

ARTICLES

Enforcement of Illicit Cigarettes Increases Excise Revenue in Indonesia

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The illicit cigarette trade poses a persistent threat to excise revenues and public policy objectives in Indonesia, where tobacco products contribute more than 96 per cent of total excise collection. The study investigated the influence of law enforcement on tobacco excise revenues in East Java, the country's largest tobacco-producing and tax-contributing region. Using panel data from 2019 to 2023 at seven customs offices, a fixed effect regression model analysed the impact of illicit cigarette seizures. The study's results showed a statistically significant and positive relationship, where an increase in confiscated cigarettes was associated with an estimated excise revenue gain of approximately IDR369,653.50 per statistical unit of increase in seizures. Enforcement plays a crucial fiscal role in supporting revenues and protecting legitimate markets. The study also highlights gaps in Indonesia's alignment with the World Health Organization's (WHO) *Protocol to Eliminate the Illicit Trade in Tobacco Products*. Policy recommendations include strengthening supply chain monitoring, adopting tracking systems, and enhancing cross-border cooperation.

1. Introduction

1.1. Importance of tobacco excise in Indonesia

Excise revenue is one of many taxes essential for funding a country. The primary purpose of taxation is to obtain revenue to finance government spending, redistribute wealth, and control economic activity (Minh Ha et al., 2022). The Indonesian Government collects excise revenue through the Customs and Excise agencies (Hidayat & Surjono, 2016). According to Article 2 of *Undang-Undang Republik Indonesia Nomor 39 Tahun 2007 Tentang Perubahan Atas Undang-Undang Nomor 11 Tahun 1995 Tentang Cukai* (Law of the Republic of Indonesia Number 39 of 2007 concerning Amendments to Law Number 11 of 1995 concerning Excise), excise is imposed on certain goods that have the nature or characteristics of consumption that need to be controlled; their circulation needs to be supervised, their use can have a negative impact, and it is necessary to impose state levies for the sake of justice and balance, including excisable goods in the form of cigarettes.

In Indonesia, excise taxes on cigarettes play a crucial role in controlling consumption and generating state revenue. Cigarette consumption in Indonesia has continued to increase, rising from 212.5 billion cigarettes in 2007 to 307.6 billion in 2018 (Kasri et al., 2021). Besides that, Indonesia's

most significant excise revenue comes from tobacco products, especially cigarettes. Based on the results of the 2024 audit by the Badan Pemeriksa Keuangan (BPK; the audit board), it is evident that in 2022 and 2023, tobacco excise revenue accounted for 96.20 per cent of national excise revenue, averaging IDR214.29 trillion (BPK, 2024). To control the increasing consumption of cigarettes, the government implemented a mechanism to increase excise rates on tobacco products (Ngo et al., 2024). The policy of increasing excise rates as a dual instrument for controlling consumption and optimising state revenue is a balanced approach. However, it can become counterproductive when faced with the stagnant prevalence of smoking in Indonesia and the high price disparity between licit and illicit cigarettes.

1.2. The challenge of illicit cigarettes

Illicit cigarettes remain widespread, accounting for 7–8 per cent of global consumption (Aziani et al., 2021). In Indonesia, consumption fluctuated between 5 per cent and 19 per cent of total cigarette use from 2007 to 2018, peaking at 59 billion sticks in 2018 (Kasri et al., 2021). That year, revenue losses were estimated at IDR 24.2 to 42.0 trillion, representing up to 27.5 per cent of tobacco excise revenue. Studies consistently show that illicit trade significantly undermines excise revenue (Gallego et al., 2020; Wang et al., 2019).

Illicit cigarettes, being significantly cheaper, distort price competition and undermine the legal industry's market share and revenue (Aziani et al., 2021; Hiscock et al., 2021). Their presence weakens the impact of excise tax increases as both a fiscal and public health instrument (Vellios et al., 2019). The circulation of illicit cigarettes is very detrimental both in terms of state revenue, competition in the legal cigarette industry, and reduced potential for tax earmarking that can be used in the health sector.

