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THE IMPACT OF TOBACCO EXCISE TAX ON FINANCIAL PERFORMANCE OF INDONESIAN CIGARETTE COMPANIES (2020-2024)

Bagus Satrio Prakoso [1], Dodik Siswantoro [2]

[1), 2)] Department of Accounting, Faculty of Economics and Business, Universitas Indonesia, Kampus UI Salemba 10430, DKI Jakarta, Indonesia

E-mail: [1]) bagus.satrio31@ui.ac.id, [2]) dodik.siswantoro@ui.ac.id

Abstract
This study analyses the impact of the tobacco excise increase under Minister of Finance Regulation No. 192/PMK.010/2021 on the financial performance of cigarette companies listed on the Indonesia Stock Exchange during 2020–2024. It employs a mixed methods approach with an explanatory sequential design. Saturated sampling covers the entire population of four listed cigarette firms: PT Gudang Garam Tbk, PT H.M. Sampoerna Tbk, PT Wismilak Inti Makmur Tbk, and PT Indonesian Tobacco Tbk. Financial performance is measured through the Quick Ratio, Debt to Equity Ratio, Return on Equity, Total Asset Turnover, and Net Profit Margin, and tested using the Wilcoxon Signed Rank Test comparing the pre-policy (2020–2021) and post-policy (2022–2024) periods. The results show no significant median differences in any ratio. Interviews with finance management of a large and a smaller issuer and with the excise regulator, triangulated against annual reports and notes to the financial statements, indicate that this stability reflects deliberate adaptive strategies: gradual and segment-differentiated price pass-through, operational efficiency, disciplined cash management, product-mix repositioning toward lower-tariff segments, and a preference for internal financing. The study contributes in three ways: it is the first to test PMK 192/PMK.010/2021 directly on the financial ratios of the complete population of listed Indonesian cigarette firms; it integrates a non-parametric before–after test with primary qualitative evidence from both firms and the regulator; and it argues that statistical non-significance in fiscal-policy event studies should be read as evidence of firm-level absorptive capacity rather than of absent economic impact.
Keywords: Cigarette Companies; Financial Performance; Mixed Methods; PMK 192/PMK.010/2021; Tobacco Excise Tax; Wilcoxon Signed Rank Test

Abstrak
Penelitian ini menganalisis dampak kenaikan tarif cukai hasil tembakau berdasarkan PMK Nomor 192/PMK.010/2021 terhadap kinerja keuangan perusahaan rokok yang terdaftar di Bursa Efek Indonesia periode 2020–2024. Pendekatan yang digunakan adalah mixed methods dengan desain explanatory sequential. Sampel jenuh mencakup seluruh emiten rokok BEI: PT Gudang Garam Tbk, PT H.M. Sampoerna Tbk, PT Wismilak Inti Makmur Tbk, dan PT Indonesian Tobacco Tbk. Kinerja keuangan diukur melalui Quick Ratio, Debt to Equity Ratio, Return on Equity, Total Asset Turnover, dan Net Profit Margin, kemudian diuji dengan Wilcoxon Signed Rank Test untuk membandingkan periode sebelum (2020–2021) dan sesudah (2022–2024) kebijakan. Hasil pengujian menunjukkan tidak terdapat perbedaan median yang signifikan pada seluruh rasio. Wawancara dengan manajemen keuangan emiten besar dan kecil serta regulator cukai, yang ditriangulasi dengan laporan tahunan dan catatan atas laporan keuangan, menunjukkan bahwa stabilitas tersebut merupakan hasil strategi adaptif: price pass-through bertahap dan tersegmentasi, efisiensi operasional, pengelolaan kas yang disiplin, penyesuaian bauran produk ke segmen bertarif rendah, serta preferensi pendanaan internal. Kebaruan penelitian ini terletak pada tiga hal: pengujian langsung PMK 192/PMK.010/2021 terhadap rasio keuangan seluruh populasi emiten rokok BEI, yang belum dilakukan literatur terdahulu; integrasi uji beda non-parametrik dengan bukti kualitatif primer dari sisi perusahaan dan regulator sekaligus; serta reinterpretasi metodologis bahwa ketidaksignifikanan statistik pada studi peristiwa kebijakan fiskal perlu dibaca sebagai indikasi kapasitas absorpsi perusahaan (absorptive capacity), bukan sebagai bukti ketiadaan dampak ekonomi kebijakan.
Kata kunci : Cukai Hasil Tembakau; Kinerja Keuangan; Perusahaan Rokok; Wilcoxon Signed Rank Test; Mixed Methods; PMK 192/PMK.010/2021

INTRODUCTION

1.1 Background

The cigarette industry in Indonesia occupies a unique position in the national economy. On one hand, this industry is one of the largest contributors to state revenue through tobacco excise taxes. On the other hand, the cigarette industry is also subject to strict government control due to the negative health impacts of cigarette consumption. The tension between fiscal interests and public health policy makes the cigarette industry highly sensitive to regulatory changes, particularly excise tax policies (Directorate General of Customs and Excise, 2022). The scale of this fiscal dependence is substantial: tobacco excise accounts for well over ninety per cent of Indonesia's total excise collection, so any change in tariff design carries simultaneous consequences for the state budget and for corporate cost structures

Tobacco excise tax is a dominant cost component in the retail price structure of cigarettes. In practice, the excise tax burden can account for more than 60 percent of the cigarette retail selling price (Chaloupka, Yurekli, & Fong, 2012; Guindon, Paraje, & Chaloupka, 2017). Any change in excise rates therefore directly affects the cost structure of cigarette companies and may influence their liquidity, profitability, and operational efficiency.

As part of its sustainable fiscal policy, the government issued Minister of Finance Regulation No. 192/PMK.010/2021, which stipulated an average double-digit increase in cigarette excise rates effective 1 January 2022 and simplified the tariff-tier structure. The policy was intended to control cigarette consumption while increasing state revenue (Kementerian Keuangan Republik Indonesia, 2021). For cigarette companies, however, it represented a strategic challenge because it significantly raised production costs. Comparable rate adjustments continued in 2023 and 2024, so the post-policy period examined here reflects cumulative rather than one-off fiscal pressure.

From a cost-accounting perspective, an increase in excise raises variable cost per unit and may compress profit margins if firms cannot adjust selling prices or realise cost efficiencies (Horngren, Datar, & Rajan, 2018; Drury, 2018). Microeconomic theory, however, indicates that in industries with relatively inelastic demand firms retain the ability to shift higher costs onto consumers through price pass-through (Pindyck & Rubinfeld, 2018; Nicholson & Snyder, 2017). Empirical estimates for Indonesia place cigarette own-price elasticity in the inelastic range, which is consistent with this expectation (Fauzi & Pongpanich, 2022; Bella et al., 2024).

Although tobacco excise tax has been widely discussed in relation to public health, consumption control, and government revenue, its impact on the financial performance of listed cigarette companies remains less conclusive. Existing studies tend to focus either on consumption behavior, fiscal revenue, or general industry responses, while fewer studies directly examine whether recent excise tax adjustments are reflected in corporate financial ratios. This creates an empirical gap, particularly in the context of Indonesia's listed cigarette companies, where firms differ substantially in market share, production scale, product portfolio, and financial flexibility.

The 2020–2024 period is particularly compelling because it captures a unique policy and business environment. The period includes the years before the implementation of PMK No. 192/PMK.010/2021, the first year of policy implementation in 2022, and the subsequent adjustment period in 2023–2024. During this period, cigarette companies faced simultaneous pressures from higher excise tax rates, post-pandemic recovery, changing consumer purchasing power, down-trading behavior, and increasing competition from lower-priced products. Therefore, examining this period provides a timely opportunity to assess whether the excise tax increase significantly changed the financial condition of cigarette companies or whether firms

were able to absorb the policy pressure through pricing, efficiency, and financial management strategies.

1.2 Novelty and Contribution of the Study

First, an empirical contribution at the firm-financial level. Indonesian studies on PMK 192/PMK.010/2021 and its predecessors have concentrated on macro-level outcomes consumption (Susilawati et al., 2022), retail price formation (Prasetyo & Adrison, 2020; Adrison & Dauchy, 2024), production volume and state revenue (Ginanjar, Wany, & Prayitno, 2023; Santosa, Supriyono, & Marka, 2021), and aggregate economic output (Bella et al., 2024). Studies that do examine cigarette-firm financial ratios (Suwanti & Sulasmiyati, 2022; Mantik et al., 2023; Dien, Alexander, & Latjandu, 2025; Sunandar & Permana, 2024) are largely descriptive or use pre-2022 windows and therefore do not test the specific policy shock. This study is, to the authors' knowledge, the first to test PMK 192/PMK.010/2021 as a before–after event on the financial ratios of the complete population of listed Indonesian cigarette firms.

Second, a methodological contribution through genuine mixed-methods integration. Most prior Indonesian work is single-method. Where qualitative material is used, it is typically secondary. This study collects primary interview evidence from *both* sides of the policy, finance, and management of a large-scale firm and of a smaller-scale firm, and of the excise regulator, and triangulates it against audited financial statements and annual-report disclosures. This design converts a null statistical result from a dead end into an explainable outcome.

Third, an interpretive contribution. The study argues that in fiscal-policy event studies, non-significance in short-horizon accounting ratios should be interpreted as evidence of *absorptive capacity* or the firm's ability to neutralise a cost shock through pricing, mix, efficiency, and financing decisions rather than as evidence that the policy was economically inconsequential. This reframing has direct implications for how excise-policy effectiveness is evaluated, and it reconciles the apparently conflicting findings reported by Ginanjar et al. (2023) and Susilawati et al. (2022)

1.3 Research Questions

Based on the background above, this study seeks to examine the financial performance of four cigarette companies listed on the Indonesia Stock Exchange during the 2020–2024 period and to analyze whether the implementation of the tobacco excise tax increase under PMK No. 192/PMK.010/2021 affected their financial performance before and after the policy implementation. Specifically, the study evaluates whether there were significant differences in liquidity, financing structure, profitability, and operational efficiency between the pre-policy period and the post-policy period.

1.4 Research Objectives

Accordingly, the objective of this study is to analyze the financial performance of Indonesian listed cigarette companies during the 2020–2024 period and to assess the impact of the tobacco excise tax increase under PMK No. 192/PMK.010/2021 on their financial ratios. The study also aims to explain the statistical findings through qualitative evidence obtained from interviews and documentary analysis, so that the results are not limited to numerical changes but also reflect the strategic responses of companies and regulators.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Tobacco Excise Tax Policy

Excise is a state levy imposed on goods with specific characteristics, one of which is tobacco products. Indonesian cigarette excise policy is designed to achieve two principal objectives: controlling consumption and optimising state revenue (Direktorat Jenderal Bea dan Cukai, 2022; Azizatun Nafi', 2021). Indonesia applies a specific (per-stick) excise that varies by product type, production technique, production volume, and declared retail price band, which historically produced a complex multi-tier structure (Prasetyo & Adrison, 2020).

