivity create valuable intangible assets and improve revenue, cash-flow expectations, and firm value (Joshi & Hanssens, 2010; Morgan, 2012; Morgan et al., 2009; Rust et al., 2004; Srinivasan & Hanssens, 2009). Finance and accounting research, meanwhile, shows that capital structure, investment intensity, asset utilization, and earnings quality condition the extent to which growth translates into returns (Aivazian et al., 2005; Dechow et al., 2010; Frank & Goyal, 2009; Margaritis & Psillaki, 2010). A manager may therefore observe rising revenue and interpret it as marketing success, whereas an investor or state owner may ask whether that growth is financed prudently, supported by productive capacity, and converted into operating income and returns on assets.

This interface is particularly relevant for listed state-controlled enterprises. Their access to debt can reflect strategic importance, implicit support expectations, or project mandates, while their market expansion may be influenced by regulated prices, public assignments, commodity cycles, infrastructure concessions, and policy-driven investment. These conditions do not eliminate commercial accountability; rather, they intensify the need for transparent performance measures and consistent financial reporting. Evidence from Indonesian state-owned pharmaceutical companies, for example, shows how accounting-policy implementation such as PSAK 71 can materially shape the recognition and monitoring of financial risk in listed SOEs (Sova et al., 2023). The 2024 OECD Guidelines emphasize professional ownership, disclosure, sustainability, and long-term value creation in state-owned enterprises. Indonesia's official portfolio reporting and BPS financial statistics similarly highlight assets, liabilities, revenues, profits, and return measures as central indicators of enterprise performance (BPS-Statistics Indonesia, 2024; OECD, 2024). For listed entities, these accounting outcomes also shape capital-market narratives about growth quality, solvency, and the credibility of future earnings.

Prior marketing-finance studies have demonstrated that advertising, customer assets, and marketing capabilities can affect profitability, risk, and valuation (Hanssens & Pauwels, 2016; Joshi & Hanssens, 2010; McAlister et al., 2007; Srivastava et al., 1998). Indonesian evidence likewise shows that market-facing variables such as brand, price perception, website quality, online reviews, and trust shape purchase decisions, illustrating how customer responses are ultimately transmitted into realized demand (Ismail et al., 2022; Ismail et al., 2026). Yet detailed advertising or promotion expenditure is not consistently reported as a standardized line item across Indonesian state-controlled issuers. This disclosure constraint makes an input-based measure of marketing intensity difficult to compare. The present study therefore uses revenue growth as an outcome-based proxy for realized market expansion. Revenue growth is appropriate for this purpose because it captures the observable financial realization of changes in sales volume, customer acquisition, market penetration, channel reach, product mix, service availability, and pricing. It is also consistently disclosed across sectors and can be reconciled directly with profitability measures. Importantly, the proxy is not interpreted as a pure measure of marketing capability: revenue can also move because of inflation, commodity prices, regulated tariffs, acquisitions, or public assignments. For that reason, the study treats revenue growth as a conservative measure of realized market expansion and explicitly interprets results alongside leverage, asset turnover, capital expenditure, year effects, and sector context.

The study addresses three gaps. First, research on the marketing-finance interface is dominated by private firms in advanced markets, while evidence from state-controlled enterprises in emerging economies remains limited. Second, many studies examine growth, leverage, or capital expenditure independently, leaving their joint association with accounting profitability insufficiently understood. Third, evidence from Indonesian listed state-controlled enterprises is often sector-specific or descriptive. A cross-sector design can reveal whether market expansion and financial policy display common patterns across strategically important enterprises, while robustness tests can show whether results are driven by distressed observations. These gaps are relevant to the Financial Accounting and Capital Markets track because they concern the credibility of growth, the accounting conversion of strategic expenditure, and the financial constraints that investors use to evaluate public-sector corporate performance.

Accordingly, this study asks: (1) Is realized market expansion positively associated with accounting profitability? (2) Does financial leverage constrain profitability? (3) Is capital expenditure intensity associated with stronger profitability? and (4) Does leverage change the relationship between market expansion and return on assets? The empirical analysis covers 13 nonfinancial listed state-controlled enterprises during 2021-2023. The period captures post-pandemic normalization, commodity and infrastructure variation, and restructuring pressures, while preserving consistent availability of standardized financial statement line items. Models use return on assets and operating margin as complementary outcomes, with year effects, asset turnover controls, winsorization, and firm-clustered standard errors.

