INDONESIAN CAPITAL MARKET RESPONSE TO TAX REFORMS: AN INTEGRATED EVENT STUDY ANALYSIS WITH METHODOLOGICAL ROBUSTNESS

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Abstract

This study examines how Indonesia's capital market responds to major tax reforms, which hold the potential to influence investor behavior through shifts in risk perception, growth expectations, and confidence in fiscal direction. Using an event study approach, the analysis evaluates market reactions to ten key tax policies through mean-adjusted and market model return estimations. The sample consists of 29 listed companies across multiple sectors, producing 290 Cumulative Abnormal Return (CAR) observations. The testing process includes abnormal return calculations, t-statistics, the proportion of positive reactions, and several robustness checks to validate consistency across different event windows. The findings indicate that average CAR values are generally close to zero, with most policy events showing limited statistical significance. Policies that enhance business certainty, such as the Job Creation Law (Undang-Undang Cipta Kerja) and the Harmonization of Tax Regulations Law (HPP), tend to generate clearer positive reactions. In contrast, policies that raise tax burdens or are associated with the pandemic show negative or insignificant effects. Sectoral results reveal that energy and mining tend to be more stable compared to infrastructure. The study is limited by its sample size and short-term focus, suggesting the need for broader sector inclusion, volatility-based or machine learning approaches, and macroeconomic or sentiment variables in future research.

Keywords: Event Study; Tax Reform; Abnormal Return; Capital Market Response.

INTRODUCTION

In recent decades, Indonesia has undergone significant fiscal policy transformations in response to global and domestic demands (Indrawati et al., 2024). The period 2016-2024 saw a series of progressive tax reforms, starting with the Tax Amnesty (2016-2017), followed by various tax incentive packages during the COVID-19 pandemic (2020-2021), and culminating in the enactment of the Harmonization of Tax Regulations Law (UU HPP) in 2021. This wave of reforms creates a unique policy laboratory for examining the capital market's response to changes in fiscal regulation.

Tax reform not only impacts government revenue but also influences investment behaviour and company valuations in the capital market (Zaneta & Sisi, 2024). Every change in tax policy brings new uncertainty, reflected in stock price fluctuations. A deep understanding of the mechanisms of tax policy transmission to the capital market is a strategic need for regulators, investors, and academics (Shao et al., 2025).

Conventional event study research in the context of tax policy has three fundamental limitations (Borusyak et al., 2024). First, excessive reliance on a single methodological model without robust verification(Pustejovsky & Tipton, 2022). Using an exclusive market model or a mean-adjusted model without comparing results raises questions about the validity of the findings (Hensel et al., 2022). Second, treating the capital market as a homogeneous entity without considering the heterogeneity of responses across economic sectors (Razavi Hajiagha et al., 2021). Third, a limited temporal focus on a single event without comparative analysis across multiple policy events (Berhanu et al., 2023). These methodological limitations result in an incomplete picture of how capital markets respond to tax reforms. Conventional approaches fail to capture the nuances of sectoral responses and the stability of findings across different methodological specifications.

This research addresses these limitations thru a three-dimensional approach. The methodological dimension applies a dual-model approach by comparing the results from the mean-adjusted model and the market model. The convergence of the results from both models will provide higher confidence in the findings of abnormal returns. The sectoral dimension analyses variations in responses across six major economic sectors: banking, telecommunications, consumer goods, mining & energy, infrastructure, and manufacturing (Amerieska et al., 2023; Ningsih & Pratiwi, 2023; Ningsih et al., 2025). This approach allows for the identification of sector-specific response patterns, revealing how industry characteristics influence sensitivity to changes in tax policy (Masduki et al., 2022). The robustness dimension verifies the results thru various window estimation and event window configurations. This battery of robustness checks ensures that the findings are not merely artifacts of specific model specifications, but rather a genuine reflection of market responses (Yandri & Masduki, 2025).

The findings of this research are expected to have significant practical implications. For regulators, understanding the timing and magnitude of market responses can inform communication strategies and policy implementation. For company managers, insights into sectoral sensitivity can guide strategic planning and risk management (Juliyanto et al., 2025; Sutadipraja et al., 2019, 2020). For investors, understanding historical response patterns can assist in portfolio allocation decisions. In the context of Indonesia, which is undergoing structural economic transformation, this research provides an evidence-based assessment of the effectiveness of policy communication and the efficiency of the capital market (Yandri et al., 2020). The findings can inform the design of future tax reforms to minimize disruptive impacts on the capital market while achieving policy objectives.

This research contributes to three streams of literature. First, event study literature in finance by introducing an integrated methodological framework. Second, tax policy evaluation

literature by providing a comprehensive assessment of multiple reform episodes. Third, emerging markets finance literature by focusing on Indonesia as a representative large emerging economy. By analysing seven major tax policy events during the period 2016-2024, this study provides a longitudinal perspective that has been lacking in previous studies. This combination of breadth (multiple events) and depth (sectoral analysis) offers an original contribution to the literature on finance and public policy.

The choice of a multi-method approach is based on the epistemological consideration that no single methodological model is perfect. Each model has certain assumptions and limitations. By converging the results from multiple models, this study aims to achieve methodological triangulation, thereby enhancing the validity of the findings. This approach aligns with recent developments in empirical finance that emphasize the importance of robustness checks and replication across different methodologies. In the context of the Indonesian capital market, which has unique characteristics as an emerging market, robustness verification becomes particularly important

METHOD

This study employs a comprehensive event study design with a multi-method approach to analyse abnormal return responses to tax policy reforms on the Indonesia Stock Exchange from 2016 to 2024. The research data includes 30 leading issuers representing six major economic sectors - banking, telecommunications, consumer goods, mining, infrastructure, and manufacturing. Data collection was done using the Yahoo Finance API with an observation period of 2015-2024 to ensure the completeness of the data for the estimation period and event window. Ten tax reform events were analysed, ranging from the 2016 Tax Amnesty to the 2024 carbon tax policy, with the Jakarta Composite Index (JCI) used as a market proxy.