PMK No. 192/PMK.010/2021 forms part of the tobacco excise roadmap, which emphasises continuous tariff increases and simplification of the tier structure. The regulation raises the excise burden per stick and directly affects the cost structure of cigarette companies (Kementerian Keuangan Republik Indonesia, 2021). Tier simplification is analytically important because a narrower tier gap reduces the scope for firms to reposition products into lower-taxed segments which is one of the classic mitigation strategies documented internationally (Sheikh, Branston, & Gilmore, 2023).

2.2 Production Cost Theory

Production cost theory holds that an increase in variable cost reduces profit if revenue does not rise proportionally (Drury, 2018; Horngren et al., 2018). In the cigarette industry, excise is a variable cost attached directly to the product, so a tariff increase raises cost of goods sold. Where cost increases are anticipated and recurring, however, management can respond through budgeting, pricing, and efficiency programmes rather than absorbing the shock passively—a point emphasised in the managerial-accounting literature on cost management under regulatory pressure (Garrison, Noreen, & Brewer, 2021).

2.3 Price Pass-Through and Demand Elasticity

Price pass-through refers to a firm's ability to transfer production-cost increases to consumers through higher selling prices. Its success depends heavily on demand elasticity (Pindyck & Rubinfeld, 2018) and on market structure: in concentrated, oligopolistic markets, firms retain greater pricing power (Carlton & Perloff, 2015; Porter, 1985).

The international evidence indicates that pass-through is neither automatic nor uniform. Sheikh et al. (2023), in a systematic review of industry pricing responses to excise policy, find that manufacturers routinely engage in *differential shifting,* which overshifts tax on premium segments while undershifting on budget segments and in price smoothing, brand-variant launches, and product-attribute changes. Undershifting is more common in low- and middle-income countries (Sheikh, Branston, van der Zee, & Gilmore, 2023). For Indonesia specifically, Prasetyo and Adrison (2020) find evidence of tax undershifting, and Adrison and Dauchy (2024) show that minimum-price rules and differential tiers jointly shape firms' pricing decisions. This literature implies that pass-through in Indonesia is likely to be gradual and segment-specific rather than immediate and complete, an expectation that becomes analytically central to this study.

2.4 Financial Performance and Financial Ratios

Financial performance reflects the effectiveness of management in deploying resources to achieve operational and financial objectives, and is conventionally measured through liquidity, solvency, profitability, and activity ratios (Garrison et al., 2021; Brigham & Ehrhardt, 2020; Hery, 2016; Ross, Westerfield, & Jordan, 2019). Ratio analysis remains a standard

instrument for evaluating firm condition and for comparing performance across periods (Nissim & Penman, 1999). This study measures financial performance using:

- Quick Ratio as an indicator of liquidity;
- Debt to Equity Ratio as an indicator of financing structure;
- Return on Equity and Net Profit Margin as indicators of profitability;
- Total Asset Turnover as an indicator of operational efficiency.

2.5 Previous Studies

2.5.1 Excise Policy, Consumption and State Revenue

The first stream examines whether excise increases achieve their stated policy goals. Internationally, Goodchild, Perucic, and Nargis (2018) show that raising tobacco taxes can deliver simultaneous public-health and fiscal benefits, though the size of the effect depends on how tax increases are transmitted into retail prices. Chaloupka and Powell (2019) and Chaloupka, Straif, and Leon (2019) likewise conclude that taxation is among the most effective tobacco-control instruments, while noting that economic effects vary with demand elasticity and market structure.

In Indonesia, findings are more equivocal. Susilawati, Abyan, Aruan, and Angwyn (2022) report that the 12.5 per cent excise increase did not significantly reduce cigarette consumption, indicating persistently inelastic demand. Fauzi and Pongpanich (2022) estimate an overall cigarette price elasticity of approximately −0.67, again in the inelastic range. Bella et al. (2024), using input–output analysis, find that a substantial tax increase would generate a *net positive* macroeconomic effect on output, income, and employment, and explicitly observe that the Indonesian cigarette industry has sustained high production levels and relatively stable profits despite successive tariff increases. Azizatun Nafi' (2021) adds a cautionary note: aggressive tariff increases may erode industry profit while widening the price gap that fuels illicit trade, and therefore argues for gradual, calibrated increases.

2.5.2 Industry Pricing responses and pass-through behaviour

The second stream focuses on how firms respond to tax changes through price. This literature is well developed internationally but thinly represented in Indonesian accounting research. Sheikh et al. (2023) systematically document six recurring industry strategies which are differential shifting, launching new brand variants, promotions, price smoothing, pack-size manipulation, and product reformulation, all of which delay or dilute the impact of tax increases on retail prices and on firm margins. Sheikh, Branston, van der Zee, and Gilmore (2023) show that undershifting predominates in low- and middle-income markets.

For Indonesia, Prasetyo and Adrison (2020) find that manufacturers undershifted excise increases over 2005–2017, and Adrison and Dauchy (2024) demonstrate that the interaction between minimum-price rules and differential tiers materially shapes firms' pricing decisions. Rospita et al. (2024) examine the relationship between selling price and cigarette sales volume, providing complementary domestic evidence on the price–volume trade-off.
This stream is directly relevant here because it predicts that pass-through will be *gradual and segmented*, which in turn predicts *muted* short-horizon movement in accounting margins.

2.5.3 Excise policy and cigarette-firm performance in Indonesia

The third stream connects excise policy to firm outcomes, and it is here that the literature is most divided. On one side, several studies report adverse effects. Suprihanti, Sinaga, and Kustiari (2018) find that excise increases affect selling prices and production volume because excise constitutes a significant share of production cost. Gunardi, Agung, and Febyola (2021)

report that higher SKM tariffs pushed manufacturers to reduce output. Ginanjar et al. (2023) find that PMK 192 was associated with lower production volume and lower net profit among cigarette issuers even as revenue targets were met. Santosa et al. (2021) similarly conclude that excise policy raised state revenue while reducing production capacity, particularly in lower- and middle-tier segments.

On the other side, an equally substantial group of studies finds resilience rather than deterioration. Susilawati et al. (2022) find no significant consumption decline. Suwanti and Sulasmiyati (2022), analysing four listed cigarette issuers with Current Ratio, DER, TATO, and ROE, find that liquidity, solvency, and activity ratios jointly influence profit growth, implying that internal financial management remains a decisive performance driver. Mantik et al. (2023), comparing cigarette firms across ASEAN, find that although Indonesian firms face the heaviest fiscal pressure, operational efficiency enables them to defend earnings. Lesmana and Iskandar (2020) show that profitability and liquidity positively affect firm value among Indonesian cigarette issuers, while high leverage depresses it. Solihin et al. (2023) and Sunandar and Permana (2024) document heterogeneous rather than uniformly negative profitability outcomes among IDX-listed cigarette firms.

A third group is essentially descriptive. Dien et al. (2025) evaluate the financial performance of IDX cigarette firms and report contrasting patterns between large and small issuers without testing a policy shock. Badar, Nurgraha, Supriatna, and Purnamasari (2025) and Dewi and Basyir (2025) apply before–after ratio comparison designs in other settings, demonstrating the method's usefulness but not addressing excise policy.

2.5.4 Financial Ratios as Instruments of Before-After Policy Evaluation

The fourth stream is methodological. Anita Wahyu Indrasti (2020), Dianitha, Masitoh, and Siddi (2020), and Kurniasari and Ichwanudin (2023) establish financial ratios as valid indicators of performance and firm value in Indonesian consumer-goods and manufacturing sectors. Badar et al. (2025) and Dewi and Basyir (2025) apply pre-/post-event ratio comparison, confirming its appropriateness for evaluating discrete shocks. Where samples are small and non-normal, the non-parametric Wilcoxon Signed Rank Test is the standard paired test (Siegel & Castellan, 1988; Conover, 1999; Hollander, Wolfe, & Chicken, 2013; Gibbons & Chakraborti, 2020; Corder & Foreman, 2014), and median-based inference is robust to outliers and small-sample distortion (Hartwig et al., 2020).

2.5.5 Similarities, differences and the resulting research gap

A comparison of the studies reviewed above reveals a body of literature that converges firmly on its premises but diverges sharply on its conclusions, and it is this pattern that defines the space the present study occupies.

The convergence concerns the economic starting point. Almost without exception, the studies agree that Indonesian cigarette demand is relatively inelastic and that excise constitutes a material component of both production cost and retail price. Susilawati et al. (2022) demonstrate the former by showing that a double-digit tariff increase failed to produce a significant reduction in consumption, and Fauzi and Pongpanich (2022) quantify it at an own-price elasticity of approximately −0.67. Suprihanti et al. (2018) and Santosa et al. (2021) establish the latter, documenting excise as a dominant element of the cost structure and of the retail price formation process. The present study proceeds from the same premise and adopts the same theoretical anchors such as production cost theory and price pass-through so that its findings remain directly comparable with this body of work.

The divergence concerns outcomes. The literature is genuinely divided on whether the excise burden ultimately damages firm performance, and the division does not follow any

obvious methodological fault line. Ginanjar et al. (2023) find that PMK 192 was associated with reduced production volume and lower net profit among cigarette issuers; Santosa et al. (2021) report contraction in production capacity, particularly in the lower- and middle-tier segments; and Gunardi et al. (2021) observe that higher machine-made tariffs pushed manufacturers to curtail output. Against these, Susilawati et al. (2022) find no significant consumption decline, Suwanti and Sulasmiyati (2022) show that internal financial management continues to drive profit growth among listed cigarette issuers, Mantik et al. (2023) conclude that operational efficiency allows Indonesian firms to defend earnings despite carrying the region's heaviest fiscal burden, and Lesmana and Iskandar (2020) demonstrate that profitability and liquidity remain the decisive determinants of firm value in this sector. Bella et al. (2024) reinforce the resilience position from an entirely different vantage point, observing that the industry has sustained high production levels and relatively stable profits across successive tariff increases. This contradiction has not been resolved in the existing literature; it is, rather, the central puzzle that motivates the present study.