1.3. Enforcement as a policy response

The eradication of illicit cigarettes is fundamental if the government wants to optimise state revenue. If the government fails to eradicate illicit cigarettes, rising prices of legal products – combined with stagnant smoking prevalence (World Health Organization [WHO], 2024) – will push consumers towards cheaper, illegal alternatives. This shift threatens the legal industry and erodes state excise revenue. Moreover, weak enforcement emboldens illicit actors; when there are no consequences, tax evasion becomes not only acceptable but a profitable business strategy (Gërxhani & Cichocki, 2023). A study by the World Bank (2019) demonstrates that the eradication of illegal cigarettes has a positive impact on increasing tax revenues and strengthening national taxation policies. Vigorous law enforcement enables the government to optimise tax collection and suppress the consumption and circulation of illegal cigarettes (Yürekli & Sayginsoy, 2010).

Globally, various enforcement strategies – such as technological tools and regulatory reforms – have proven effective in curbing the illicit trade in cigarettes. For example, Kenya’s Track-and-Trace System improved supply chain monitoring and boosted revenue (Munga et al., 2023). In Georgia, post-2004 legal reforms and stricter enforcement encouraged formalisation of tobacco businesses, reduced illicit cigarette consumption from 19.7 per cent to 14.7 per cent (2020–2021), and increased excise revenue (Mzhavanadze, 2023; Ross & Bakhturidze, 2018).

In Indonesia, law enforcement against illicit cigarettes is the task of the Directorate General of Customs and Excise (DGCE). Meanwhile, the hard approach to eradicating illicit cigarettes includes land and sea patrols, market operations, joint operations with other law enforcement agencies and collaboration with local governments. However, amid the ongoing enforcement, it remains necessary to examine its impact on state revenue. Referring to international enforcement practices, of course, there is still room for improvement in the quality of law enforcement against illicit cigarettes.

1.4. Aim of the study

This research aims to explore how Indonesian Customs enforces the illicit trade of cigarettes to increase excise revenue from tobacco products, especially in East Java Province. The research was conducted in East Java because, according to data from the DGCE in 2023, it is the province with the most significant number of cigarette factories in Indonesia; 817 cigarette companies out of a total of 1,835 (45%) are established in East Java Province, and the most significant contributor to excise, around IDR140 trillion or 65 per cent of national excise revenue is contributed by cigarette factories in East Java.

2. Literature review

Shadow economy theory explains that illicit cigarettes are included in economic activities that are not recorded and tend to violate the law. The shadow economy refers to the market for producing goods and services, both legal and illicit, that are not accounted for in gross domestic product (GDP) (Aziani et al., 2021). Minh Ha and others (2022) state that taxpayers respond to inflation tax increases by engaging in informal and shadow economic activities. Individual involvement in the shadow economy also encompasses the institutional social context that affects their subjective wellbeing. When they feel secure about their future by not paying taxes today, they happily avoid taxes (Gërkhani & Cichocki, 2023). The government’s authority can use law enforcement to ‘give a message’ either indirectly or directly (deterrent effect) against illicit cigarette actors.

Illicit cigarettes are cigarettes that do not pay excise duty as required by government regulations. Illicit cigarettes are produced domestically and abroad and do not comply with the provisions of Customs and related technical ministries (Gallego et al., 2020). The WHO defines the illicit trade

in tobacco products as an unlawful act, including production, possession, distribution, sale, and purchase. The illicit tobacco industry harms public health and national security, and the economic impact is in the form of lost government revenue (Moreira et al., 2021). According to World Bank (2019), illicit tobacco trade is a practice related to, among other things, selling, distributing, or buying tobacco products that are prohibited by law, including tax evasion, disguise of product origin, counterfeiting and smuggling. These illicit practices can be carried out by unregistered business actors or official companies that run their businesses in violation of applicable regulations.

Rational choice theory explains the reasons consumers choose illicit cigarettes despite the risks. Based on the perspective of rational choice (Cornish & Clarke, 1986/2017), price is one of the key factors influencing the circulation of illicit cigarettes, as it provides an incentive for smokers to avoid higher costs and taxes associated with purchasing legal cigarettes (Aziani et al., 2021). Therefore, the government needs to formulate more effective policies to suppress the circulation of illicit cigarettes and protect the legal cigarette industry.