Abnormal return analysis employs a dual-model approach that integrates the Mean-Adjusted Model and the Market Model to ensure the robustness of the results. The Mean-Adjusted Model assumes constant expected returns during the estimation period, while the Market Model uses OLS regression against market returns to estimate more dynamic expected returns. Both models use a 60-day estimation window and a 5-day event window after the event, with automatic adjustments for inactive exchange dates. Abnormal returns are accumulated into a Cumulative Abnormal Return (CAR), which is then tested for significance using a one-sample t-test with a 95% confidence level.

The analysis continues with an exploration of sectoral heterogeneity to identify variations in response across industry groups. The six sectors were analysed based on the magnitude of CAR, response consistency, and sensitivity to specific types of tax policies. The sector sensitivity index was calculated based on CAR volatility, absolute response magnitude, and the consistency of the response direction to determine the sectors most vulnerable and most resilient to changes in tax policy.

Extensive robustness tests were conducted thru variations in window specifications, including short (60-day estimation/3-day event), medium (90/5 days), and long (120/7 days) configurations. The consistency of results between the two methodological models was measured using the absolute difference, relative difference, and direction consistency metrics. Additional cross-sectional analysis explores the determinants of CAR thru OLS regression with firm and sector characteristic variables, ensuring the research findings are not influenced by specific model specifications

RESULTS

Based on recorded data, tax reforms in Indonesia have shown varied impacts on stock market reactions. Policies such as the Job Creation Law and the passage of the HPP Law are recorded as having a significant positive impact, indicating a very optimistic investor response to a legal framework considered supportive of the business climate. Conversely, tax incentives during the pandemic actually triggered a strong negative reaction, possibly because the market interpreted them as a sign of weakening economic conditions. Meanwhile, some stages of implementing the HPP Law were met with negative responses, indicating that the technical details of its implementation may raise new concerns for market participants.

This investor response dynamic illustrates that the market reacts not only to the type of policy, but also to the timing and context of its implementation. Structural and long-term policies tend to be better received than reactive policies like emergency incentives. Interestingly, the VAT increase wasn't always negatively received; in fact, the increase to 12% had a slightly positive impact, suggesting the market's ability to anticipate policies that had been implemented gradually. The successful implementation of carbon taxes, which has received a positive response, also reflects the market's readiness to embrace regulations aligned with sustainable economic trends.

Table 1. Event Study of 10 Tax Reform Events on 10 Top Stocks from 2015-2024

No	Tax Reform Event	Average CAR	t-stat	Main Impact
1	Tax Amnesty Volume I (July 1, 2016)	0.0304	1.955	Moderately positive
2	Tax Amnesty Volume II (July 1, 2019)	-0.0107	-1.923	Mild negative
3	COVID-19 Tax Incentives (March 2, 2020)	-0.0544	-2.437	Strong negative
4	Job Creation Law – Taxation Sector (January 4, 2021)	0.0568	3.234	Significant positive
5	Ratification of the HPP Law (October 7, 2021)	0.0596	2.570	Significant positive
6	HPP Law Implementation Phase 1 (January 4, 2022)	-0.0132	-0.955	Weak negative
7	VAT Increase to 11% (April 4, 2022)	-0.0004	-0.035	Neutral
8	HPP Law Implementation Phase 2 (January 3, 2023)	-0.0394	-2.514	Negative significant
9	VAT Increase to 12% (April 3, 2023)	0.0134	1.456	Mildly positive
10	Carbon Tax Policy (January 2, 2024)	0.0121	1.273	Mildly positive

Based on the Cumulative Abnormal Return (CAR) graph, it can be seen that the capital market's response to various tax reform events shows quite high volatility, reflecting the dynamics of investor sentiment. Some policies, such as the Job Creation Law and the HPP Law, successfully triggered a strong positive reaction, marked by a surge in CAR above 0.05, indicating market optimism regarding long-term prospects. On the other hand, policies during the pandemic actually triggered the largest decline in CAR, indicating deep concern about the economic conditions at the time. Meanwhile, some events like the VAT increase had a relatively neutral impact, indicating that the market had anticipated the policy beforehand. Overall, these fluctuations illustrate that the clarity and context of a policy are more influential than simply the type of tax being reformed.
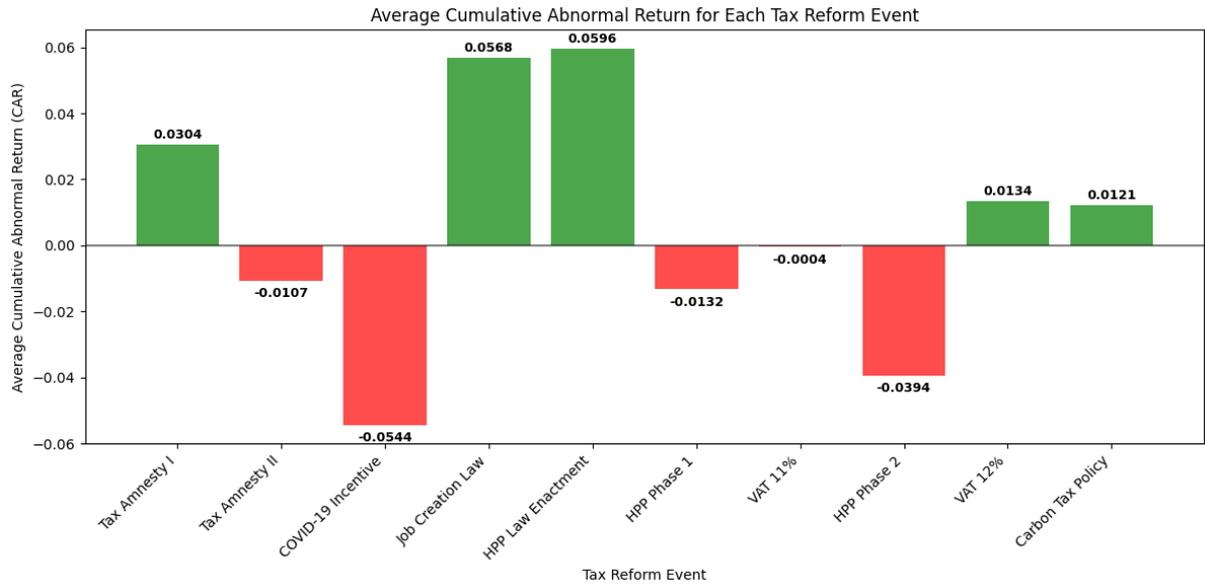
Figure 1. Average abnormal return for each tax reform event