The divergence also concerns research design, and here three recurring gaps become apparent. The first is the choice of outcome variable. The great majority of Indonesian studies measure consumption, retail price, physical volume, or state revenue rather than audited financial ratios, so that the accounting consequences of excise policy for the firm are inferred rather than observed. Adrison and Dauchy (2024) and Prasetyo and Adrison (2020) illustrate this clearly: both examine firm behaviour with considerable rigour, but the behaviour they observe is pricing, not financial performance. The second gap concerns identification. Those studies that do employ financial ratios, such as Solihin et al. (2023), Sunandar and Permana (2024), and Dien et al. (2025), tend to report trends across a period rather than defining a specific policy event and testing performance across it, and their observation windows frequently close before the regulation of interest takes effect. The third gap concerns method. Almost none of these studies integrate primary qualitative evidence capable of explaining a null result, with the consequence that when the literature reports "no significant effect," it is generally unable to distinguish between a policy that produced no impact and a policy whose impact was absorbed by the firm.

The present study is designed against precisely these three gaps. It adopts audited financial ratios as the outcome variable rather than inferring firm consequences from market-level indicators; it defines PMK No. 192/PMK.010/2021 as a discrete policy event and tests performance across the resulting pre- and post-policy periods, following the before–after logic validated in other settings by Badar et al. (2025) and Dewi and Basyir (2025); and it collects primary interview and documentary evidence expressly in order to interpret the statistical result rather than merely to illustrate it. Taken together, these three design choices allow the study to address the unresolved contradiction identified above, because they make it possible to determine not only whether financial performance changed but why it did or did not.

2.6 Conceptual Framework

The conceptual framework of this study sets out the analytical sequence through which the effect of a fiscal instrument on corporate financial performance is examined, and explains why that effect cannot be predicted from theory alone. Figure 2.1 presents this sequence, and the discussion below follows its five stages in turn.

The sequence begins with the audited financial statements of the cigarette companies listed on the Indonesia Stock Exchange, which constitute the empirical base of the study. Financial statements are used here not merely as a data source but as the medium through which the consequences of policy become observable, since it is in the income statement and the balance

sheet that a change in the excise tariff ultimately registers (Nissim & Penman, 1999; Brigham & Ehrhardt, 2020).

From these statements, the study derives corporate financial performance, operationalised through the five ratios established in Section 2.4: the Quick Ratio for liquidity, the Debt-to-Equity Ratio for financing structure, Return on Equity and Net Profit Margin for profitability, and Total Asset Turnover for operational efficiency. Together, these ratios represent the four dimensions of financial condition through which the impact of a cost shock would be expected to become visible (Garrison et al., 2021; Ross, Westerfield, & Jordan, 2019).

The third stage introduces the excise tariff increase under PMK No. 192/PMK.010/2021 as an external influence acting upon that performance. The regulation raises the specific excise levied per cigarette stick, and because excise attaches directly to the product rather than to the enterprise, it enters the income statement immediately as an increase in variable cost and therefore in cost of goods sold (Drury, 2018; Horngren et al., 2018). It does not, however, confine itself to the income statement. Excise stamps are purchased in advance of sale, so a higher tariff also enlarges excise and cigarette-tax payables within current liabilities and advances the timing of the associated cash outflow. The policy is therefore, from the outset, simultaneously a margin event and a working-capital event, and its influence may be expected to reach each of the four financial dimensions along a distinct path: liquidity through the enlargement and earlier maturity of current liabilities relative to liquid assets; financing structure if the higher outlay is funded through external borrowing; profitability if the higher unit cost is not recovered through selling price; and operational efficiency if volume contracts while the asset base remains unchanged.

This influence is not, however, transmitted mechanically, because firms possess mechanisms through which a cost shock can be absorbed before it reaches reported performance. Theory and the literature reviewed in Section 2.5 identify four such mechanisms. Price pass-through, under conditions of inelastic demand and an oligopolistic market structure, permits recovery of the cost increase through selling price (Pindyck & Rubinfeld, 2018; Carlton & Perloff, 2015), although the international evidence cautions that pass-through in practice tends to be gradual and differentiated across product segments rather than immediate and complete (Sheikh et al., 2023; Prasetyo & Adrison, 2020; Adrison & Dauchy, 2024). Cost efficiency combined with product-mix management allows firms to reposition volume towards segments carrying lower tariffs, most notably hand-rolled products relative to machine-made ones (Gunardi et al., 2021; Mantik et al., 2023). Working capital and cash discipline allow the earlier excise outflow to be met without liquidity stress (Garrison et al., 2021). And conservative financing, reflecting a pecking-order preference for internal funds, forestalls any escalation in leverage (Frank & Goyal, 2003). Each of these mechanisms operates in the opposite direction to the corresponding transmission path, so that what is eventually observed in the ratios is a net outcome rather than the raw effect of the tariff increase.

The fourth stage therefore partitions the observation period at the point of policy implementation, separating the pre-policy years of 2020–2021 from the post-policy years of 2022–2024. This partition converts the regulation into a discrete event against which financial performance can be compared, following the before–after logic validated in other settings by Badar et al. (2025) and Dewi and Basyir (2025), and it is this comparison that the hypotheses developed in the following section are designed to test.

The fifth and final stage integrates the quantitative and qualitative evidence. This stage is a structural requirement of the framework rather than a methodological addition, and the reason lies in the interaction between transmission and absorption described above. Because a cost shock of known direction encounters absorption mechanisms of unknown strength, theory alone cannot predict the sign of the net effect on any of the five ratios, and this indeterminacy is

precisely what the divided empirical literature reflects: studies that emphasise the cost channel report deterioration (Ginanjar et al., 2023; Santosa et al., 2021), while those that capture the absorption channel report stability (Susilawati et al., 2022; Mantik et al., 2023; Bella et al., 2024). A statistical comparison taken on its own cannot resolve the ambiguity, because it cannot distinguish the absence of a shock from a shock that has been absorbed. Qualitative evidence is therefore required to establish which mechanism was operating on which ratio, and it is this requirement that gives the explanatory sequential design its rationale.

Two consequences for the research design follow. The hypotheses developed in Section 2.7 are formulated in non-directional form, predicting a difference between the two periods without specifying its sign, because the framework supports opposing signs simultaneously; this in turn establishes the two-tailed Wilcoxon Signed Rank Test as the appropriate test. The qualitative phase, correspondingly, is not an illustrative supplement to the statistical analysis but the element that allows its result to be interpreted.

2.7 Hypothesis Development

The hypotheses of this study follow directly from the framework set out in the preceding section. Each is constructed by placing the transmission path along which the excise increase would reach a particular financial dimension against the absorption mechanism capable of neutralising it, and by considering how the existing empirical literature divides on the resulting outcome. Because in every case the two forces act in opposite directions and the evidence is genuinely contested, the hypotheses are formulated to predict the existence of a difference between the pre-policy and post-policy periods rather than its direction.

Liquidity offers the clearest illustration of this logic. A higher excise tariff requires larger and earlier cash outlays for the purchase of excise stamps, which enlarges excise and cigarette-tax payables within current liabilities and, holding liquid assets constant, mechanically depresses the Quick Ratio. Working against this, firms may respond by tightening cash-flow forecasting and accelerating receivable and sales turnover, so that liquid assets expand in step with the obligation and the ratio is preserved (Garrison et al., 2021). Which of the two dominates is an empirical matter, and accordingly:

H1: There is a significant difference in the Quick Ratio of cigarette companies before and after the implementation of PMK No. 192/PMK.010/2021.

The financing structure is subject to comparable tension. Where internal cash flow proves insufficient to fund the enlarged excise outlay, firms may turn to external borrowing, which would raise the Debt-to-Equity Ratio and increase financial risk. Pecking-order reasoning, however, predicts a preference for internal funds wherever they are available, and firms operating under regulatory uncertainty have particular reason to avoid any escalation in leverage (Frank & Goyal, 2003). This expectation is reinforced by Lesmana and Iskandar (2020), who find that high leverage depresses firm value among Indonesian cigarette issuers and thereby gives management a direct incentive to restrain it. The direction of any change is therefore indeterminate, and:

H2: There is a significant difference in the Debt-to-Equity Ratio of cigarette companies before and after the implementation of PMK No. 192/PMK.010/2021.

Profitability measured from the shareholder's perspective is exposed to the most direct conflict in the literature. An increase in unit cost that is not recovered through selling price compresses net income and therefore Return on Equity. Set against this, inelastic demand and

an oligopolistic market structure grant firms the pricing power required to pass the increase on to consumers (Pindyck & Rubinfeld, 2018; Carlton & Perloff, 2015), and Mantik et al. (2023) demonstrate that efficiency programmes allow Indonesian cigarette firms to defend earnings even while carrying the heaviest fiscal burden in the region. Yet Ginanjar et al. (2023), examining the same regulation over the same period, find that net profit nonetheless declined. Given that the literature supports both outcomes on comparable evidence:

H3: There is a significant difference in the Return on Equity of cigarette companies before and after the implementation of PMK No. 192/PMK.010/2021.

Operational efficiency is reached through the volume channel rather than the cost channel. If higher retail prices depress sales volume while the asset base remains fixed, Total Asset Turnover falls, and Gunardi et al. (2021) and Santosa et al. (2021) report precisely such contraction in production output following earlier tariff increases. The countervailing evidence is that demand inelasticity limits the extent of any volume loss, as Susilawati et al. (2022) find in the case of consumption and Fauzi and Pongpanich (2022) confirm through an estimated own-price elasticity of approximately −0.67, while firms may further sustain revenue by repositioning their product mix and expanding distribution. Hence:

H4: There is a significant difference in the Total Asset Turnover of cigarette companies before and after the implementation of PMK No. 192/PMK.010/2021.

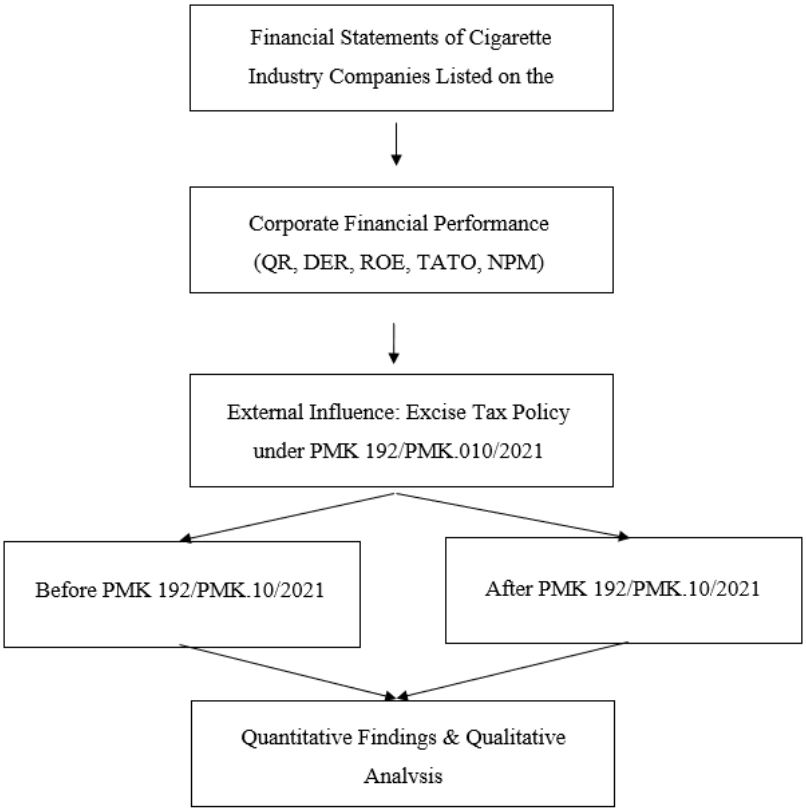
Net Profit Margin, finally, constitutes the most direct accounting expression of the relationship between cost and price, and it falls whenever the excise increase outpaces the adjustment of selling prices. Since pass-through in Indonesia is partial and gradual rather than immediate and complete (Prasetyo & Adrison, 2020; Adrison & Dauchy, 2024), some degree of margin compression is plausible; since pass-through is also differentiated across segments, however, that compression may be offset by shifts in the product mix towards products carrying lower tariffs. Accordingly:

H5: There is a significant difference in the Net Profit Margin of cigarette companies before and after the implementation of PMK No. 192/PMK.010/2021.