The study makes distinct theoretical and contextual contributions. Theoretically, it extends the marketing-finance interface by showing that realized market expansion should be evaluated jointly with financing pressure and productive investment rather than treated as an autonomous growth outcome. This integration clarifies that top-line expansion can generate accounting value through separate, additive pathways to asset returns and operating conversion, while leverage can impair profitability even when growth remains positive. Contextually, the study contributes evidence from listed state-controlled enterprises, where commercial objectives coexist with public-service, strategic, and developmental mandates. Unlike conventional privately controlled firms, these enterprises may expand because of regulated tariffs, infrastructure assignments, domestic-supply obligations, or policy-driven investment, and may also enjoy refinancing access or implicit support that changes the meaning of leverage. The Indonesian setting therefore reveals an ownership-specific tension: growth can be economically desirable from a public-policy perspective while still producing weak accounting conversion. Empirically, the paper provides cross-sector evidence that revenue growth and capital expenditure intensity are positively associated with profitability, while leverage is particularly relevant to operating-margin conversion and becomes more clearly negative when extreme distress is removed. Finally, the insignificant revenue growth-leverage interaction identifies a useful boundary condition, indicating that the effects are primarily additive in this short panel rather than uniformly conditional.

The resource-based view treats market knowledge, customer relationships, brand credibility, distribution access, and managerial capabilities as resources that can generate sustained performance differences when they are valuable and difficult to replicate (Barney, 1991; Vorhies & Morgan, 2005). Marketing capability research further indicates that customer-facing resources create performance only when managers deploy them through coherent decisions and measurement systems (Katsikeas et al., 2016; Morgan, 2012; O'Sullivan & Abela, 2007). From a financial perspective, these resources matter because they influence expected revenue, cash-flow stability, competitive risk, and the productivity of invested capital. Thus, marketing and financial strategy should not be evaluated as isolated functional activities. Market expansion requires financing, operating assets, working capital, and governance mechanisms that determine whether additional revenue becomes income and economic value.

State-controlled enterprises add institutional complexity. They may pursue strategic coverage, affordability, domestic supply, or infrastructure objectives that private firms would not select under a purely financial criterion. Such mandates can justify long-horizon investment but can also weaken the clarity of commercial accountability. The appropriate analytical response is not to assume inefficiency, but to examine whether observable market outcomes are accompanied by accounting returns. ROA captures the productivity of the asset base, whereas operating margin isolates the conversion of revenue into operating income before financing and tax effects. Their joint use therefore distinguishes asset-level return from operating conversion.

Revenue growth reflects the realized outcome of multiple market-facing decisions: pricing, product availability, customer acquisition, channel development, service quality, volume, and portfolio mix. Marketing productivity research argues that market actions can increase firm value indirectly through sales and profit responses and directly through information effects and intangible asset formation (Joshi & Hanssens, 2010; Srinivasan & Hanssens, 2009). Market orientation and marketing capability likewise improve performance by enabling firms to identify demand, coordinate resources, and respond to customers more effectively (Morgan et al., 2009). Indonesian consumer studies provide micro-level support for this transmission mechanism: brand and price-related evaluations affect purchase decisions in pharmaceutical markets, while online reviews, price perception, website quality, and trust influence digital purchase decisions (Ismail et al., 2022; Ismail et al., 2026). At the firm level, these individual purchase responses aggregate into sales volume and revenue. Revenue growth is therefore a defensible realized-output proxy when direct, comparable marketing expenditure is unavailable, although it should not be interpreted as isolating marketing effort from external price, regulation, or demand shocks. In accounting terms, growth should improve profitability when incremental revenue exceeds the associated variable, acquisition, working-capital, and capacity costs.

The relationship is not automatic. Growth may be obtained through discounting, low-margin contracts, delayed receivables, or politically mandated expansion. It can also create working-capital and capacity requirements that depress near-term returns. Nevertheless, across a diversified sample, positive revenue growth should on average indicate that the firm's market strategy is generating additional economic activity. If fixed assets and administrative costs are partly scalable, higher revenue can improve both asset productivity and operating conversion. The study therefore expects a positive association between market expansion and profitability.

H1: Revenue growth is positively associated with accounting profitability in Indonesian listed state-controlled enterprises.

Capital structure affects performance through tax benefits, financing discipline, financial distress costs, agency conflicts, and restrictions on managerial flexibility. Debt can discipline managers and reduce free-cash-flow problems, but excessive leverage increases interest obligations, covenant constraints, refinancing exposure, and the probability that managers reject positive-value projects (Berger & Udell, 2006; Frank & Goyal, 2009; Margaritis & Psillaki, 2010). Emerging-market firms may be especially exposed when macro-financial conditions change or debt maturities are concentrated (Alter & Elekdag, 2020). For state-controlled enterprises, perceived public support may facilitate borrowing, yet it does not remove economic costs or operating constraints.