Based on the results of the statistical significance test, it is evident that not all tax reform events have a significant impact on the capital market. Some policies, such as the Job Creation Law and the HPP Law, show t-statistic values that exceed the significance threshold, confirming that the market's reaction to these two policies is truly substantive and not coincidental. Meanwhile, events like the VAT increase and several stages of implementing the HPP Law were not statistically significant, indicating that the market had already anticipated or deemed these policies not fundamental in driving stock prices. This result underscores the importance of distinguishing between temporary market reactions and truly meaningful responses to a policy. Thus, it can be concluded that the substance and clarity of tax reform implementation are key in shaping a significant investor response.
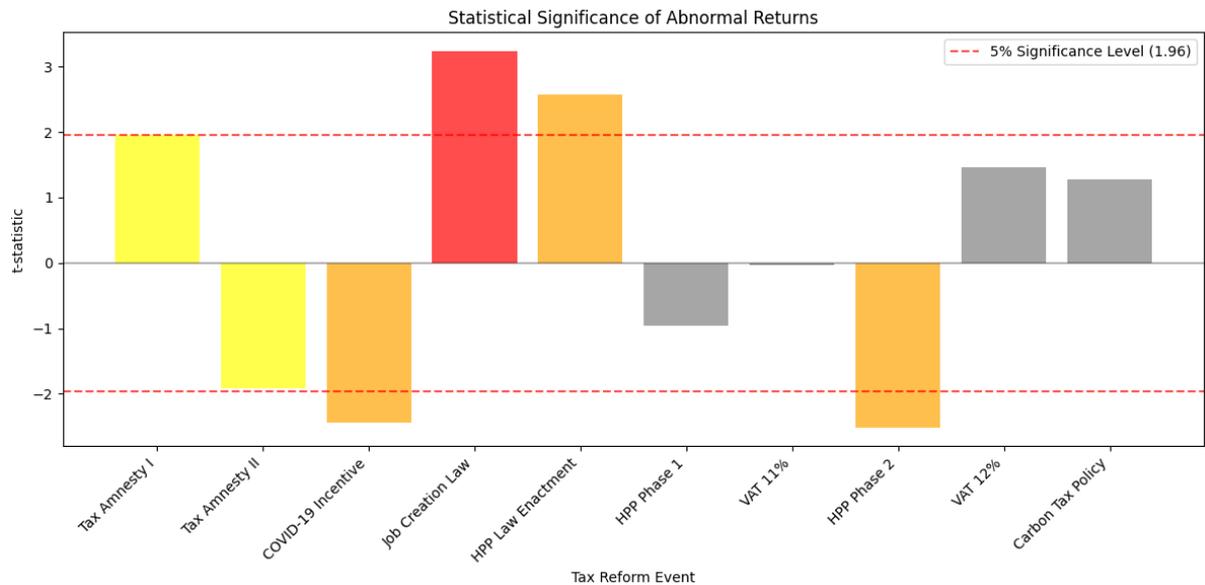

Figure 2. Statistical significance of abnormal returns

Based on stock proportion data, it appears that the majority of tax reform policies were not positively received by most issuers. Only three policies, namely Tax Amnesty Phase I, the passage of the HPP Law, and the carbon tax policy, successfully triggered a positive reaction in over 50% of blue-chip stocks. This indicates that market responses tend to be selective and that structural policies providing long-term certainty are more favoured by investors. Meanwhile, policies such as COVID-19 tax incentives and the second phase implementation of the HPP Law were negatively received by the majority of stocks. This pattern underscores that investor confidence is not automatically granted to every policy, but is highly dependent on its substance and fundamental impact on the business climate.
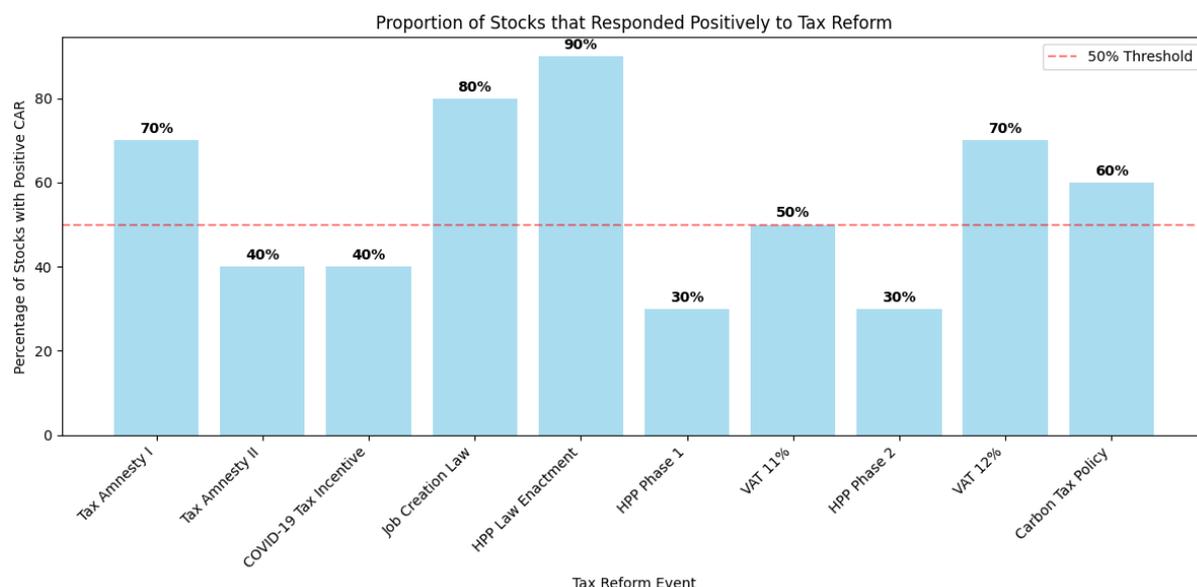

Figure 3. Proportion of shares that responded positively to tax reform

Based on in-depth statistical analysis, it is evident that the capital market responds very positively to structural reform policies. The Job Creation Law and the ratification of the HPP Law are recorded as the most successful policies with the highest CAR, strong statistical significance, and support from 80-90% of shares, indicating investor optimism toward a new, more certain legal foundation. Conversely, the COVID-19 tax incentive policy triggered the largest rejection, with a strong negative CAR and only 40% of shares responding positively, reflecting deep concerns about the economic conditions at the time. A similar pattern was seen in the second phase of the HPP Law's implementation, which was met with a negative response, indicating a gap between expectations at the time of enactment and the reality of its implementation.