All five hypotheses are stated in the alternative form and are tested against corresponding null hypotheses of no median difference between the two periods. Testing is conducted two-tailed using the Wilcoxon Signed Rank Test at the five per cent significance level, the two-tailed specification following necessarily from the non-directional formulation adopted above. The decision rule is that a p-value below 0.05 leads to rejection of the null hypothesis and support for the alternative, whereas a p-value at or above 0.05 leaves the null hypothesis unrejected.

It should be emphasised that a failure to reject the null hypothesis does not, within this framework, constitute evidence that the excise increase was without economic consequence. As Section 2.6 established, the observed movement in each ratio is a net outcome in which a transmission path and an absorption mechanism have already been set against one another, and a statistical test conducted on that net outcome cannot distinguish the absence of a shock from a shock that has been successfully absorbed. Where a null hypothesis is not rejected, the qualitative phase of the study is therefore used to identify which absorption mechanism accounts for the result, and it is through this division of labour between the two phases that the hypotheses are interpreted.

Figure 2.1 Research Framework



Source: Processed by the Author

RESEARCH METHOD

3.1 Research Design

This study employs a mixed-methods approach with an explanatory sequential design. The quantitative phase is conducted first to examine whether there are significant differences in the financial performance of cigarette companies before and after the implementation of PMK No. 192/PMK.010/2021. The qualitative phase is then conducted to explain and confirm the statistical findings through interviews and documentary analysis.

In the quantitative phase, the study uses financial statement data from four cigarette companies listed on the Indonesia Stock Exchange and analyzes five financial ratios, namely Quick Ratio, Debt to Equity Ratio, Return on Equity, Total Asset Turnover, and Net Profit Margin. The Wilcoxon Signed Rank Test is used because the number of observations is limited and the data do not meet the assumptions required for parametric testing.

In the qualitative phase, semi-structured interviews are conducted with selected company management representatives and regulators, supported by documentary analysis of annual reports, management discussion and analysis sections, and notes to the financial statements. This phase is intended to provide contextual explanations for the quantitative results, particularly why the financial ratios remained statistically stable despite the increase in tobacco excise tax. This design is consistent with the explanatory sequential logic, in which qualitative evidence is used to deepen the interpretation of quantitative findings.

3.2 Population and Sample

The population of this study consists of all cigarette companies listed on the Indonesia Stock Exchange. The sampling technique used is saturated sampling, in which the entire population is used as the research sample, consisting of four listed cigarette companies.

3.3 Types and Sources of Data

The data used in this study consist of secondary financial data and primary qualitative data. The secondary data are obtained from the annual financial statements and annual reports of four cigarette companies listed on the Indonesia Stock Exchange, namely PT Gudang Garam Tbk, PT H.M. Sampoerna Tbk, PT Wismilak Inti Makmur Tbk, and PT Indonesian Tobacco Tbk, for the 2020–2024 period.

For before-after analysis, the observation period is divided into two groups. The pre-policy period consists of 2020–2021, representing the period before the implementation of PMK No. 192/PMK.010/2021. The post-policy period consists of 2022–2024, representing the period after the regulation became effective. This classification allows the study to compare financial performance before and after the tobacco excise tax increase policy.

3.4 Operational Definition and Variable Measurement

In this study, corporate financial performance is measured using financial ratios that represent four main aspects of a company's financial condition: liquidity, financing structure, profitability, and operational efficiency. The selection of financial ratios is based on their relevance in assessing the impact of fiscal policy on a company's financial condition and their suitability for the characteristics of the cigarette industry, which is highly regulated and cost-intensive (Garrison et al., 2021).

Liquidity is measured using the Quick Ratio (QR), which reflects a company's ability to meet its short-term obligations using its most liquid current assets, excluding inventories. QR is selected because the cigarette industry has a relatively long inventory cycle, making a more conservative liquidity measurement more appropriate.

The company's financing structure is measured using the Debt-to-Equity Ratio (DER), which indicates the proportion of company financing derived from debt compared to equity. DER is used to assess whether companies tend to increase their dependence on debt in response to the higher excise tax burden.

Profitability is measured using two indicators: Return on Equity (ROE) and Net Profit Margin (NPM). ROE reflects a company's ability to generate profit for shareholders, while NPM indicates the company's efficiency in generating net profit from sales. The use of these two profitability indicators is intended to capture the impact of excise tax policy from both the shareholders' perspective and the operational perspective.

Operational efficiency is measured using Total Asset Turnover (TATO), which indicates a company's ability to utilize its total assets to generate revenue. This ratio is relevant for assessing whether the increase in excise tax rates affects the productivity of the company's assets.

3.5 Qualitative Informants, Interview Protocol and Quotation Handling

Informants were selected purposively on the basis of their direct knowledge of the phenomenon under study. Three key informants were interviewed, representing the two sides of the policy relationship: the firms subject to the excise increase and the authority that designs it. Company-side informants were drawn from one large-scale issuer and one smaller-scale issuer so that variation in adaptive capacity could be observed rather than assumed, since the descriptive analysis in Section Overview of the Research Objects indicates that scale, product

portfolio, and financial flexibility differ substantially across the four sample firms. Table 4.1 summarises the informants.

Table 3.1 Profile of Key Informants

Code	Position / Institution	Perspective represented	Mode and duration
I1	Management representative, PT H.M. Sampoerna Tbk (HMSP)	Large-scale issuer	Recorded, semi-structured, ±45 minutes
I2	Management representative, PT Wismilak Inti Makmur Tbk (WIIM)	Smaller-scale issuer	Recorded, semi-structured, ±40 minutes
I3	Head of Excise Tariff and Basic Price Section I, Directorate General of Customs and Excise	Excise regulator	Recorded, semi-structured, ±50 minutes

Source: Processed by the Author

Interviews were semi-structured and guided by a protocol derived from the preliminary quantitative results. The protocol comprised five thematic blocks corresponding to the five financial ratios, with a concluding open question inviting the informant to identify the principal reason for the observed stability. This structure was chosen so that each response could be mapped directly onto the statistical finding it was intended to explain, and so that the informants were confronted with the quantitative result itself rather than asked to speculate about the policy in the abstract. The regulator protocol followed the same five-block logic but reframed each theme from the policy-design perspective.

With the informants' consent, all three interviews were audio-recorded and transcribed verbatim. Informants are identified by code and institutional position; personal names are held by the researcher and withheld from the manuscript in accordance with the confidentiality undertaking given at the time of interview.

In reporting the findings, direct quotations are presented in the informants' original language, followed by an English translation, and are attributed to the informant codes I1 to I3. Two editorial conventions apply. Square brackets indicate a correction of an evident artefact of automated transcription, for example where a technical term has been rendered phonetically; ellipses within square brackets indicate omitted material. No wording has otherwise been altered, and no quotation has been composited from separate passages of the transcript.

Direct quotation functions here as primary evidence rather than as illustration. Each quotation is subsequently matched against two independent sources: the corresponding result of the Wilcoxon test, and the disclosures contained in the company's annual report, management discussion and analysis, and notes to the financial statements. Triangulation, set out in Section 4.5, is accordingly the instrument through which the claims made in the quotations are tested, and both convergence and divergence between the three sources are reported.

3.6 Data Analysis Technique

Data analysis is conducted in four integrated stages. The first stage is descriptive. Financial-ratio data are described across the full observation period in order to establish the general pattern of performance before the more formal comparison is undertaken. Descriptive statistics centre on median rather than mean values, for two reasons: the sample comprises only four firms, and preliminary examination indicates that the ratios are not normally distributed. In such conditions median-based inference is considerably more robust to outliers and to the distortions characteristic of small samples than mean-based inference would be (Hartwig et al., 2020). Consistent with the periodisation established in Section 3.3, values described as "before"

are computed from the 2020–2021 financial years and those described as "after" from the 2022–2024 financial years.

The second stage tests the hypotheses developed in Section 2.7. The Wilcoxon Signed Rank Test is applied to each of the five ratios in order to examine whether financial performance differs between the periods preceding and following the implementation of PMK No. 192/PMK.010/2021. This non-parametric paired test is appropriate here on three grounds: the observations are paired, since the same firms are observed in both periods; the number of observations is small; and the assumption of normality required by parametric alternatives is not satisfied (Hollander et al., 2013; Gibbons & Chakraborti, 2020). Testing is conducted two-tailed at the five per cent significance level, the two-tailed specification following from the non-directional formulation of the hypotheses. A p-value at or above 0.05 indicates that the median difference between the two periods is not statistically significant.

The third stage analyses the interview material. Because the interview protocol was itself constructed around the five financial dimensions examined in the quantitative phase, the analytical structure required is supplied by the protocol rather than by a separate coding scheme, and with three informants a formal coding procedure would add procedural apparatus without yielding additional analytical purchase. Analysis therefore proceeds by reading each verbatim transcript against the dimension to which each response was directed, so that every statement concerning liquidity, financing structure, profitability, or asset efficiency is placed alongside the corresponding statistical result and alongside what the other informants said on the same point. This arrangement makes it possible to establish whether the two company informants describe the same mechanism, whether they describe it in the same terms, and whether the regulator's account of policy design corroborates or qualifies what the firms report. Statements falling outside the five protocol dimensions are retained and examined separately rather than discarded, since these are the points at which the informants introduced considerations the study had not anticipated. Three such matters arose in the course of the interviews: the shift of production and market share from machine-made to hand-rolled products, the treatment of illicit-cigarette circulation as one of the four pillars governing tariff formulation, and the origin of the multi-year tariff design in proposals from the industry itself. Quotations selected for presentation in Section 4.4 are those in which an informant states a mechanism rather than an evaluation, and in which that mechanism can be matched to a specific financial dimension.