Leverage is expected to reduce profitability for three reasons. First, highly leveraged enterprises may prioritize debt service and liquidity over marketing, maintenance, and innovation. Second, debt-funded expansion can produce accounting growth before projects reach efficient utilization. Third, creditors and public owners may impose conflicting objectives that delay restructuring. Although ROA is calculated before considering the division of returns between debt and equity holders, high liabilities can still be associated with weak

asset quality, restructuring costs, and low operating flexibility. Operating margin may be affected indirectly through procurement constraints, project selection, and service obligations.

H2: Financial leverage is negatively associated with accounting profitability in Indonesian listed state-controlled enterprises.

Capital expenditure is the principal mechanism through which infrastructure, industrial, energy, telecommunications, and transportation enterprises renew productive assets and expand capacity. Investment can improve service reliability, lower unit costs, increase output, and support new market offerings. Aivazian et al. (2005) show that financing conditions affect investment, while the broader strategy literature emphasizes that productive assets complement market capabilities. In state-controlled enterprises, capital expenditure may also support national strategic objectives whose returns emerge over long horizons.

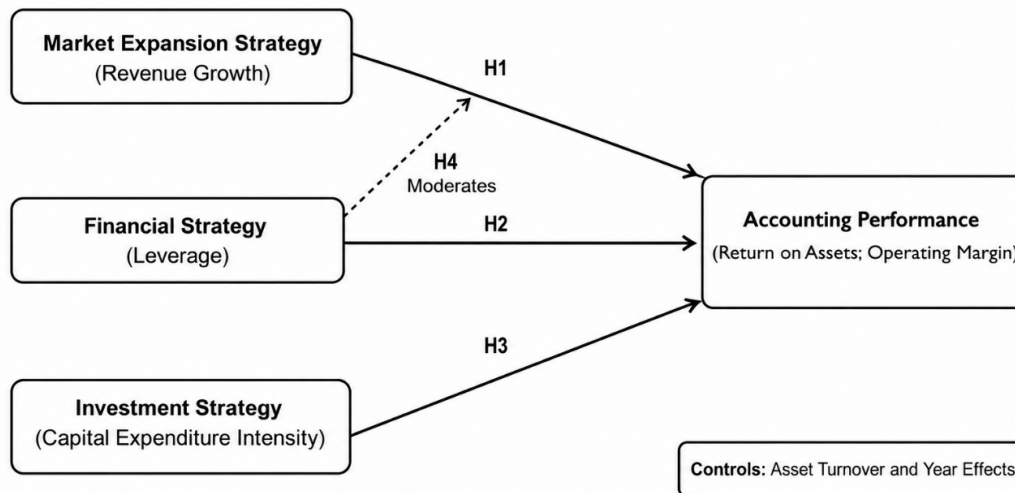
The short-run accounting effect of capital expenditure is theoretically ambiguous. New assets can increase depreciation and remain underutilized during commissioning, reducing immediate profitability. Conversely, disciplined capital expenditure can remove bottlenecks and improve efficiency, especially when expenditures are made to sustain existing operations or complete projects that generate revenue. The present study tests the net empirical association. Because the sample consists largely of asset-intensive enterprises, it expects capital expenditure intensity to be positively associated with profitability when investment is productive and aligned with market demand.

H3: Capital expenditure intensity is positively associated with accounting profitability in Indonesian listed state-controlled enterprises.

Growth can create value only if the enterprise can finance inventory, receivables, distribution, maintenance, and capacity without imposing excessive financial pressure. A highly leveraged firm may experience a weaker conversion of revenue growth into ROA because incremental cash flows are absorbed by inefficient assets, refinancing constraints, or delayed project completion. Marketing-finance research similarly argues that the value of market outcomes depends on risk and cash-flow quality rather than revenue alone (McAlister et al., 2007; Mizik & Jacobson, 2007).

This reasoning implies a negative interaction: the positive association between revenue growth and profitability should weaken as leverage rises. However, state ownership can complicate this prediction. Strategic firms may obtain longer maturities, policy support, or access to refinancing that allows growth and leverage to coexist. Testing the interaction is therefore useful even if the empirical result is null, because it clarifies whether financing pressure conditions market expansion or whether the two dimensions operate additively.

H4: Financial leverage weakens the positive association between revenue growth and return on assets.



Source: Research results.

Figure 1. Research Framework

METHODS

Research Design and Data Source

The study uses an explanatory quantitative design with a short unbalanced-to-balanced panel constructed from standardized financial statement line items. The source dataset is a publicly accessible compilation of Indonesia Stock Exchange (IDX) issuer fundamentals covering 595 issuers, 20 financial statement metrics, and fiscal years 2020-2023 (Lemuel, n.d.). The compilation is derived from issuer financial disclosures and is used here as a machine-readable input. Firm identity and state-control status were evaluated against the official SOE portfolio and listed-share information. The analysis script, variable construction, and final panel were retained to support replication. Because the source is a secondary compilation rather than a proprietary database, the study emphasizes ratio variables and transparent sample filters. (Indonesia Stock Exchange, n.d.)