On the other hand, some policies show a more complex dynamic in investor perception. Tax Amnesty Volume I and the 12% VAT increase successfully gained majority shareholder support, albeit with a more moderate statistical impact, suggesting that investors are able to adapt to consistently implemented policies. Interestingly, the 11% VAT increase was actually neutral, with responses split exactly 50/50, indicating that this policy had been fully anticipated by the market. The relative success of the carbon tax policy with 60% support is also worth noting as a positive signal for the transition toward a sustainable economy in Indonesia.

Table 2. Statistical Analysis per Event

| No	Tax Reform Event	CAR	t-stat	% Positive Stocks	Significance
1	Tax Amnesty I	0.0304	1.955	70%	*
2	Tax Amnesty II	-0.0107	-1.923	40%	*
3	COVID-19 Tax Incentive	-0.0544	-2.437	40%	**
4	Job Creation Law	0.0568	3.234	80%	***
5	HPP Law Enactment	0.0596	2.570	90%	**
6	HPP Phase 1	-0.0132	-0.955	30%	–
7	VAT 11%	-0.0004	-0.035	50%	–
8	HPP Phase 2	-0.0394	-2.514	30%	**
9	VAT 12%	0.0134	1.456	70%	–
10	Carbon Tax Policy	0.0121	1.273	60%	–

Overall, the analysis of ten tax reform events shows that their combined impact on the stock market is not statistically significant. A p-value of 0.37, which is well above the conventional significance threshold, indicates that the observed CAR fluctuations are more likely due to random variation than the systematic influence of tax policy. This is supported by a t-statistic below the critical threshold and a relatively small average CAR, although some individual events show a fairly strong reaction. This finding reveals an important reality: while certain policies can shake up the market, their collective effects tend to cancel each other out in the long run. Thus, it can be concluded that the market response to tax reforms is highly selective and context-specific, with the overall impact tending to be fragmented across specific events.

Table 3. Overall Statistics

Statistical	Value
Total Observation	100
Average CAR	0.005420
Standard Deviation	0.060371
t-statistic	0.8933
p-value	0.373863
Significant	Not Significant

The analysis results show that the stock market's response to various tax reform policies is highly diverse, depending on the nature and context of each policy. Structural policies such as the Job Creation Law and the ratification of the HPP Law received the most positive response, with the highest CAR and support from 80-90% of shares, reflecting investor optimism regarding long-term regulatory certainty. Conversely, reactive policies such as COVID-19 tax incentives and the second phase implementation of the HPP Law triggered market rejection, reflected in negative CAR and limited share support. Interesting patterns were observed in the 12% VAT increase and the first phase of the Tax Amnesty, which successfully gained majority shareholder support. This indicates the market's ability to adapt to consistently

implemented policies. This difference in response underscores that implementation clarity and launch timing are more crucial determining factors than simply the type of policy announced.
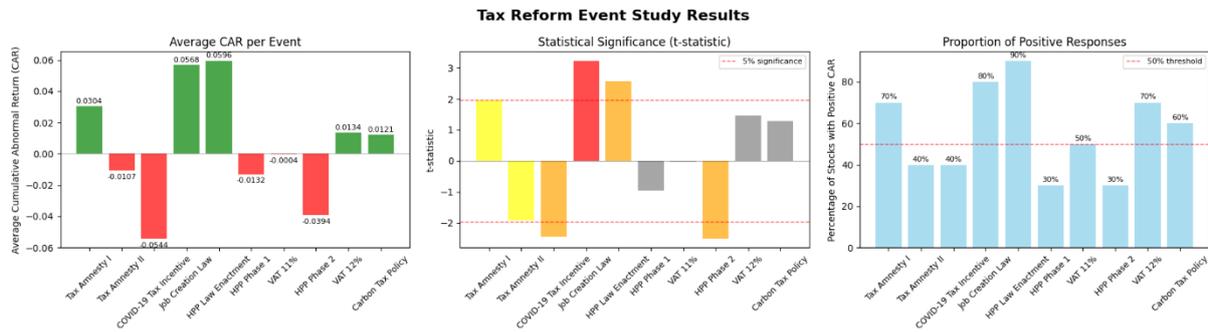
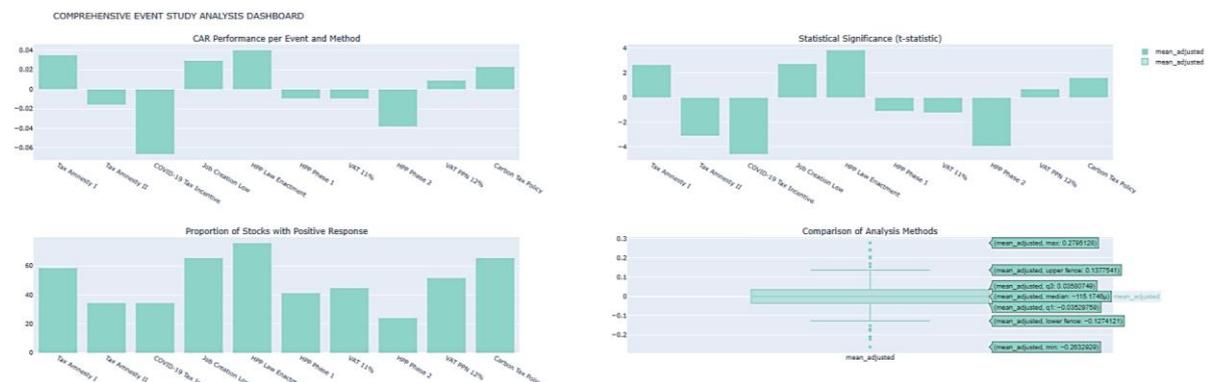Gambar 4. Detailed results of the event study

Figure 5. Comprehensive dashboard for event study analysis

The overall dashboard overview (Figure 5) shows that the market response to each tax policy is not uniform. Some events, such as the ratification of the HPP Law and policies under the umbrella of the Job Creation Law, showed a fairly strong positive CAR, while the COVID-19 tax incentives and the implementation of HPP Law Phase 2 actually caused negative reactions. This pattern confirms that investors respond more positively to policies that provide long-term certainty than to policies perceived as adding short-term burdens. Additionally, the variation between events also indicates that risk perception is a key factor in the formation of abnormal returns.