The fourth stage integrates the quantitative and qualitative findings through triangulation. Two forms are applied. Methodological triangulation sets the statistical results against the interview evidence, so that the claims made in the direct quotations are tested against the Wilcoxon outcomes rather than merely accompanying them. Documentary triangulation then tests those same claims against the disclosures contained in annual reports, management discussion and analysis sections, and notes to the financial statements. The purpose of this stage is interpretive as much as confirmatory: where the Wilcoxon results indicate no statistically significant change, triangulation is the instrument by which the study determines whether that outcome reflects the absence of economic impact or the operation of the firm-level absorption mechanisms identified in Section 2.6. Convergence across all three sources strengthens confidence in the conclusion drawn, while divergence between them is reported openly and interpreted rather than reconciled by preference for any single source.

RESULTS AND DISCUSSION

4.1 Overview of the Research Objects

The four cigarette companies examined in this study have different business characteristics in terms of operational scale, market segments, and product strategies. PT

Gudang Garam Tbk and PT H.M. Sampoerna Tbk are large-scale cigarette companies with dominant market shares, while PT Wismilak Inti Makmur Tbk and PT Indonesian Tobacco Tbk are companies with relatively smaller business scales.

These differences in characteristics lead to varying corporate responses to the excise tax increase policy. Large-scale companies tend to have greater flexibility in adjusting prices and implementing cost efficiency, whereas smaller-scale companies face more limitations in absorbing the increase in excise tax burden.

4.2 Descriptive Statistics of Financial Ratios

Descriptive statistical analysis is conducted to provide an initial overview of the financial performance of cigarette companies before and after the implementation of the tobacco excise tax increase policy under PMK Number 192/PMK.010/2021. Descriptive statistics are used to identify general tendencies, patterns of change, and variations in the financial ratio data before inferential statistical testing is carried out.

In this study, the descriptive statistics focus on the median as the measure of central tendency. The use of the median is considered more appropriate than the mean because the financial ratio data are not normally distributed and may contain outliers. This approach is also consistent with the use of the Wilcoxon Signed Rank Test, which is based on comparing median values between periods.

The descriptive statistical results show that, in general, the financial performance of cigarette companies during the 2020–2024 period remained relatively stable, both before and after the implementation of the excise tax increase policy. In terms of liquidity, measured using the Quick Ratio, the median values indicate that cigarette companies were still able to maintain their ability to meet short-term obligations. Although there were fluctuations across companies and periods, there was no indication of a sharp decline in liquidity after the excise tax policy was implemented.

From the perspective of financing structure, the descriptive statistics of the Debt-to-Equity Ratio show that cigarette companies tended to maintain a relatively consistent capital structure. There was no significant increase in the median DER during the post-policy period, indicating that companies did not respond to the higher excise tax burden by increasing their dependence on debt financing. This stability in financing structure reflects management's prudence in maintaining financial risk amid policy uncertainty.

In terms of profitability, the Return on Equity and Net Profit Margin ratios show fluctuations during the observation period, influenced by various factors such as changes in net income, macroeconomic conditions, and the impact of the pandemic in the early period of the study. However, in aggregate, the median values of ROE and NPM did not show a consistent decline after the implementation of the excise tax increase policy. This indicates that cigarette companies were still able to maintain their return on equity and net profit margins.

Meanwhile, operational efficiency, measured using Total Asset Turnover, shows that companies' ability to utilize assets to generate revenue remained relatively unchanged. The stable median TATO value reflects that the excise tax increase did not directly reduce the productivity of company assets. Companies were still able to optimize the use of their assets despite facing cost and regulatory pressures.

Overall, the descriptive statistical results indicate that fluctuations in the financial ratios of cigarette companies during the research period were more reflective of differences in each company's characteristics and macroeconomic conditions than the direct impact of the excise tax increase policy. These descriptive findings provide an initial indication that cigarette companies have relatively strong adaptive capacity in facing fiscal policy changes, which is further tested statistically using the Wilcoxon Signed Rank Test.

Table 4.1 Descriptive Statistics

No	Company	QR_ before	QR_ After	DER_ before	DER_ After	ROE_ before	ROE_ after	TATO_ before	TATO_ After	NPM_ before	NPM_ After
1	PT Gudang Garam Tbk	0,4925	0,344	0,4265	0,518	0,113	0,087	2,6915	1,408	0,056	0,067
2	PT Handjaya Mandala Sampoerna Tbk	1,223	0,697	0,731	0,518	0,264	0,166	6,3155	1,708	0,0825	0,067
3	PT Wismilak Inti Makmur Tbk	1,561	0,697	0,3985	0,518	0,1395	0,156	1,3405	1,57	0,0755	0,067
4	PT Indonesian Tobacco Tbk	0,086	0,344	0,7135	0,518	0,0395	0,087	0,4485	1,287	0,052	0,065

Source: Processed by the Author

4.3 Results of the Wilcoxon Signed Rank Test

The results of the Wilcoxon Signed Rank Test show that all financial ratios analyzed have p-values above the 5 percent significance level. Therefore, there are no statistically significant median differences in the Quick Ratio, Debt to Equity Ratio, Return on Equity, Total Asset Turnover, and Net Profit Margin between the periods before and after the implementation of the excise tax increase policy.

These findings indicate that, in aggregate, the tobacco excise tax increase policy did not cause significant changes in the financial performance of cigarette companies listed on the Indonesia Stock Exchange during the observation period.

Table 4.2 Test Statistics Results

	QR_after – QR_before	DER_after - DER_before	ROE_after - ROE_before	TATO_after – TATO_before	NPM_after – NPM before
Z	-1.095[b]	-0.730[b]	-0.365[b]	-0.730[b]	0.00[c]
Asymp. Sig. (2-tailed)	0.273	0.465	0.715	0.465	1.00

Source: Processed by the Author

The non-significance of the statistical test results should not be interpreted to mean that the excise tax increase policy had no impact at all on cigarette companies. Rather, the results indicate that the impact of the policy was not strong enough to cause statistically significant changes in the median financial ratios.

This suggests that cigarette companies have effective adaptation mechanisms in responding to fiscal policy pressures, including selling price adjustments, cost efficiency, and relatively sound cash management

Accordingly, the null hypothesis is not rejected for any of the five hypotheses, as summarised in Table 4.3.

Table 4.3 Hypothesis Testing Decisions

Hypothesis	Ratio	Decision at α = 0.05	Interpretation
H1	Quick Ratio	Not supported	No significant median difference in liquidity
H2	Debt to Equity Ratio	Not supported	No significant median difference in financing structure
H3	Return on Equity	Not supported	No significant median difference in shareholder return
H4	Total Asset Turnover	Not supported	No significant median difference in asset efficiency
H5	Net Profit Margin	Not supported	No significant median difference in operating margin

Source: Processed by the Author

4.4 Qualitative Findings

The qualitative findings are presented by financial dimension, so that each body of interview evidence can be read directly against the statistical result it is intended to explain.

4.4.1 Liquidity: Anticipatory Cash Management

Both company informants rejected the premise that the excise increase had disturbed their liquidity position, and both attributed this to planning that begins before the tariff takes effect. I1 described the annual tariff adjustment as a familiar and expected event rather than a shock:

"Di [Sampoerna] ini kami sudah terbiasa dengan pola perubahan tarif cukai yang naik setiap tahunnya. Jadi setiap kali pemerintah mengumumkan kenaikan, tim finansial kami langsung membuat simulasi arus kas. Kami ini sangat disiplin dalam perencanaan kas, termasuk forecasting arus kas operasional, pengaturan [jatuh] tempo piutang, sampai [penjadwalan] pembayaran pemasok." — I1

("At Sampoerna we are already accustomed to the pattern of annual excise tariff increases. So every time the government announces an increase, our finance team immediately prepares a cash-flow simulation. We are highly disciplined in cash planning, including operational cash-flow forecasting, management of receivable maturities, and the scheduling of supplier payments.")

I1 then connected this practice directly to the ratio under examination:

"Dan karena segmen kami, khususnya SKM Mild, masih memiliki volume penjualan yang kuat, arus kas masuk sebenarnya tetap stabil. Makanya quick ratio kami tidak turun drastis, likuiditas juga masih aman sepanjang periode itu." — I1

("And because our segment, particularly SKM Mild, still has strong sales volume, cash inflow has in fact remained stable. That is why our quick ratio did not fall sharply, and liquidity remained secure throughout the period.")

I2 described a functionally equivalent mechanism operating at a smaller scale, with the emphasis falling on turnover speed rather than on forecasting capacity:

"Kami juga menjaga likuiditas melalui manajemen kas yang cukup konservatif. Penjualan Wismilak itu cukup stabil juga, terutama di segmen SKT yang punya konsumen loyal. Kami juga punya jaringan distribusi yang sangat efisien. Jadi, perputaran barang cepat dan otomatis, kas juga cepat kembali. Dengan kontrol kas yang kuat seperti itu, quick ratio kami tidak terganggu secara ekstrem." — I2

("We also maintain liquidity through fairly conservative cash management. Wismilak's sales are quite stable as well, particularly in the SKT segment which has loyal consumers. We also have a very efficient distribution network, so goods turn over quickly and cash accordingly returns quickly. With that kind of strong cash control, our quick ratio was not disturbed to any extreme degree.")

Taken together, these accounts explain the non-significant Quick Ratio result. The enlargement of current liabilities arising from excise-stamp purchases was not permitted to erode the liquidity position, because it was met by a deliberate strengthening of the liquid-asset side. Notably, the two firms achieve the same outcome by different routes, the larger firm through forecasting and working-capital scheduling and the smaller firm through inventory and cash-conversion speed, which is consistent with the heterogeneity in adaptive capacity noted in Section Overview of the Research Objects.

4.4.2 Financing Structure: Preference for Internal Funds

Both company informants stated unequivocally that the higher excise burden was not financed through additional borrowing. I1 was categorical when asked whether the increase had required a change in financing:

"Tidak, Mas, sama sekali tidak. Kami selama ini mengandalkan pendanaan internal. Struktur modal kami memang didesain konservatif agar fleksibel menghadapi dinamika [pasar]. Meskipun biaya produksi naik karena cukai, kami sudah memiliki mekanisme untuk mengantisipasinya, termasuk melalui penyesuaian harga jual. Jadi tidak ada kebutuhan mendesak untuk menambah utang. Itu sebabnya DER terlihat stabil di laporan keuangan." — I1

("No, not at all. We have always relied on internal funding. Our capital structure is deliberately designed to be conservative so that it remains flexible in the face of market dynamics. Although production costs rose because of excise, we already have mechanisms to anticipate this, including through selling-price adjustment. So, there was no urgent need to add debt. That is why the DER appears stable in the financial statements.")