The population of interest is nonfinancial enterprises listed on the IDX that are directly or indirectly controlled within Indonesia's state-owned enterprise portfolio. Financial institutions were excluded because leverage, asset structure, regulatory capital, and revenue recognition are not comparable with nonfinancial firms. Enterprises were also excluded when the compilation did not provide distinct and complete annual line items required for the analysis. The final sample contains 13 firms and 39 firm-year observations for 2021-2023. The 2020 observations were used only to calculate 2021 revenue growth. The sample spans aviation, cement, construction, energy, infrastructure, mining, telecommunications, and related strategic sectors.

Table 1. Sample Firms and Sector Representation

Ticker	Enterprise	Sector
ADHI	PT Adhi Karya (Persero) Tbk	Construction
ANTM	PT Aneka Tambang Tbk	Mining
GIAA	PT Garuda Indonesia (Persero) Tbk	Aviation
JSMR	PT Jasa Marga (Persero) Tbk	Infrastructure
PGAS	PT Perusahaan Gas Negara Tbk	Energy
PTBA	PT Bukit Asam Tbk	Mining
PTPP	PT PP (Persero) Tbk	Construction

Ticker	Enterprise	Sector
SMBR	PT Semen Baturaja Tbk	Cement
SMGR	PT Semen Indonesia (Persero) Tbk	Cement
TINS	PT TIMAH Tbk	Mining
TLKM	PT Telkom Indonesia (Persero) Tbk	Telecommunications
WIKA	PT Wijaya Karya (Persero) Tbk	Construction
WSKT	PT Waskita Karya (Persero) Tbk	Construction

Source: Research results.

Variable Measurement

Revenue growth is the focal market-expansion variable and equals the annual change in total revenue divided by the absolute value of prior-year revenue. It is an outcome-based market measure rather than a direct measure of advertising or promotion. Leverage equals total liabilities divided by total assets and represents the intensity of debt and non-equity financing. Capital expenditure intensity equals the absolute value of capital expenditure divided by total assets. Asset turnover, calculated as revenue divided by total assets, controls for operating efficiency. ROA equals net income divided by total assets, and operating margin equals operating income divided by revenue. All ratios are currency-invariant, which permits inclusion of issuers reporting in different presentation currencies. Continuous variables were winsorized at the 2.5th and 97.5th percentiles to reduce the influence of extreme values without deleting strategically important distressed firms.

Table 2. Variable Operational Definition

Variable	Role	Measurement	Interpretation	Main Sources
Revenue growth	Independent	$(\text{Revenue}_t - \text{Revenue}_{t-1}) / \text{Revenue}_{t-1} $	Realized market expansion and demand outcome	Morgan (2012); Srinivasan & Hanssens (2009)
Leverage	Independent / moderator	Total liabilities / Total assets	Financing intensity and balance-sheet pressure	Frank & Goyal (2009); Margaritis & Psillaki (2010)
Capital expenditure intensity	Independent	$ \text{Capital expenditure} / \text{Total assets}$	Investment in productive capacity and renewal	Aivazian et al. (2005)
Asset turnover	Control	Revenue / Total assets	Efficiency in using the asset base to generate sales	Katsikeas et al. (2016)
Return on assets	Dependent	Net income / Total assets	Bottom-line return generated by the asset base	BPS-Statistics Indonesia (2024)
Operating margin	Dependent	Operating income / Revenue	Operating conversion of revenue before financing and tax	Dechow et al. (2010)

Source: Research results.

Empirical Models and Estimation

The baseline models estimate the association of market expansion, leverage, capital expenditure intensity, and asset turnover with profitability. Year indicators absorb common annual shocks. The small number of years prevents strong causal claims and makes a conventional large-N panel estimator inappropriate. Pooled ordinary least squares is therefore

reported as the main specification, with standard errors clustered by firm to allow arbitrary within-firm dependence (Cameron & Miller, 2015; Petersen, 2009). The Breusch-Pagan test rejects homoskedasticity in the ROA model ($p = 0.012$), supporting the use of robust inference. Variance inflation factors for the four continuous predictors range from 1.04 to 1.77 in the baseline specification, indicating no material multicollinearity.