The WHO's *Protocol to Eliminate the Illicit Trade in Tobacco Products* (the *Illicit Trade Protocol* or ITP) is the first international instrument to comprehensively regulate measures for the prevention and eradication of illicit cigarettes (WHO, 2013). This protocol emphasises the importance of supply chain supervision through licensing obligations, the implementation of due diligence and the development of a tracking and tracing system to ensure that the movement of tobacco products can be monitored down to the consumer level. In addition, this protocol also regulates international cooperation, data exchange and administrative and criminal sanctions for violators. Overall, the ITP is designed to strengthen law enforcement and reduce state losses due to the illicit cigarette trade. Although Indonesia has not ratified this protocol, several enforcement measures, including market operations, joint patrols and field enforcement, have been implemented as part of a strategy to curb the circulation of illicit cigarettes and boost excise revenues.

To the best of our knowledge, no research on illicit cigarettes in Indonesia has specifically discussed the enforcement of illicit cigarettes that affects revenue. As listed in [Table 1](#), much of the research focuses on the number of illicit cigarettes circulating with various methods.

Other research focuses on the health sector. For instance, Matheos and others (2023) assessed the cost-effectiveness of the government's provision of varenicline (a smoking cessation medication), smoking bans in public places and cigarette taxes. Additionally, Audrine (2020) studied policies focused on public health and support for tobacco farmers. Meanwhile, research from Hidayat and Surjono (2016) shows that increased revenue can be achieved by simplifying tariffs.

Table 1. Summary of previous studies on illicit cigarette consumption in Indonesia.

Study/author	Methodology	Main findings
Gadjah Mada University (Center for Economics and Public Policy Studies, Gadjah Mada University, 2017, as cited in Kasri et al., 2021)	Pack survey (purchasing cigarette packs)	Illicit cigarette packs increased from 6.1% (2010) to 12.1% (2016), but decreased to 7.0% (2018)
Oxford Economics (Oxford Economics, 2017, as cited in Kasri et al., 2021)	Empty pack survey	Domestic illicit cigarettes increased from 26.2 billion sticks (8.5%) in 2012 to 30.9 billion sticks (9.6%) in 2017
The Prakarsa (Kartika et al., 2019)	Interviews with 1,440 adult smokers in six provinces and 1,201 pack checks	20% of respondents had smoked illicit cigarettes at least once; 2% of the packs were found illicit based on excise tape and health warning images
University of Indonesia (Ahsan et al., 2014)	Estimation based on cigarette consumption data	Illicit cigarettes were estimated to account for 17% (2004) and 9% (2013) of total consumption
University of Indonesia (Kasri et al., 2021)	Nationally representative consumption & production data, including VAT and local cigarette tax.	Illicit cigarette consumption fluctuated: 19 billion (2007) to 14 billion (2013) to 59 billion (2018) (5–19% of consumption). Estimated revenue loss: IDR24.2–42.0 trillion (15.8–27.5% of excise revenue, 2018).

Source: Kasri et al. (2021).

3. Research model

The sample used in this study consists of enforcement actions against illicit cigarettes, proxied by the number of illicit cigarettes seized from 2019 to 2023 by seven Customs and Excise Supervision and Service Offices (Kantor Pengawasan dan Pelayanan Bea dan Cukai, KPPBC) under the DGCE Regional Office of East Java II (Kanwil DJBC Jatim II), reflecting the hard approach in combating illegal trade. Kanwil DJBC Jatim II was selected because most of the supervised districts/cities are located on the southern side of East Java Province, an area with low income and low economic growth (Warda, 2013). The seven KPPBC supervise 23 districts and cities out of a total of 38 districts and cities in East Java Province. The data used in this research are secondary data obtained from KPPBC Malang, KPPBC Kediri, KPPBC Jember, KPPBC Blitar, KPPBC Madiun, KPPBC Probolinggo, and KPPBC Banyuwangi. The data used in this study are on the enforcement of illicit cigarettes and excise revenue from tobacco products during 2019–2023, analysed using EViews 10 software.

A quantitative analysis approach was used, with a panel data regression method. The model can be expressed as:

$$Y_{it} = \alpha + \beta X_{it} + \epsilon_{it} \text{ (Equation 1)}$$

where:

Y_{it} = Tobacco Excise Revenue at Office i and Time t

α = Constant

β = Coefficient for the Illicit Cigarette Enforcement variable

X_{it} = Number of Illicit Cigarettes seized (sticks) at Office i and Time t

ϵ_{it} = Error term.

Table 2. Data on the crackdown on illicit cigarettes and revenue.