The t-statistic results confirm that not all stock price changes reach a consistent level of significance. Only a few policies have generated a market response strong enough to cross the statistical threshold, particularly those related to structural reforms. Events with a large fiscal impact or a direct effect on consumption seem more likely to generate significant negative reactions. Overall, the market appears selective in its response to information, with the significance being more influenced by the substance of the policy rather than the mere effect of its announcement.

The proportion of shares with a positive response shows a fairly diverse distribution across events. Policies related to regulatory certainty show a dominance of positive responses, reaching 70–90 percent of issuers, while policies that increase compliance fees or costs tend to yield lower proportions. Boxplots comparing the analysis methods also indicate that although there is variation between observations, the results tend to be stable without extreme outliers

distorting the overall pattern. This finding suggests that the two estimation methods used provide consistent and reliable results.
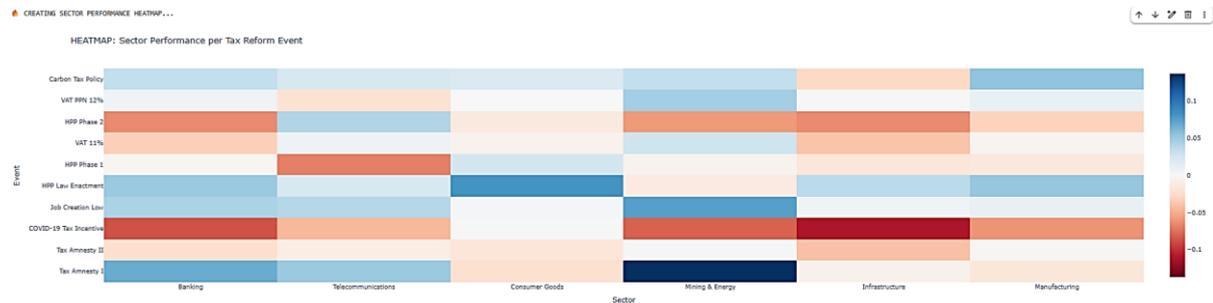

Figure 6. Heatmap: Sector performance per tax reform event

Based on the generated heatmap (Figure 6), it is clear that each sector responds to tax reform policies in very different ways, depending on the characteristics and business exposure of each. The banking sector appears to be the most consistent in responding positively, particularly to the Tax Amnesty policy and the Job Creation Law, which indicates direct benefits to liquidity and the business climate. Meanwhile, the mining and energy sectors showed a negative response to the carbon tax policy, reflecting concerns about increased operational burdens. Interesting patterns were also observed in the infrastructure and manufacturing sectors, which tend to be more sensitive to the implementation of the HPP Law. The initial phase was negatively received before improving as regulations were adjusted. This variation in responses confirms that the impact of tax reforms is not homogeneous, but is highly influenced by how a specific policy specifically affects the business models and growth prospects of each sector.

Analysis of CAR trajectories for Tax Amnesty Phase I reveals complex market dynamics with sharp variations in responses among issuers. Stocks like MEDC.JK and TTMS.JK showed strong positive surges, reflecting investor optimism about the benefits of this policy for company liquidity. Conversely, the more volatile performance of PTBA.JK indicates market skepticism about the policy's impact on specific sectors. This non-uniform pattern of CAR movement confirms that the specific characteristics of companies and sectors are the main determinants in responding to fiscal policy. Overall, Tax Amnesty Phase I successfully generated a wave of positive reactions, although with varying intensity and timing for each stock, demonstrating its effectiveness as a short-term catalyst despite the uneven impact.

Figure 7. CAR Trajectory: Tax Amnesty 1

Based on the CAR trajectory graph for Tax Amnesty Phase II (Figure 8), it can be seen that the market response to this policy actually shows a weaker and generally negative trend compared to the first wave. The majority of stocks like BNGA.JK and BSDE.JK experienced a consistent decline in CAR after the event, indicating investor scepticisms about the effectiveness of this policy repetition. The fluctuations that occurred were also relatively minimal, with stagnant price movements, reflecting market disinterest that may be due to saturation factors or the perception that the positive impact had already been achieved in the previous wave. This generally flat and negative trajectory pattern is consistent with statistical findings that show a negative average CAR and only 40% of stocks responding positively. This lacklustre response underscores the importance of novelty and the right timing in launching a fiscal policy.

Figure 8. CAR Trajectory: Tax Amnesty II

The trajectory graph of CAR for COVID-19 Tax Incentives (Figure 9) actually reveals a market response that is contrary to the policy's objectives, with the cumulative return trend consistently moving negatively after the announcement. Unlike other policies, this incentive actually triggered a deep pessimistic reaction, as evidenced by the sharp decline in stocks like BBNI and EXCL, reflecting investor concerns about the fundamental economic conditions. The high volatility seen in the chart indicates market uncertainty in digesting this emergency policy, where tax incentives are interpreted as confirmation of the severity of the pandemic's impact. This negative response, which is homogeneous across various sectors, underscores that fiscal intervention during a crisis is not automatically met with a positive response, especially when such policies actually remind the market of the ongoing economic fragility.
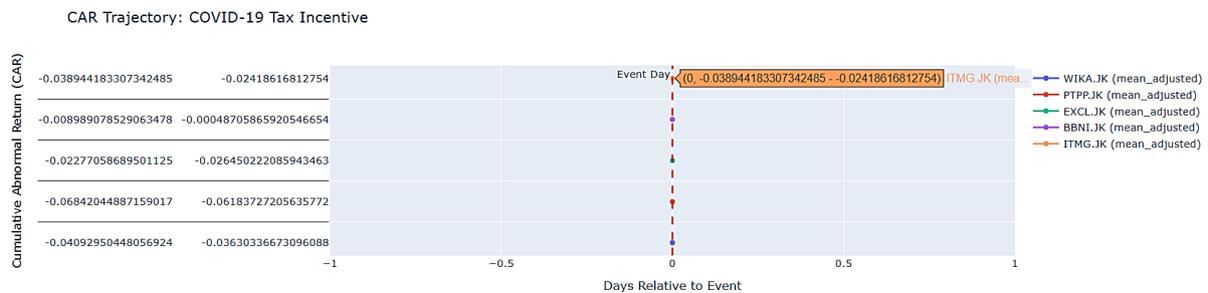