The interaction model mean-centers revenue growth and leverage before constructing their product term. Robustness tests exclude Garuda Indonesia, whose negative-equity and restructuring conditions create exceptional leverage, and then exclude both Garuda Indonesia and Waskita Karya to test sensitivity to severe financial distress. A final firm fixed-effects model is reported as a demanding robustness check. Because only three outcome years are available, firm effects absorb much of the cross-sectional information and sharply reduce statistical power; this model is interpreted as a check on within-firm direction rather than as the principal estimate.

$$ROA_{it} = b_0 + b_1 Growth_{it} + b_2 Leverage_{it} + b_3 ATO_{it} + b_4 CAPEX_{it} + Year_t + e_{it} \quad (1)$$

$$OPM_{it} = b_0 + b_1 Growth_{it} + b_2 Leverage_{it} + b_3 ATO_{it} + b_4 CAPEX_{it} + Year_t + e_{it} \quad (2)$$

$$ROA_{it} = b_0 + b_1 GrowthC_{it} + b_2 LeverageC_{it} + b_3 Interaction_{it} + b_4 ATO_{it} + b_5 CAPEX_{it} + Year_t + e_{it} \quad (3)$$

In these equations, i indexes firms and t indexes years; GROWTH is revenue growth, LEV is leverage, ATO is asset turnover, CAPEX is capital expenditure intensity, OPM is operating margin, and $Year_t$ denotes year effects. Statistical significance is evaluated at 1%, 5%, and 10%, but effect size, robustness, and theoretical consistency are considered jointly. Given the observational design, coefficients are described as associations rather than causal effects.

RESULTS AND DISCUSSION

Results

Descriptive Statistics and Correlations

Table 3 shows substantial heterogeneity. Mean revenue growth is 10.1%, with a range from -28.6% to 57.7% after winsorization. Mean leverage is 0.630, and the maximum of 1.276 reflects a negative-equity condition in a distressed enterprise. Mean ROA is 4.3%, whereas mean operating margin is 11.8%. The wide dispersion of both outcomes is expected in a cross-sector state-controlled sample that contains commodity producers, regulated infrastructure, construction firms, telecommunications, and a restructuring airline. Capital expenditure intensity averages 3.4% of assets. These patterns support the use of sector-sensitive interpretation and distress robustness tests.

Table 3. Descriptive Statistics

Variable	N	Mean	Std. Dev.	Minimum	Median	Maximum
Revenue growth	39	0.101	0.210	-0.286	0.062	0.577
Leverage	39	0.630	0.254	0.294	0.563	1.276
Asset turnover	39	0.487	0.297	0.118	0.420	1.178
Capital expenditure intensity	39	0.034	0.030	0.005	0.024	0.128
Return on assets	39	0.043	0.084	-0.132	0.027	0.293
Operating margin	39	0.118	0.136	-0.243	0.108	0.344

Source: Research results.

The correlation matrix in Table 4 provides preliminary support for the main relationships. Revenue growth correlates positively with ROA ($r = 0.523$) and operating margin ($r = 0.193$). Leverage correlates negatively with ROA ($r = -0.318$) and operating margin ($r = -0.574$), while

asset turnover correlates positively with ROA ($r = 0.534$). Capital expenditure intensity has a positive bivariate relationship with operating margin ($r = 0.362$). Leverage and asset turnover are negatively correlated ($r = -0.626$), but the associated variance inflation factors remain below conventional thresholds. Correlations do not control for common year effects and should not be interpreted as hypothesis tests.

Table 4. Pearson Correlation Matrix

Variable	Growth	Leverage	ATO	CAPEX	ROA	OPM
Growth	1.000					
Leverage	0.104	1.000				
ATO	0.124	-0.626	1.000			
CAPEX	-0.133	-0.106	0.117	1.000		
ROA	0.523	-0.318	0.534	0.200	1.000	
OPM	0.193	-0.574	0.210	0.362	0.377	1.000

Source: Research results.

Regression Results

Table 5 reports the baseline and interaction models. In Model 1, revenue growth is positively associated with ROA ($\beta = 0.194$, $p = 0.011$). A ten-percentage-point increase in revenue growth is associated with approximately 1.94 percentage points higher ROA, holding the other variables and year effects constant. Relative to the sample mean ROA of 4.3%, this magnitude is economically substantial: the associated increase is equivalent to roughly 45% of the average ROA level. Thus, the result is not only statistically significant but also indicates that moderate differences in realized market expansion correspond to meaningful differences in asset-level profitability. Asset turnover and capital expenditure intensity are also positive, while leverage is negative but statistically insignificant in the full ROA sample. Model 1 explains 56.2% of ROA variation. These results support H1 and H3 for ROA, but do not support H2 in the most inclusive ROA specification.