Year	Number of seizures	Number of illicit cigarettes seized (sticks)	Total revenue (IDR)	Tobacco excise revenue (IDR)
2019	350	18,382,808	43,932,570,157,778	42,774,416,487,949
2020	305	25,293,588	49,864,444,189,139	48,641,837,228,740
2021	554	25,374,040	56,303,847,258,077	54,738,494,595,850
2022	1,019	47,868,889	61,542,824,514,068	59,725,395,643,890
2023	1,033	47,730,002	58,471,725,338,135	57,090,538,454,135

Source: DGCE, processed by the author.

4. Data analysis

[Table 2](#) presents a summary of enforcement and revenue data from 2019 to 2023 at seven KPPBC in East Java Province, including the frequency of enforcement, the number of illicit cigarettes prohibited, the total revenue of the seven offices and the revenue from tobacco excise.

The data indicate that, in aggregate, both the frequency of enforcement and the number of illicit cigarettes detained have continued to increase annually, with a slight decrease in the number of illicit cigarettes seized in 2023. The number of illicit cigarettes seized in 2019 increased dramatically from 18 million to 47 million cigarettes between 2022 and 2023.

Data on tobacco excise revenue also showed a consistent increase, with a slight decline in 2023. Interestingly, excise revenue from tobacco products accounts for most of the customs office's revenue, with an average of 97.36 per cent from 2019 to 2023, indicating that excise revenue from tobacco products contributes significantly to the revenue target set by the customs office. These trends in enforcement and revenue reinforce the suspicion that the stronger the law enforcement efforts (given the quantity of illicit cigarettes seized), the more likely they are to be positively correlated with higher tobacco revenue.

To explore this relationship further, we used panel data regression analysis. The fixed effect model (FEM) was selected as the best model based on the Chow test and the Hausman test. Classical assumption tests were performed, which confirmed that there were no issues with heteroskedasticity, autocorrelation, or multicollinearity.

Based on the hypothesis test results in [Table 3](#), the regression coefficient suggests a positive association between the number of illicit cigarettes seized and excise revenue, with an estimated effect of approximately IDR369,653.5 per statistical unit of increase in seizures. This estimate should be interpreted cautiously, as excise revenue during the study period was also potentially influenced by annual adjustments to the excise tax rate and a complex, multi-tier tax structure. The R-squared value of 97.75 per cent indicates that the enforcement variable accounts for most of the variation in excise revenue, and the significance value ($p = 0.0003$) confirms that this effect is statistically significant.

Table 3. FEM panel data regression results.

Variable	Coefficient	Standard error	t-statistic	Prob.
C	5.77E+12	5.32E+11	10.84683	0.0000
X1	369653.5	87888.10	4.205956	0.0003
R-squared	0.977580			
Adjusted R-squared	0.971768			
F-statistic	168.1840			
Prob (F-statistic)	0.000000			
Observations	35			

Notes: FEM = Fixed Effect Model; C = Constant; X1 = Illicit cigarette seizure; R-squared = Coefficient of determination; Prob. = Probability value (p-value).

Source: Secondary data processed by the author.

5. Discussion

The estimated coefficient in this study cannot be interpreted as a direct revenue contribution from each seized illegal cigarette, as changes in excise rates and the complex structure of excise rates in Indonesia potentially influenced total excise revenue during the 2019–2023 period. Excise rate variables are not included in the model, given data limitations and the application of uniform rates across offices every year. Although the primary focus of this study is on the law enforcement aspect, we recognise that excise tariff policies play a significant role in state revenue. An increase in excise rates by 10 per cent can reduce consumption by 0.9–3.0 per cent but increase revenue by 7–9 per cent (Kasri et al., 2021). Examining the fiscal and regulatory dynamics in Indonesia, strengthening law enforcement is a key element in maintaining and increasing excise revenue.

In Indonesia, the enforcement strategy against illicit cigarettes encompasses the supply chain, from production and distribution to retail markets. The government applies a combination of hard approaches, such as land and sea patrols, market operations, and direct seizures, along with soft approaches, including public awareness campaigns, selective licensing for manufacture, cooperation with courier service providers and document audits. This multi-pronged strategy aims not only to deter illegal production and sales but also to raise compliance among businesses and consumers.