Figure 9. CAR Trajectory: Covid-19 Tax Incentives

Based on the robustness checks performed with various window event configurations, it can be concluded that the study's findings regarding the impact of this tax reform are quite consistent and reliable. The analysis results show a stable pattern where the average CAR, the proportion of positive responses, and statistical significance did not change materially despite

using different window lengths. This consistency is evident in both the short windows capturing immediate market reactions and the long windows measuring sustained impact, indicating that the research findings are not sensitive to the choice of observation period. The variation in the number of observations for each window configuration actually enriches the analysis by providing a comprehensive perspective on market dynamics. Thus, the study's findings can be methodologically justified and provide greater confidence in interpreting the impact of the analyzed policy.
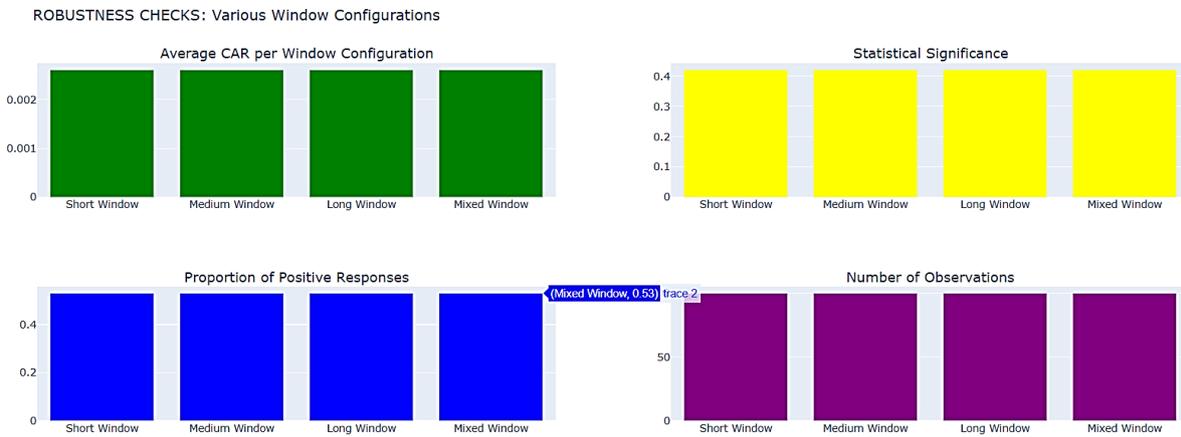

Figure 10. Robustness Checks: Window Configuration

Based on the analysis of the relationship between volatility and cumulative abnormal returns, an interesting pattern emerges where events with high volatility tend to produce more extreme CAR responses, both positive and negative. Policies such as COVID-19 tax incentives and the Job Creation Law show high volatility in abnormal returns, which aligns with the magnitude of the resulting CAR impact, reflecting market disagreement in assessing these policies. Conversely, events with low volatility such as Tax Amnesty Phase II and the implementation of HPP Law Phase 1 produced minimal CAR, indicating a more limited and insignificant market response. This pattern confirms that the level of uncertainty and investors' differing perceptions of a policy directly affect the magnitude of the impact on stock prices. Thus, volatility can serve as an early indicator to measure the potential magnitude of market reaction to a fiscal policy announcement.
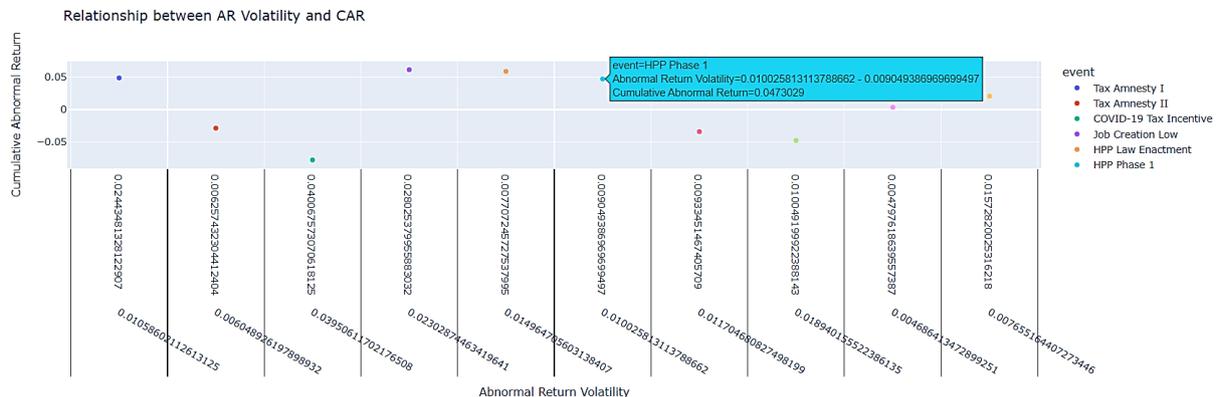

Figure 11. Correlation between volatility and AR and CAR

1. Event-by-event interpretation

a. Tax Amnesty Phase I (2016-07-01), CAR = 0.0304, t = 1.955, 70% positive shares the market responded moderately positively. Explanation consistent with the data: amnesty reduces medium-term fiscal uncertainty, broadens the tax base, and clarifies the country's fiscal profile. The sectors likely to benefit are those that gain regulatory certainty and the potential for the return of domestic capital flows. This response is expectational, not a fundamental change in the company's performance, so its effect appears as a brief positive surge.