Model 2 uses operating margin. Revenue growth remains positive ($\beta = 0.259$, $p < 0.001$), implying that a ten-percentage-point increase in revenue growth is associated with approximately 2.59 percentage points higher operating margin. Relative to the sample mean operating margin of 11.8%, this corresponds to about 22% of the average margin and therefore represents a material operating effect. Leverage is negative and economically large ($\beta = -0.445$, $p < 0.001$): a 0.10 increase in the liabilities-to-assets ratio is associated with approximately 4.45 percentage points lower operating margin, equivalent to nearly 38% of the sample mean margin. This magnitude highlights the practical importance of balance-sheet pressure even before considering interest expense directly. Capital expenditure intensity is positive ($\beta = 1.736$, $p < 0.001$); because the average CAPEX intensity is only 3.4%, a one-percentage-point increase corresponds to approximately 1.74 percentage points higher operating margin. Asset turnover is negative at the 10% level, which may reflect low-margin high-volume operations in some sectors. Model 2 supports H1, H2, and H3 for operating performance.

Model 3 tests the proposed boundary condition. Mean-centered revenue growth remains positive ($\beta = 0.178$, $p = 0.019$), leverage is negative at the 10% level, and capital expenditure intensity remains positive. The interaction between revenue growth and leverage is positive but statistically insignificant ($\beta = 0.267$, $p = 0.369$). H4 is therefore not supported. The null interaction suggests that, in this short panel, market expansion and leverage have largely additive associations with ROA rather than a stable conditional relationship. Differences in debt maturity, government support, project cycles, and sector regulation may prevent a uniform moderation effect across firms.

Table 5. Baseline Regression Results

Predictor	Model 1: ROA	Model 2: OPM	Model 3: ROA Interaction
Revenue growth	0.194** (0.076)	0.259*** (0.047)	
Leverage	-0.035 (0.027)	-0.445*** (0.088)	
Centered revenue growth			0.178** (0.076)
Centered leverage			-0.063* (0.034)
Growth × leverage			0.267 (0.297)
Asset turnover	0.107** (0.051)	-0.181* (0.108)	0.100* (0.056)
Capital expenditure intensity	0.572** (0.253)	1.736*** (0.349)	0.443** (0.184)
Year effects	Yes	Yes	Yes
Firm-clustered standard errors	Yes	Yes	Yes
R ²	0.562	0.610	0.599
Adjusted R ²	0.480	0.537	0.508
N	39	39	39

Source: Research results. Notes: Firm-clustered standard errors are in parentheses; *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$; OPM = operating margin.

Robustness Tests

Table 6 assesses sensitivity to financial distress. When Garuda Indonesia is excluded, leverage becomes negative and significant in the ROA model ($\beta = -0.119$, $p = 0.040$), while revenue growth is positive at the 10% level and capital expenditure intensity remains positive. Excluding both Garuda Indonesia and Waskita Karya produces stronger results: revenue growth is positive ($\beta = 0.166$, $p = 0.005$), leverage is negative ($\beta = -0.138$, $p = 0.008$), and capital expenditure intensity is positive ($\beta = 0.523$, $p = 0.003$). The corresponding operating-margin model also yields positive revenue growth and capital expenditure effects and a negative leverage effect. These tests indicate that the full-sample leverage coefficient is attenuated by extreme restructuring conditions rather than created by them.

A firm fixed-effects model yields positive revenue-growth and capital-expenditure coefficients but none is statistically significant. This outcome is unsurprising because only three annual observations per firm are available and firm effects absorb most cross-sectional variation. The fixed-effects result nevertheless limits the strength of inference: the baseline estimates identify short-panel associations that combine between-firm and within-firm differences. They should not be interpreted as causal estimates of what would happen if a single enterprise changed its strategy. The substantive conclusion is therefore narrower: firms and years characterized by stronger realized market expansion and productive investment tend to display better accounting performance, while high leverage is associated with weaker margins and lower ROA in non-extreme subsamples.

Table 6. Distress and Fixed-Effects Robustness Tests for ROA

Predictor	No GIAA	No GIAA and WSKT	Full Firm FE	Inference
Revenue growth	0.119* (0.064)	0.166*** (0.059)	0.146 (0.170)	Positive in pooled robustness; weak within-firm power
Leverage	-0.119** (0.058)	-0.138*** (0.052)	-0.181 (0.480)	Negative after removing extreme distress
Asset turnover	0.081 (0.059)	0.082 (0.063)	0.095 (0.149)	Direction positive; not robustly significant
Capital expenditure intensity	0.397** (0.193)	0.523*** (0.176)	0.269 (2.100)	Positive in pooled robustness
R ²	0.629	0.652	0.730	
N	36	33	39	

Source: Research results. Notes: Firm-clustered standard errors are in parentheses; FE = firm fixed effects; *** p < 0.01, ** p < 0.05, * p < 0.10.