I2 gave a consistent account in which low leverage is treated as a standing principle rather than as a response to the policy:

"Terkait penambahan utang, sepertinya tidak ya Pak ya. Kami masih bisa mengandalkan pendanaan internal kami. Prinsip Wismilak itu menjaga leverage tetap rendah supaya perusahaan tetap fleksibel. Ya, kenaikan cukai memang menambah biaya, tapi kenaikan harga jual dan efisiensi internal sudah cukup untuk menutupnya." — I2

("Regarding additional debt, I would say no. We can still rely on our internal funding. Wismilak's principle is to keep leverage low so that the company remains flexible. Yes, the excise increase did add cost, but the selling-price increase and internal efficiency were sufficient to cover it.")

Both statements align closely with pecking-order reasoning (Frank & Goyal, 2003) and explain the stability of the Debt-to-Equity Ratio. Both informants also identify the same substitute for external financing, namely selling-price adjustment combined with efficiency, which links this dimension directly to the profitability evidence that follows.

4.4.3 Profitability: Inelastic demand, Gradual Pass-Through and Segment Position

I1 attributed profitability stability first to the demand condition that makes pass-through possible:

"Permintaan rokok di Indonesia itu sangat inelastis. Konsumen kami, terutama di SKM Mild dan SKT, mereka tetap membeli meski harga naik. Jadi ruang kami untuk melakukan price adjustment itu cukup besar." — I1

("Cigarette demand in Indonesia is highly inelastic. Our consumers, particularly in SKM Mild and SKT, continue to buy even when prices rise. So our room to make price adjustments is quite considerable.")

I1 then set out a sequence of efficiency measures undertaken alongside price adjustment, comprising optimisation of production lines, strengthening of the distribution network, elimination of inefficient stock-keeping units, improvement of raw-material procurement, and expansion of the portfolio into alternative tobacco products, before concluding that it was the combination that preserved the ratios:

"Jadi kombinasi faktor inilah yang menjaga ROE dan NPM tetap stabil meskipun beban cukai meningkat." — I1

("So, it is this combination of factors that kept ROE and NPM stable even though the excise burden increased.")

I2's explanation is structurally similar but rests on a different competitive position, and introduces the tariff differential between product types as an explicit source of advantage:

"Yang kedua, tarif cukai SKT naiknya tidak sebesar SKM, sehingga struktur biaya kami relatif lebih ringan dibandingkan dengan perusahaan besar yang fokus di SKM. Yang ketiga, kami melakukan efisiensi di semua lini, contohnya di produksi, di pemasaran, di distribusi, ditambah dengan strategi [price] adjustment yang terukur. Margin kami tetap bisa dijaga." — I2

("Second, the SKT excise tariff did not rise as much as SKM, so our cost structure is relatively lighter than that of large companies focused on SKM. Third, we pursue efficiency across every line, for example in production, marketing, and distribution, together with a measured price-adjustment strategy. Our margin could therefore be maintained.")

This evidence explains why Return on Equity and Net Profit Margin fluctuated at the level of individual firms without producing a statistically significant median decline. It also indicates that the two firms occupy different positions within the same tariff structure: the differential that constitutes a relative advantage for the SKT-focused issuer is, for the SKM-dominant issuer, precisely the pressure that motivates portfolio adjustment. The regulator evidence in Section 4.4.6 shows that this asymmetry became a system-wide phenomenon.

4.4.4 Operational Efficiency: Continuity of Capacity and Distribution

Both informants reported that asset utilisation was substantially unchanged across the policy boundary. I1 grounded this in production rhythm and distribution relationships:

"Pabrik-pabrik kami beroperasi pada kapasitas yang relatif konstan. Untuk produksi SKT dan SKM semuanya sudah berjalan dengan ritme operasional yang konsisten. Jaringan distribusi kami juga sangat stabil. Kami punya hubungan kuat dengan retailer besar dan kecil. Jadi meskipun harga naik, distribusi barang ke pasar tetap berjalan lancar. Dengan volume yang stabil dan aset yang juga tidak banyak berubah, rasio TATO ya wajar kalau terlihat stabil juga." — I1

("Our factories operate at relatively constant capacity. SKT and SKM production have all continued at a consistent operational rhythm. Our distribution network is also very stable. We have strong relationships with both large and small retailers. So, although prices rose, the distribution of goods to the market continued smoothly. With stable volume and an asset base that likewise did not change much, it is reasonable that the TATO ratio appears stable.")

I2 added an active element to the same account, in which distribution was not merely maintained but extended:

"Kapasitas produksi berjalan dengan ritme yang sama seperti tahun-tahun sebelumnya. Kami juga melakukan ekspansi distribusi ke berbagai daerah. Jadi volume tidak turun, aset tetap juga tidak banyak berubah." — I2

("Production capacity ran at the same rhythm as in previous years. We also expanded distribution into various regions. So, volume did not fall, and fixed assets likewise did not change much.")

These accounts are consistent with the non-significant Total Asset Turnover result. They should, however, be read alongside the regulator's evidence in Section 4.4.6, which indicates that aggregate industry production did decline over the same period. The reconciliation of these two observations is addressed in Section 4.5.

4.4.5 Regulator's Perspective: Absorption Anticipated at the Design Stage

I3 explained that the tariff was not set with firm financial performance as an incidental consideration, but within an explicit four-pillar framework in which the effect on industry and employment is a stated objective:

"Dalam rangka penyusunan kebijakan tarif atau kebijakan cukai hasil tembakau, hal tersebut memiliki pertimbangan utama, yaitu empat pilar kebijakan. Pilar pertama adalah bagaimana kebijakan yang disusun itu dapat mengendalikan konsumsi. Pilar kedua, di saat kita melakukan implementasi kebijakan, itu juga bagaimana dampaknya terhadap industri maupun terhadap tenaga kerja, serta bagaimana kebijakan yang disusun bisa mengoptimalkan penerimaan negara dari sektor cukai hasil tembakau dan juga dampak terhadap peredaran rokok ilegal." — I3

("In formulating tariff policy or tobacco excise policy, the principal consideration consists of four policy pillars. The first pillar is how the policy formulated can control consumption. The second, when we implement the policy, concerns its impact on industry and on the workforce, as well as how the policy can optimise state revenue from the tobacco excise sector, and its effect on the circulation of illicit cigarettes.")

I3 further explained that the second pillar is operationalised through consultation with manufacturers during policy formulation, with the consequence that firms are aware of an impending increase before it is promulgated:

"Regulator pasti akan berdiskusi dan melakukan audiensi dengan pengusaha pabrik. Jadi, kita tanya bagaimana situasi terkini di industri, di pasar, sehingga mereka memberikan masukan yang baik pada saat kita melakukan penyusunan. […] Sehingga pada prinsipnya memang pada saat proses penyusunan, perusahaan atau industri juga sudah mengetahui ketika akan ada kebijakan. […] Sehingga mereka pasti akan menyesuaikan […] kebijakan di internal perusahaan mereka." — I3

("The regulator will certainly hold discussions and consultations with manufacturers. So we ask about current conditions in the industry and in the market, so that they provide useful input while we are drafting. […] So, in principle, during the formulation process, companies or the industry already know that a policy is coming. […] They will therefore certainly adjust their internal corporate policies accordingly.")

This account corroborates I1's statement that the annual tariff adjustment is treated as an expected event, and it establishes that the absorption observed at firm level was anticipated at the design stage rather than representing an unintended failure of the policy.

Most significantly, I3 described the timing of price pass-through as observed directly in the authority's own monitoring of market transaction prices:

"Kita pelajari dari data-data monitoring HTP bahwa pola kenaikan harga transaksi pasar dengan kebijakan tarif atau kebijakan kenaikan harga jual eceran yang kita terapkan, kemudian mereka akan membuat pola kenaikannya di akhir tahun sampai Q3. Jadi, pada Q1 itu perusahaan masih tetap menjaga harga pasar seperti yang terdahulu, sehingga konsumen tidak kaget dengan adanya kenaikan. Nah, itu mereka serap dulu [beban] kebijakan itu di sisi mereka.

Kemudian lambat laun di Q2, Q3 dan sampai dengan akhir tahun mereka akan men-shifting beban itu baru ke konsumen mereka." — I3

("We have learned from market transaction price monitoring data that, in the pattern of market price increases relative to the tariff policy or the retail-price increase we impose, companies then structure their increases from the end of the year through to Q3. So, in Q1 the company still maintains market prices as previously, so that consumers are not startled by the increase, and they absorb the burden of that policy on their own side first. Then gradually in Q2, Q3 and through to the end of the year they begin to shift that burden onto their consumers.")

This is the most consequential piece of qualitative evidence in the study, because it identifies the precise mechanism by which the cost shock was neutralised and, at the same time, specifies its timing. The burden is absorbed by the firm in the first quarter and transferred to consumers progressively over the remainder of the fiscal year. Since the financial ratios examined here are computed on annual audited figures, a within-year absorption-then-transfer pattern of this kind would be substantially invisible at the annual reporting date, which is precisely what the Wilcoxon results show. I3 attributed the speed of this adaptation to the consultation process itself:

"Nah, ini yang kita lihat bahwa ternyata tadi pola adaptasi perusahaan itu sangat cepat karena komunikasi pada saat penyusunan kita lakukan sehingga mereka bisa menyusun strategi-strategi itu. Dan strategi itu juga berdampak positif buat perusahaan sendiri dari kinerja keuangan." — I3

("What we observe is that the companies' pattern of adaptation is very rapid, because of the communication we undertake during formulation, which enables them to devise those strategies. And those strategies also have a positive effect on the companies themselves in terms of financial performance.")

4.4.6 Downtrading and Segment Repositioning

A theme not anticipated in the interview protocol emerged from the regulator interview and requires separate treatment, because it bears directly on the reconciliation of this study's findings with the prior literature.

I3 stated that aggregate production did in fact decline following implementation, and located that decline within the policy's own stated objective:

"Untuk kondisi dari 2021 ke 2022 memang kita lihat produksi menurun secara overall. Secara keseluruhan, produksi menurun, tetapi […] penurunan tersebut memang disebabkan oleh kebijakan pertama. Memang kita tujuannya adalah pengendalian konsumsi. Jadi tetap ada kebijakan di situ, tetapi untuk kinerja keuangan perusahaan, mereka bisa melakukan perubahan atau penyesuaian harga." — I3

("For the situation from 2021 to 2022, we did indeed observe that production declined overall. Production declined overall, but that decline was caused by the first policy pillar. Our objective was indeed consumption control. So, the policy effect is there, but as regards the companies' financial performance, they were able to make changes or adjustments to price.")