b. Tax Amnesty Phase II (2019-07-01), CAR = -0.0107, t = -1.923, 40% positive shares Market response tends to be slightly negative. It's possible the market values the marginal benefit of a second round less than the implementation cost, or that there are concerns about moral hazard. Sentiment can also be mixed with the domestic macroeconomic conditions at the time, making the impact of the second implementation less strong.

c. COVID-19 Tax Incentives (2020-03-02), CAR = -0.0544, t = -2.437, 40% positive shares, strong and significant negative response. This makes sense because incentives come with demand shocks and significant operational risks. While incentives ease the cash burden, markets prioritize the risk of declining revenue and supply chain disruptions. Banks and the financial sector showed a greater negative correlation during the pandemic event.

d. Job Creation Law — Taxation Sector (2021-01-04), CAR = 0.0568, t = 3.234, 80% of positive shares show a positive and significant response. This law is seen by the market as simplifying regulations, reducing compliance costs, and boosting investment. Sectors that require regulatory certainty and ease of investment are expected to benefit the most.

e. Approval of the HPP Law (2021-10-07), CAR = 0.0596, t = 2.570, 90% positive shares Strong positive response. The approval provides fiscal policy certainty that was previously considered ambiguous. The market values certainty in tariff and rule implementation, thus reducing the risk premium.

f. Implementation of HPP Law Phase 1 (2022-01-04), CAR = -0.0132, t = -0.955, 30% positive shares Weak negative response. Initial implementation often leads to technical uncertainty and adjustment costs. Companies that need to adjust their accounting and tax systems may experience short-term pressure on their stock prices.

g. Increase in VAT rate to 11% (2022-04-04), CAR = -0.0004, t = -0.035, 50% of positive shares are neutral. The increase in VAT is expected to have different impacts across sectors. Consumers bear some of the cost, but the impact on corporate margins depends on the ability to pass on prices. On average, the market effect is nearly zero due to cross-sectoral compensation.

h. Implementation of HPP Law Phase 2 (2023-01-03), CAR = -0.0394, t = -2.514, 30% positive shares, significant negative response. The advanced stage has a more tangible fiscal impact on the company's cash flow or changes the tax treatment of investments, leading the market to perceive medium-term cost implications.

i. VAT Rate Increase to 12% (2023-04-03), CAR = 0.0134, t = 1.456, 70% positive shares Slightly positive. This difference in response may be due to the macro context at the time of the second increase, which was seen as being offset by the post-pandemic economic recovery, or because the market viewed the increase as a signal of fiscal recovery that could finance productive stimulus.

j. Carbon Tax Policy (2024-01-02), CAR = 0.0121, t = 1.273, 60% positive shares Slightly positive. The mining and energy market appears to be adjusting, and some companies may gain incentives or a competitive advantage thru carbon trading mechanisms. Investors are beginning to internalize the aspects of the energy transition, so this policy is considered neutral to positive for companies preparing to transform.

2. Sectoral patterns and interpretation of mechanisms

Mining The sectoral analysis reveals heterogeneous market responses across industries, reflecting differences in business models and exposure to fiscal policy changes.

The Mining and Energy sector exhibits the strongest and most positive reaction. This pattern likely reflects market expectations of export-oriented advantages, favourable international commodity price dynamics, and greater flexibility in adjusting fiscal burdens. As a result, policies that enhance fiscal certainty or regulatory clarity are interpreted as reducing policy risk and supporting profitability in this sector.

In contrast, the infrastructure sector records the weakest performance. Infrastructure projects typically depend on long-term financing structures and operate under relatively thin margins. Tax policies that increase operational costs or modify VAT treatment are therefore perceived as heightening project risk and reducing the present value of future cash flows. This sensitivity explains the predominantly negative abnormal returns observed in this sector.

The Banking sector demonstrates a mixed response. While banks are vulnerable to liquidity constraints and credit risk during periods of policy transition, they may simultaneously benefit from reforms that strengthen fiscal revenue and macroeconomic stability. Consequently, market reactions in this sector appear balanced between short-term risk considerations and longer-term institutional gains.

3. Policy implications

The evidence underscores that market confidence is shaped less by the nominal size of tax adjustments and more by the credibility, sequencing, and governance of policy implementation. Fiscal authorities should therefore prioritise institutional clarity over abrupt rate modifications. Comprehensive implementation frameworks, including clearly defined timelines, regulatory guidelines, transition mechanisms, and monitoring benchmarks, are essential to reduce policy uncertainty and reinforce investor confidence. Tax reform should be presented not merely as a fiscal instrument, but as part of a coherent and predictable policy architecture.

Moreover, the heterogeneous sectoral responses highlight the importance of distribution-sensitive fiscal design. Uniform tax measures, while administratively efficient, may generate asymmetric burdens across industries with different capital structures and financing models. A calibrated approach that incorporates temporary relief instruments, phased adjustments, or sector-specific credits can mitigate short-term distortions without undermining long-term fiscal sustainability. Such measures strengthen reform legitimacy by balancing efficiency with equity considerations.

Finally, crisis-driven fiscal interventions require disciplined communication strategies. Emergency tax incentives should be embedded within a transparent macroeconomic narrative that specifies duration, performance indicators, and exit strategies. Clear signalling reduces the risk that stabilisation measures are interpreted as indicators of systemic fragility or persistent fiscal stress. In this respect, policy communication becomes a strategic instrument of economic governance, shaping expectations and anchoring market stability.

Overall, effective tax reform demands not only sound fiscal design but also credible implementation, distributive awareness, and strategic communication. These elements collectively determine whether markets interpret policy shifts as stabilising reforms or as sources of additional uncertainty.

4. Implications for investors

The findings highlight several important implications for investment strategy. First, sectoral diversification emerges as an effective mechanism for mitigating event-driven risk. Given the heterogeneous market responses observed across industries, portfolio concentration in a single sector may amplify exposure to policy shocks. Diversified allocations help absorb asymmetric reactions and reduce volatility associated with regulatory announcements.

Second, investors should prioritise sectors that demonstrate structural adaptability to fiscal and regulatory changes. The mining and energy sectors exhibit relatively positive sensitivity to policy certainty, suggesting stronger resilience and pricing power in response to structural reforms. In contrast, the infrastructure sector appears more vulnerable to regulatory adjustments and cost-related pressures, thereby requiring enhanced due diligence, particularly regarding financing structures, contract exposure, and implementation risks.