Table 7. Hypothesis Evaluation

Hypotheses	Expected relationship	Evidence	Decision
H1	Revenue growth → profitability (+)	Positive for ROA and OPM; positive in non-distress robustness	Supported
H2	Leverage → profitability (-)	Negative for OPM and non-distress ROA; insignificant in full ROA model	Partially supported
H3	CAPEX intensity → profitability (+)	Positive in both baseline models and pooled robustness	Supported
H4	Growth × leverage → ROA (-)	Interaction is statistically insignificant	Not supported

Source: Research results.

Discussion

The central result is that realized market expansion is positively associated with accounting profitability. This finding supports the marketing-finance proposition that market outcomes matter when they produce incremental cash-generating activity rather than merely visible customer metrics. Revenue growth is associated with both ROA and operating margin, and its coefficient remains positive when distressed firms are excluded. The result is consistent with research showing that marketing capabilities and market-based assets influence business performance through demand creation, customer response, and improved revenue expectations (Morgan, 2012; Morgan et al., 2009; Rust et al., 2004). It also complements capital-market research that links marketing actions to profit and valuation pathways (Joshi & Hanssens, 2010; Srinivasan & Hanssens, 2009). What is distinctive in state-controlled enterprises is that revenue growth cannot be assumed to reflect the same objective function as in privately controlled firms. A private firm can typically reject expansion that fails a commercial hurdle rate; a state-controlled enterprise may still expand to preserve affordability, connectivity, domestic supply, employment, or strategic capacity. The positive coefficients therefore indicate that, during the observed period, these public-policy and commercial pressures did not on average prevent market expansion from being converted into accounting returns. This is an ownership-specific insight that cannot be inferred from conventional private-firm samples alone.

For managers, the result does not imply that any revenue growth is desirable. Revenue can increase because of commodity prices, consolidation, regulated tariffs, public assignments, or discounts. The positive association should instead be understood as evidence that market

expansion and accounting performance are aligned on average in the observed period. The strength of the operating-margin coefficient suggests that incremental revenue was not entirely consumed by operating costs. However, the cross-sector sample requires managerial decomposition: boards should reconcile growth by price, volume, customer, product, channel, and policy assignment, and should disclose how each component affects margin, working capital, and asset productivity.

The leverage findings clarify why growth quality cannot be evaluated without financial strategy. Leverage is strongly negative in the operating-margin model and becomes negative for ROA after firms with exceptional distress are removed. Although operating margin precedes interest expense, a negative association is economically plausible because leverage can proxy for project burden, operating inflexibility, delayed restructuring, and weak asset quality. In construction and infrastructure enterprises, liabilities may accompany long project cycles and receivable exposure; in transportation, financial restructuring can dominate ordinary operating relationships. The evidence is consistent with capital-structure theory that debt benefits can be outweighed by distress and agency costs (Frank & Goyal, 2009; Margaritis & Psillaki, 2010).

The null interaction is also informative. The study predicted that leverage would weaken the growth-ROA relationship, but no stable moderation effect appears. One interpretation is that leverage affects profitability directly rather than changing the marginal value of revenue growth. Another is that debt structure matters more than the aggregate liability ratio. Long-term project finance, subsidized facilities, trade payables, lease obligations, and short-term bank debt have different effects on cash-flow flexibility. Government support expectations and strategic mandates may further reduce the comparability of a single leverage measure. Future research should therefore disaggregate debt maturity, interest cost, currency exposure, guarantees, and related-party financing rather than relying only on total liabilities.

Capital expenditure intensity is positively associated with both ROA and operating margin in the pooled models. This result suggests that investment was, on average, connected with productive capacity, modernization, or service improvement during the sample period. For asset-intensive state-controlled enterprises, underinvestment can impair reliability and market access, while disciplined investment can lower bottlenecks and sustain growth. Yet the fixed-effects result is not significant, and reverse association remains possible: more profitable firms may simply have greater capacity to invest. Boards and investors should therefore examine project-level post-investment reviews, completion delays, utilization rates, and realized cash flows before interpreting capital expenditure as value creating.

The findings contribute to financial accounting by emphasizing the reconciliation between top-line growth and two different profitability measures. ROA asks whether the total asset base produces bottom-line returns, whereas operating margin asks whether revenue is converted into operating income. A strategy can look attractive on one measure and weak on another. For example, asset turnover is positive for ROA but weakly negative for operating margin, consistent with sectors that achieve high volume at relatively low margins. This distinction is useful for state owners because public-service scale, affordability, and strategic coverage may lower margins while still improving asset use, or vice versa. Performance contracts should therefore avoid a single-ratio approach. More specifically, state owners and boards can incorporate revenue growth, operating margin, ROA, leverage, and post-investment realization into balanced executive performance contracts, with explicit thresholds that distinguish policy-mandated growth from commercially generated growth. Capital-allocation committees can require major expansion projects to demonstrate expected contribution margins, financing needs, utilization targets, and downside scenarios before funds are committed. Monitoring systems can then compare realized revenue, margin, leverage, and asset productivity against those *ex ante* targets so that underperforming expansion is identified early rather than after balance-sheet stress has accumulated.