I3 then described the accompanying shift in product mix, identifying it explicitly as down-trading and as a deliberate strategy for defending profit:

"Ketika suatu perusahaan besar mengandalkan produknya pada jenis sigaret kretek mesin, karena situasi kondisi ekonomi di masyarakat yang daya belinya melemah, mereka mampu membeli rokok yang lebih murah. Akhirnya, mereka juga melakukan alih produksi dari sigaret kretek mesin menjadi sigaret kretek tangan yang harganya lebih murah. Jadi, market share SKM mengecil, tetapi market share SKT untuk perusahaan besar itu membesar. Dan itu juga salah satu upaya yang kita lihat untuk menjaga keuntungan mereka, menjaga penjualan mereka." — I3

("When a large company relies on machine-made kretek products, but because of economic conditions in which purchasing power has weakened, consumers can afford cheaper cigarettes, the company ultimately shifts its production from machine-made kretek to hand-rolled kretek, which is cheaper. So the SKM market share contracts while the SKT market share for large companies expands. And that too is one of the efforts we observe to defend their profit and defend their sales.")

Finally, I3 noted that the multi-year tariff design adopted for 2023 and 2024 originated as a proposal from the industry itself, in order to permit strategy formulation over a two- to three-year horizon rather than annually. This is directly relevant to the interpretation of the post-policy period, since it indicates that the planning horizon available to firms lengthened during the observation window rather than remaining constant.

4.4.7 Synthesis

The interview evidence indicates that the stability of the financial ratios was neither incidental nor evidence that the policy was without effect. Four absorption mechanisms are identifiable across the three interviews, each corresponding to one of the transmission paths specified in Section 2.6: disciplined cash and working-capital management, which protected liquidity; a standing preference for internal funds, which protected the financing structure; gradual and segment-differentiated price pass-through operating under inelastic demand, which protected margin; and continuity of capacity combined with distribution expansion and product-mix repositioning, which protected asset efficiency.

Two features of this evidence deserve emphasis. The first is that firm-level accounts and regulator-level accounts converge on the same mechanisms while being obtained independently, which materially strengthens confidence in the interpretation. The second is that the regulator evidence introduces a qualification the company informants did not volunteer: aggregate production declined, and part of the margin defence was achieved by repositioning volume from SKM into SKT rather than by retaining it. The policy therefore did produce a measurable industry effect; that effect simply did not present itself in the annual financial ratios of the listed firms.

4.5 Triangulation of Research Findings

Triangulation in this study was conducted to enhance the validity of the findings by comparing and integrating the results of quantitative analysis, qualitative findings from interviews, and documentary analysis of the annual reports of cigarette companies. This triangulation approach is consistent with the mixed methods explanatory sequential design, in which quantitative results are explained and further explored through qualitative data.

The quantitative analysis shows that there are no significant median differences in all financial ratios before and after the implementation of PMK Number 192/PMK.010/2021. This finding is then confirmed by the interview results, which indicate that cigarette companies had anticipated the increase in excise tax rates as a structural risk and responded to it through price adjustment strategies, or price pass-through, operational efficiency, and prudent cash flow management.

Furthermore, the documentary analysis of the companies' annual reports strengthens these findings. In the Board of Directors' reports and Management Discussion and Analysis (MD&A) sections, companies consistently disclosed that the increase in excise tax burden raised production costs, but its impact was managed through gradual price adjustments, cost control, and conservative financial policies. There was no indication of a significant increase in the use of debt in response to the excise tax increase, which is consistent with the stability of financing structure ratios in the quantitative results.

Based on the triangulation results, it can be concluded that the non-significant changes in financial ratios were not due to the absence of any impact from the excise tax policy, but rather to the adaptive capacity of cigarette companies in responding to such policy pressure. The integration of quantitative and qualitative findings indicates that the impact of the excise tax policy on the financial performance of cigarette companies was mitigated in the short term, and therefore was not significantly reflected in the financial ratios analyzed.

Table 4.3 Triangulation Results

Financial Ratio	Quantitative Findings	Interview Findings	Documentary Study Findings	Triangulation Conclusion
QR	Not significant	Management emphasized cash and working capital management to maintain short-term obligations.	The Board of Directors' Report and MD&A show a focus on cash flow stability and working capital efficiency.	Stable
DER	Not significant	Companies avoided increasing debt and maintained a conservative capital structure.	There was no indication of a significant increase in debt usage in the annual reports.	Stable
ROE	Not significant	Price adjustments and cost efficiency were implemented to maintain returns to shareholders.	The annual reports disclosed strategies to maintain profitability amid the excise tax increase.	Stable
NPM	Not significant	Price pass-through was implemented gradually to maintain profit margins.	The MD&A mentioned limitations in passing on costs within a single fiscal period.	Stable
TATO	Not significant	Operations continued normally, with a focus on asset optimization.	The annual reports emphasized operational efficiency and asset utilization.	Stable

Source: Processed by the Author

4.6 Discussion

The central finding of this study is that the excise increase under PMK No. 192/PMK.010/2021 did not produce a statistically significant deterioration in the financial performance of listed cigarette companies, and this places the study firmly within the resilience stream of the existing literature.

The closest correspondence is with Bella et al. (2024), who observe that the Indonesian cigarette industry has sustained high production levels and relatively stable profits across successive tariff increases. What their input–output analysis detects at the level of aggregate economic output, the present study observes in audited liquidity, leverage, profitability, and efficiency ratios, so that the two sets of findings function as macro-level and firm-level expressions of a single phenomenon. The correspondence is strengthened considerably by the regulator evidence reported in Section 4.4.5, since the account given by I3 derives not from the firms' own reporting but from the authority's monitoring of market transaction prices, and it therefore constitutes an independent confirmation of the stability that Bella and colleagues infer from national accounts data.

The same pattern of correspondence holds with respect to Susilawati et al. (2022), who find that a 12.5 per cent excise increase failed to reduce cigarette consumption significantly. Their consumption result and the profitability result reported here are two expressions of a single underlying condition, namely the inelasticity of Indonesian cigarette demand: where volume does not fall materially, and price can be adjusted, margin need not compress. The elasticity estimate of approximately −0.67 offered by Fauzi and Pongpanich (2022) supplies the parameter that renders this mechanism quantitatively plausible, and the interview evidence supplies its managerial expression, since I1 attributed the firm's pricing latitude explicitly to the inelastic character of demand and to consumers who continue purchasing despite higher prices. That an industry practitioner and an econometric estimate should converge on the same characterisation of the demand curve is itself a form of corroboration, and it indicates that inelasticity operates in this market not merely as a statistical property but as a recognised premise of commercial decision-making.

A comparable convergence emerges in relation to Mantik et al. (2023), whose comparative analysis of ASEAN cigarette firms concludes that operational efficiency is the principal means by which Indonesian firms defend earnings while carrying the heaviest fiscal burden in the region. Their conclusion was necessarily inferred from published financial statements; the present study observes the same mechanism directly, since I1 enumerated a specific programme comprising the optimisation of production lines, the strengthening of distribution, the elimination of inefficient stock-keeping units, and the improvement of raw-material procurement, while I2 described efficiency pursued across production, marketing, and distribution simultaneously. The primary evidence gathered here therefore confirms through managerial testimony what Mantik and colleagues could establish only by inference, and in doing so it converts a plausible interpretation of comparative ratios into a documented practice.

The findings likewise accord with Suwanti and Sulasmiyati (2022) and with Lesmana and Iskandar (2020) in demonstrating that internal financial management remains a decisive determinant of cigarette-firm outcomes even under sustained external regulatory pressure. Suwanti and Sulasmiyati establish that liquidity, solvency, and activity ratios jointly govern profit growth among the same four issuers examined here, while Lesmana and Iskandar show that leverage depresses firm value in this sector and thereby gives management a direct incentive to restrain it. The stability of the Debt-to-Equity Ratio observed in this study, together with the interview evidence in which both company informants described reliance on internal funding as a standing principle rather than as a reaction to the tariff, reinforces both conclusions. It is significant in this connection that I1 characterised the capital structure as deliberately

designed to be conservative, and I2 described low leverage as a corporate principle maintained for the sake of flexibility, since these are statements about policy rather than about circumstance, and they indicate that leverage restraint under fiscal pressure reflects a settled financial philosophy rather than an opportunistic response to a single regulation.

Finally, the study corroborates Solihin et al. (2023), Sunandar and Permana (2024), and Dien et al. (2025) in documenting substantial heterogeneity among the listed cigarette firms. Their observation that large and small issuers exhibit contrasting performance patterns is reproduced in Section Overview of the Research Objects of the present study, and it acquires additional significance here because it forms part of the explanation for the aggregate null result. The interview evidence makes the point concrete: although both company informants reported stable liquidity, they achieved that stability by different routes, the larger issuer through cash-flow forecasting and the scheduling of receivables and supplier payments, and the smaller issuer through the speed of inventory and cash conversion in a loyal hand-rolled segment. Similarly, both defended margin, but the larger issuer did so principally through pricing latitude derived from scale and inelastic demand, whereas the smaller issuer benefited from a tariff structure in which hand-rolled products faced smaller increases than machine-made products. Divergent firm-level responses of this kind offset one another at the median, and the heterogeneity documented by these earlier studies therefore does not merely coexist with the present findings but partly accounts for them.

CONCLUSION AND IMPLICATIONS

5.1 Conclusion

Based on the descriptive analysis and the Wilcoxon Signed Rank Test, this study concludes that the implementation of the tobacco excise tax increase under PMK No. 192/PMK.010/2021 did not cause statistically significant median differences in the financial performance of cigarette companies listed on the Indonesia Stock Exchange. Financial performance, as measured by Quick Ratio, Debt to Equity Ratio, Return on Equity, Total Asset Turnover, and Net Profit Margin, remained relatively stable between the pre-policy period and the post-policy period.

The qualitative findings provide further explanation for this result. Interviews with company management and regulators, supported by documentary analysis, indicate that cigarette companies anticipated the excise tax increase as a recurring policy risk and responded through gradual price pass-through, operational efficiency, disciplined cash management, conservative financing, and product mix adjustment. Therefore, the absence of significant statistical differences does not mean that the policy had no impact. Rather, it shows that the impact was mitigated by the companies' adaptive capacity during the observation period.

The broader implication of this finding is that the financial impact of tobacco excise policy should not be evaluated only through short-term financial ratios. In a market characterized by relatively inelastic demand, strong brand loyalty, and differentiated product segments, companies may be able to absorb fiscal pressure without immediate deterioration in accounting-based financial performance. For policymakers, this suggests that excise tax policy can continue to serve fiscal and public health objectives, but its long-term impact on production volume, legal market size, employment, and down-trading behavior should also be monitored. For investors, the findings indicate that firm-level resilience depends not only on company size, but also on product portfolio, pricing flexibility, cost efficiency, and financial discipline.