This study focuses explicitly on enforcement as a hard approach, measured by the number of illicit cigarettes seized by customs authorities. By narrowing the scope to these direct enforcement outcomes, the research highlights how tangible interventions – such as patrols, joint operations with law enforcement officers and field seizures – can positively influence tobacco excise revenue. While broader strategies play an essential supporting role, our analysis demonstrates the direct fiscal impact of targeted enforcement activities in curbing the illicit market.

Indonesia has applied almost all of the hard approach strategies recommended by the WHO's ITP, although it has not ratified the ITP (Yunarman et al., 2021). First, Indonesia has implemented *Article 19-Special investigative techniques* in the form of market operations, illicit cigarette

raids, land and sea patrols, undercover operations and surveillance, including electronic surveillance in e-commerce. Second, Indonesia implements *Article 27-Law enforcement cooperation* through cooperation agreements with relevant law enforcement officials (police, army and prosecutors' offices), joint operations with local governments and information exchange. In support of efforts to crack down on illicit cigarettes, Indonesia has also implemented Article 36, specifically *Financial resources*, in the form of funding for supervising illicit cigarettes. This funding has been strengthened and earmarked from Tobacco Excise Revenue Sharing Funds (Dana Bagi Hasil Cukai Hasil Tembakau, DBH CHT) for law enforcement since 2021, as stipulated in the Minister of Finance Regulation (Peraturan Menteri Keuangan, PMK) Number 206 of 2020.

Following enforcement activities, Indonesia also imposes progressive fines ranging from two to ten times the excise value, applicable to individuals and legal entities found to have violated excise regulations. Additionally, criminal sanctions include imprisonment and, in extreme cases, permit revocation, as outlined in Articles 14, 15, and 16 of the ITP. Indonesia has also implemented *Article 17-Seizure payment* with the application of *ultimum remedium* in the excise sector. According to *Undang-Undang Republik Indonesia Nomor 7 Tahun 2021 Tentang Harmonisasi Peraturan Perpajakan* [Law Number 7 of 2021 concerning Harmonization of Tax Regulations] and *Peraturan Pemerintah Republik Indonesia Nomor 54 Tahun 2023 Tentang Penghentian Penyidikan Tindak Pidana di Bidang Cukai untuk Kepentingan Penerimaan Negara* (Government Regulation of the Republic of Indonesia Number 54 of 2023 concerning the Termination of Investigation of Criminal Acts in the Excise Sector for the Benefit of State Revenue), namely the application of criminal law as a last resort, allowing the termination of investigations when offenders pay fines – three to four times the excise value – restorative justice will therefore be promoted while simultaneously increasing state revenue. Indonesia has also implemented the aspect of *Article 18-Disposal or destruction* by publicly destroying evidence in front of the media and the public.

However, Indonesia still has considerable room to optimise efforts to eradicate illicit cigarettes, ensuring they align more closely with the framework of ITP. Some aspects that can be strengthened include supply chain monitoring, implementing a comprehensive track-and-trace system, tightening licensing and due diligence procedures, increasing international cooperation, and providing exceptional training for law enforcement officers responsible for illicit cigarette control.

Currently, supply chain supervision in Indonesia is generally still limited to distribution channels from factories to end consumers. Preventive measures can be initiated earlier, for example, by supervising raw materials, such as tobacco plants themselves, to minimise the potential for abuse from the outset. As we all know, cigarette production, both legal and illegal, requires the primary raw material, namely tobacco. According to Le and Fan

(2024), the logistics supply chain begins hierarchically with raw materials, then proceeds to suppliers, factories, distribution and retail stores, and ultimately reaches the end consumer. The excess of cigarette raw materials and the inconsistency of the supply chain suggest the presence of illegal tobacco trade, so public policy needs to monitor not only cigarettes but also the raw materials used in their production (Ribeiro & Pinto, 2020).

Meanwhile, the implementation of track-and-trace in Indonesia is currently limited to the attachment of personalised excise labels according to the factory's identity. There is no integrated system that can track the movement of goods from factories to end users in real-time. The main obstacles to implementing this system include the absence of international obligations due to Indonesia's non-ratification of the ITP (Yunarman et al., 2021), fragmented policy frameworks across ministries (Astuti et al., 2020; Stubbs et al., 2022) and a lack of technical and digital infrastructure. Research by Gilmore and others (2019) suggests that the state should manage the track-and-trace system, as it would be counterproductive if initiated and managed by the tobacco industry. For instance, surveillance of the cigarette supply chain in Kenya through the Track-and-Trace Systems (TTS) mechanism has increased government revenues (Munga et al., 2023). While each country has its unique context, these findings demonstrate how effective monitoring and control of tobacco distribution can support fiscal objectives and reduce illicit trade.