The study also contributes to marketing accountability. Direct marketing expenditure is difficult to compare because issuers aggregate promotion, selling, distribution, and administrative costs differently. By using revenue growth as a realized market outcome, the analysis shifts attention from budget size to market-to-financial conversion. The limitation is that revenue growth cannot isolate managerial marketing capability from external demand or prices. The appropriate managerial application is therefore a dashboard that links campaign and customer metrics to revenue components, margin, capital employed, and risk. Marketing leaders should be accountable not only for reach or sales but also for contribution quality and cash-flow implications; finance leaders should recognize that customer and channel investments can create long-lived assets even when accounting systems expense them immediately.

For capital-market participants, the evidence supports close attention to the composition and financing of growth in listed state-controlled enterprises. Investors should distinguish expansion supported by productive assets and operating conversion from expansion accompanied by rising leverage and restructuring risk. Transparent disclosure of market segments, customer concentration, pricing, capacity utilization, capital-project milestones, debt maturity, and public-service obligations would reduce information asymmetry. The OECD's governance framework and Indonesia's portfolio reporting agenda provide an institutional basis for such disclosure, but firm-level integration between strategic narratives and audited financial outcomes remains essential (ADB, 2023; OECD, 2024).

Finally, the paper shows why distressed observations should not automatically be deleted. Garuda Indonesia and Waskita Karya represent economically meaningful conditions within the state-controlled portfolio. Including them reveals the range of public corporate performance; excluding them tests whether ordinary relationships survive. The result that leverage becomes more clearly negative after exclusion indicates that exceptional restructuring can mask, rather than manufacture, the broader balance-sheet relationship. Reporting both samples is more informative than selecting only the specification with the strongest significance.

The novelty of this study lies in evaluating realized market expansion together with financing pressure and productive investment in a cross-sector sample of listed state-controlled enterprises. The evidence indicates that revenue growth, leverage, and capital expenditure intensity primarily contribute separate, additive information about profitability rather than a stable leverage-based moderation of the growth-return relationship. This ownership-specific integration links marketing outcomes to financial accounting and capital-market interpretation under simultaneous commercial and developmental mandates.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

This study shows that, among 13 Indonesian listed state-controlled nonfinancial enterprises during 2021-2023, realized market expansion and capital expenditure intensity are positively associated with accounting profitability, while leverage is most clearly associated with weaker operating margins and lower return on assets after extreme distress is removed. The insignificant revenue growth-leverage interaction indicates that market expansion and leverage operate mainly as additive rather than conditional influences in this short panel. The main contribution is to connect market outcomes, financing pressure, productive investment, and two complementary profitability measures in a state-ownership setting where commercial and developmental mandates coexist. Accordingly, growth should be evaluated through its conversion into margins and asset returns rather than through revenue alone.

Limitations

The findings are bounded by a small sample and only three outcome years, which limit statistical power and causal identification. The public machine-readable source may contain classification or transcription errors. Revenue growth cannot separate marketing capability from commodity prices, regulation, acquisitions, or public assignments; total liabilities do not distinguish debt maturity, interest costs, leases, or guarantees; capital expenditure may be endogenous to profitability; and sector heterogeneity remains substantial. The statistically weak firm fixed-effects estimates also indicate that the pooled results partly reflect between-firm differences.

Recommendations

Future research should extend the panel with audited issuer reports, collect direct selling and marketing expenditures, decompose revenue into price and volume, disaggregate debt structure, and incorporate market-based outcomes such as stock returns, market-to-book ratios, analyst forecasts, and the cost of capital. Dynamic-panel, quasi-experimental, sector-specific, and state-versus-private comparative designs could strengthen causal and contextual interpretation. For managers, boards, and state owners, growth proposals should be assessed jointly with contribution margins, working-capital needs, capital expenditure, financing capacity, project utilization, and post-investment returns so that revenue expansion does not conceal deteriorating margins or balance-sheet pressure.

Author Contributions

All authors share responsibility for verifying the data, references, analysis, and final claims presented in this manuscript.

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Data Availability and Research Integrity

The study uses public financial statement line items and a reproducible transformation script. The derived panel, variable definitions, and statistical output can be supplied to reviewers or deposited in an institutional repository upon submission. Generative artificial intelligence was used only for language organization and document preparation; the authors remain responsible for the manuscript.

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