5.2 Suggestions

Future research should address the limitations of this study by extending the observation period beyond 2024, particularly to capture the medium- and long-term effects of continuing tobacco excise tax adjustments. The relatively short post-policy period in this study may not fully reflect the cumulative impact of repeated excise tax increases on profitability, production volume, and market structure.

Future studies are also recommended to include additional non-financial indicators such as sales volume, market share, average selling price, production volume, illegal cigarette circulation, and product segment composition. These indicators may provide a more comprehensive understanding of how excise tax policy affects the cigarette industry beyond accounting-based financial ratios.

In addition, future research may expand the sample by including non-listed cigarette manufacturers or medium-sized hand-rolled cigarette producers to better capture the effect of excise policy across different levels of the industry. Methodologically, future studies may apply panel regression or difference-in-differences analysis to examine causal relationships more rigorously. A deeper qualitative design with more informants from multiple companies and regulators would also strengthen the explanation of firm-level strategies in responding to excise tax pressure.

REFERENCES

Adrison, V., & Dauchy, E. (2024). The impact of tax and price reforms on companies' prices in a complex cigarette tax system. Applied Economics, 56(57). https://doi.org/10.1080/00036846.2023.2289905

Anita Wahyu Indrasti. (2020). Analisa pengaruh rasio keuangan terhadap pertumbuhan laba pada sektor industri barang konsumsi yang terdaftar di Bursa Efek Indonesia tahun 2015–2018.

Azizatun Nafi', B. (2021). Strategi kebijakan kenaikan tarif cukai hasil tembakau dalam rangka menekan konsumsi rokok Indonesia. Jurnal GAR, 2(1).

Badar, D. S., Nurgraha, N., Supriatna, Y., & Purnamasari, I. (2025). The impact of financial ratios on corporate performance in Southeast Asia: A comparison of pre- and post-COVID-19 pandemic. Jurnal Ilmiah Akuntansi Kesatuan, 13(3), 419–432. https://doi.org/10.37641/jiakes.v13i3.3483

Bella, A., Swarnata, A., Vulovic, V., Nugroho, D., Meilissa, Y., Usman, U., & Dartanto, T. (2024). Macroeconomic impact of tobacco taxation in Indonesia. Tobacco Control, 33(Suppl 2), s108–s114. https://doi.org/10.1136/tc-2022-057735

Brigham, E. F., & Ehrhardt, M. C. (2020). Financial management: Theory and practice (15th ed.). Cengage Learning.

Carlton, D. W., & Perloff, J. M. (2015). Modern industrial organization. Pearson.

Chaloupka, F. J., & Powell, L. M. (2019). The economics of tobacco control. BMJ, 365, l2121. https://doi.org/10.1136/bmj.l2121

Chaloupka, F. J., Straif, K., & Leon, M. E. (2019). Effectiveness of tax and price policies in tobacco control. Tobacco Control, 28(2), 1–7. https://doi.org/10.1136/tobaccocontrol-2018-054289

Chaloupka, F. J., Yurekli, A., & Fong, G. T. (2012). Tobacco taxes as a tobacco control strategy. Tobacco Control, 21(2), 172–180.

Conover, W. J. (1999). Practical nonparametric statistics (3rd ed.). John Wiley & Sons.

Corder, G. W., & Foreman, D. I. (2014). Nonparametric statistics for non-statisticians: A step-by-step approach. John Wiley & Sons.

Dewi, G. K., & Basyir, A. (2025). Financial ratio approach to analyze financial performance: Comparison before and after merger. Journal of Business and Economics Research, 6(1), 53–62. https://doi.org/10.47065/jbe.v6i1.5440

Dianitha, K. A., Masitoh, E., & Siddi, P. (2020). Pengaruh rasio keuangan terhadap pertumbuhan laba pada perusahaan makanan dan minuman di BEI. Berkala Akuntansi dan Keuangan Indonesia, 5(1), 14. https://doi.org/10.20473/baki.v5i1.17172

Dien, N. T., Alexander, S. W., & Latjandu, L. D. (2025). Analisis kinerja keuangan perusahaan rokok yang terdaftar di Bursa Efek Indonesia. Manajemen Bisnis dan Keuangan Korporat, 3(1), 263–279. https://doi.org/10.58784/mbkk.321

Direktorat Jenderal Bea dan Cukai. (2022). Kebijakan cukai hasil tembakau. Kementerian Keuangan Republik Indonesia.

Drury, C. (2018). Management and cost accounting (10th ed.). Cengage Learning.

Fauzi, R., & Pongpanich, S. (2022). The effect of price on cigarette consumption among youth in Indonesia: Implications for tobacco tax policy. World Medical & Health Policy, 14(4), 665–678. https://doi.org/10.1002/wmh3.516

Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. Journal of Financial Economics, 67(2), 217–248. https://doi.org/10.1016/S0304-405X(02)00252-0

Garrison, R. H., Noreen, E. W., & Brewer, P. C. (2021). Managerial accounting (17th ed.). McGraw-Hill Education.

Gibbons, J. D., & Chakraborti, S. (2020). Nonparametric statistical inference. Chapman and Hall/CRC.

Ginanjar, P. P., Wany, E., & Prayitno, B. (2023). Analisis dampak kenaikan tarif cukai hasil tembakau dan fenomena downtrading rokok terhadap penerimaan negara dan produksi tembakau domestik.

Goodchild, M., Perucic, A. M., & Nargis, N. (2018). Modelling the impact of raising tobacco taxes on public health and finance. Tobacco Control, 27(3), 1–7. https://doi.org/10.1136/tobaccocontrol-2017-053917

Guindon, G. E., Paraje, G. R., & Chaloupka, F. J. (2017). The impact of prices and taxes on tobacco product use. World Health Organization.

Gunardi, M. V., Agung, T., & Febyola, D. (2021). Pengaruh kebijakan pengenaan tarif cukai rokok terhadap sigaret kretek mesin dan rokok elektrik. Jurnal Co-Management, 4(2), 710–720.

Hartwig, F. P., Davey Smith, G., Schmidt, A. F., Sterne, J. A. C., Higgins, J. P. T., & Bowden, J. (2020). The median and the mode as robust meta-analysis estimators in the presence of small-study effects and outliers. Research Synthesis Methods, 11(3), 397–412. https://doi.org/10.1002/jrsm.1402

Hery. (2016). Analisis laporan keuangan. PT Grasindo.

Hollander, M., Wolfe, D. A., & Chicken, E. (2013). Nonparametric statistical methods (3rd ed.). John Wiley & Sons.

Horngren, C. T., Datar, S. M., & Rajan, M. V. (2018). Cost accounting: A managerial emphasis. Pearson.

Kementerian Keuangan Republik Indonesia. (2021). Peraturan Menteri Keuangan Nomor 192/PMK.010/2021 tentang tarif cukai hasil tembakau.

Kurniasari, E., & Ichwanudin, W. (2023). The efficiency asset utilization, financial performance, and capital structure on firm value. Enrichment: Journal of Management, 13(2).

Lesmana, T., & Iskandar, Y. (2020). Pengaruh kinerja keuangan terhadap nilai perusahaan pada perusahaan rokok yang terdaftar di BEI.

Mantik, J., Takene, R., Man, S., & Bibiana, R. P. (2023). Financial performance analysis of cigarette companies listed on the Indonesia Stock Exchange. Jurnal Mantik, 7(2).

Nicholson, W., & Snyder, C. (2017). Microeconomic theory: Basic principles and extensions. Cengage Learning.

Nissim, D., & Penman, S. H. (1999). Ratio analysis and equity valuation. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.161222

Pindyck, R. S., & Rubinfeld, D. L. (2018). Microeconomics (9th ed.). Pearson Education.

Porter, M. E. (1985). Competitive advantage. Free Press.

Prasetyo, B. W., & Adrison, V. (2020). Cigarette prices in a complex cigarette tax system: Empirical evidence from Indonesia. Tobacco Control, 29(6), 618–623. https://doi.org/10.1136/tobaccocontrol-2018-054872

Rospita, C., Ernita, E., Farouq, J., et al. (2024). Pengaruh harga jual terhadap volume penjualan rokok. Indonesian Accounting Literacy Journal, 4(2), 21–28.

Ross, S. A., Westerfield, R. W., & Jordan, B. D. (2019). Fundamentals of corporate finance (14th ed.). McGraw-Hill.

Santosa, D. I., Supriyono, S., & Marka, M. M. (2021). Pengaruh cukai dan pajak rokok terhadap penerimaan cukai melalui harga eceran perusahaan rokok di Kudus. Borobudur Management Review, 1(1), 32–55. https://doi.org/10.31603/bmar.v1i1.5023

Sheikh, Z. D., Branston, J. R., & Gilmore, A. B. (2023). Tobacco industry pricing strategies in response to excise tax policies: A systematic review. Tobacco Control, 32(2), 239–250. https://doi.org/10.1136/tobaccocontrol-2021-056630

Sheikh, Z. D., Branston, J. R., van der Zee, K., & Gilmore, A. B. (2023). How has the tobacco industry passed tax changes through to consumers in 12 sub-Saharan African countries? Tobacco Control. https://doi.org/10.1136/tc-2023-058054

Siegel, S., & Castellan, N. J., Jr. (1988). Nonparametric statistics for the behavioral sciences (2nd ed.). McGraw-Hill.

Solihin, D., Indrawati, A. I., Nurfitriani, & Nur, M. (2023). Changes in profit for IDX-listed cigarette companies between 2018–2021. JEMSI, 9(6), 2480–2492. https://doi.org/10.35870/jemsi.v9i6.1551

Sunandar, N., & Permana, S. (2024). Analysis of profitability ratios in cigarette companies listed on IDX (2019–2021). https://doi.org/10.33258/birci.v6i2.7554

Suprihanti, A., Sinaga, B. M., & Kustiari, R. (2018). The impact of cigarette excise tax policy on tobacco and clove market in Indonesia. International Journal of Economics and Financial Issues, 8(6), 54–60.

Susilawati, N., Abyan, D., Aruan, S. C., & Angwyn, M. (2022). Does the increase in the cigarette excise tax affect cigarette consumption? International Journal of Public Health Science, 11(4), 1537–1552. https://doi.org/10.11591/ijphs.v11i4.21887

Suwanti, T., & Sulasmiyati, S. (2022). Faktor-faktor yang mempengaruhi pertumbuhan laba. JSHP: Jurnal Sosial Humaniora dan Pendidikan, 6(2), 137–147.