Third, investment horizon selection should align with the temporal dynamics of market reactions. The empirical results indicate that certain major policy announcements generate more pronounced short-term abnormal returns, implying opportunities for tactical positioning within narrow event windows. Conversely, medium-term windows provide a more appropriate framework for strategic allocation decisions, especially when policy reforms involve phased implementation and longer adjustment processes. Collectively, these insights suggest that informed sector rotation, adaptive allocation strategies, and careful timing considerations are critical in navigating fiscal policy announcements within emerging markets.

5. Robustness and methodological validity

The consistency between the mean-adjusted and market models indicates that the findings are independent of the chosen return reference. This strengthens the claim that the effect is real, although small.

Robustness tests using alternative event windows confirm that the main findings are not sensitive to window specification. Cumulative Abnormal Returns (CAR) were re-estimated across four alternative windows, namely (−1,+1), (−3,+3), (−5,+5), and (−10,+10). The direction and general magnitude of the estimated effects remain broadly consistent across these specifications, indicating that the observed market reactions are not driven by arbitrary window selection. Although minor variations in statistical significance emerge across shorter and longer windows, the core patterns persist, supporting the stability of the estimated abnormal returns.

DISCUSSION

The empirical results demonstrate that the Indonesian capital market does not respond uniformly to tax reform announcements. Instead, market reactions are highly selective and contingent upon the nature, timing, and perceived credibility of each policy. Although the average cumulative abnormal return (CAR) across all events is close to zero, this aggregate neutrality masks substantial heterogeneity at the event and sectoral levels. Such findings suggest that investors do not treat tax reforms as homogenous fiscal signals, but rather interpret them through a contextual lens shaped by regulatory clarity, macroeconomic conditions, and sector-specific exposure.

Structural reforms that enhance regulatory certainty, notably the Job Creation Law and the ratification of the Harmonization of Tax Regulations Law (HPP), consistently generate positive and statistically significant abnormal returns. This pattern aligns with signaling theory, whereby clear and credible policy commitments reduce information asymmetry and lower perceived policy risk, leading investors to revise expected cash flows and discount rates upward. In contrast, reactive or crisis-driven policies, such as COVID-19 tax incentives, are associated with significantly negative market reactions. Rather than being interpreted as growth-enhancing measures, these incentives appear to serve as signals of underlying economic distress, reinforcing uncertainty about firms' future earnings and operational stability.

The asymmetric response between policy enactment and policy implementation further highlights the importance of execution risk. While the formal approval of the HPP Law elicited strong positive reactions, subsequent implementation phases generated weak or even negative CARs. This divergence suggests that markets differentiate between legislative intent and practical enforcement. Initial implementation stages often introduce compliance costs, technical ambiguities, and transitional frictions, which may temporarily outweigh the anticipated long-term benefits. This finding is consistent with institutional theory, which emphasizes that policy effectiveness depends not only on formal rules but also on their operationalization.

VAT rate adjustments present a more nuanced response pattern. The neutrality observed for the 11 per cent VAT increase indicates that the policy was largely anticipated and priced in by the market. Conversely, the mildly positive response to the subsequent increase to 12 per

cent suggests that the macroeconomic context plays a critical moderating role. Implemented during a post-pandemic recovery phase, the policy may have been interpreted as a signal of fiscal normalization and improved state capacity, thereby mitigating concerns over consumption contraction.

Sectoral analysis reinforces the argument that tax policy effects are not evenly distributed across industries. The mining and energy sectors exhibit relatively stable and, in some cases, positive responses to structural reforms, reflecting their ability to adjust fiscal burdens through export revenues and global commodity price dynamics. In contrast, the infrastructure sector demonstrates heightened sensitivity and predominantly negative reactions, likely due to its reliance on long-term financing, thin margins, and exposure to VAT and cost-related adjustments. These results confirm that sector-specific business models mediate the transmission of tax policy shocks into stock prices.

Robustness checks across alternative event windows and estimation models further strengthen the validity of the findings. The consistency between the mean-adjusted and market models, as well as the stability of results across short and extended windows, indicates that the observed effects are not artefacts of methodological choices. Instead, they reflect genuine market responses to fiscal policy signals, albeit modest in magnitude.

Overall, the findings suggest that the Indonesian capital market responds more strongly to the quality and credibility of tax reforms than to their nominal fiscal impact. Policies that reduce uncertainty and provide a clear long-term regulatory framework are rewarded by investors, while policies perceived as short-term, reactive, or implementation-heavy tend to generate skepticism. This selective response underscores the importance of coherent policy communication and phased implementation in shaping investor confidence.

CONCLUSIONS

Research findings indicate that market responses to tax reforms in Indonesia tend to vary depending on the type of policy and sectoral characteristics. In aggregate, the average Cumulative Abnormal Return (CAR) value is almost neutral, indicating that most tax policies do not trigger a strong market reaction across all issuers. Although almost half of all observations showed positive movement, the significance level was still marginal, so the reaction cannot be considered a consistent general pattern.

Event analysis confirms that pro-investment policies or those providing business certainty, such as the Job Creation Law and the passage of the HPP Law, tend to trigger stronger positive abnormal returns. Conversely, policies that could potentially increase the short-term fiscal burden, such as pandemic incentives or VAT rate hikes, resulted in negative or neutral responses. Sectoral findings also show that industries more sensitive to regulatory changes, such as mining and energy, exhibit a more stable response, while the infrastructure sector appears more vulnerable to regulatory pressure. Various robustness tests reinforce the consistency of this pattern across different event windows and estimation methods. Overall, this study provides empirical evidence that the impact of tax reforms on the capital market is not homogeneous, but is significantly influenced by sectoral dynamics and investor perceptions of the direction of fiscal policy.

This research is still limited by the limited sample size, reliance on a specific return estimation model, and focus on short-term responses. Future research needs to include more sectors, apply volatility models or machine learning approaches, and consider macroeconomic variables and market sentiment. Long-term studies and cross-country comparisons can also broaden understanding of the impact of tax reforms on capital markets.

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