Indonesia still has room to strengthen the licensing aspect as mandated in the ITP, which not only requires permits for cigarette manufacturers and importers but also considers the implementation of licensing or supervision of other important activities in the supply chain. These include retail activities for cigarette sales, tobacco cultivation (except for small-scale traditional farmers), transportation of cigarettes in large quantities, as well as distribution, warehousing and brokerage activities. Additionally, stricter due diligence measures need to be implemented to ensure that production and sales volumes align with reasonable market demand, thereby minimising the risk of abuse. Indonesia can enhance international cooperation through information exchange, joint training and the adoption of global best practices within the Association of Southeast Asian Nations (ASEAN) context. While regulatory systems vary across the region, coordinated enforcement and officer training – such as that facilitated by the EU's CEPOL (European Union Agency for Law Enforcement Training) – may offer relevant insights for cross-border illicit tobacco control (Schröder et al., 2021).

Cross-border studies indicate that eradicating illicit cigarettes can reduce their consumption while increasing excise revenues. Research also suggests that excisable goods supervision is crucial in achieving excise revenue (Munga et al., 2023). For better tax policies, law enforcement against illicit cigarettes will increase tax revenues while limiting cigarette consumption (Schafferer et al., 2018). Our findings, specifically related to Indonesia,

support the general principle that more vigorous enforcement of illicit cigarettes can increase excise revenue. Given that tobacco excise contributes around 96 per cent of excise revenue and 10 per cent of government tax revenue each year, strengthening law enforcement and eradicating illicit cigarettes is essential to protect state revenue, while still considering the economic role of the tobacco industry in Indonesia (Matheos et al., 2023).

8. Conclusion

This study examined the impact of enforcement against illicit cigarette circulation on excise revenue performance in Indonesia, with a specific focus on East Java Province. Using panel data from 2019–2023 across seven KPPBC, the analysis found that enforcement actions – proxied by the number of illicit cigarettes seized – have a statistically significant and positive effect on tobacco excise revenue.

These findings reinforce the argument that law enforcement serves not only a regulatory function but also a fiscal purpose. Indonesia's tough approach – through patrols, raids and seizures – has shown measurable success in curbing illicit trade and supporting revenue goals. However, the presence of systemic gaps – such as limited supply chain visibility, lack of real-time tracking systems and inadequate licensing or due diligence – suggests that current enforcement frameworks can be further optimised. Strengthening the quality of law enforcement, adopting international best practices and expanding supply chain oversight will be critical to maximising the role of tobacco excise in state financing.

Theoretically, this study highlights the often-overlooked role of enforcement in fiscal policy and offers practical insights for improving excise implementation in developing contexts. These findings reinforce the need for more substantial institutional commitment to enforcement as an integral part of fiscal governance in Indonesia.

Implications and Limitations

Policy implications

This study emphasises the importance of strategic law enforcement in maintaining tobacco product excise revenue. While Indonesia has increased the intensity of enforcement through patrols, field seizures, market surveillance and joint operations, there are still several areas for improvement that can be optimised, namely: centralised tracking systems, cross-border cooperation and training and institutional improvements in terms of supervision of all tobacco supply chain actors.

Research limitations

This study is subject to several limitations. First, the research scope is geographically restricted to East Java Province, which, while fiscally significant, may not fully represent enforcement dynamics across Indonesia's diverse regions. Second, the use of the number of illicit cigarettes seized as a

proxy for enforcement only captures hard measures, omitting softer efforts such as public education, assistance to the factory and cooperation with courier service providers. Third, the five-year observation period (2019–2023) may not adequately reflect the long-term policy impacts or the effects of recent regulatory reforms that may still be in transition.

Future research directions

Future studies are encouraged to extend the study period by incorporating a longer historical dataset and/or adopting a national panel dataset to assess regional variation in enforcement effectiveness and its correlation with excise revenue. Qualitative research could explore institutional readiness, political commitment, and the behavioural responses of economic actors towards enforcement. Lastly, evaluating the efficiency and governance of tobacco excise revenue sharing funds (DBH CHT) allocation for enforcement purposes could offer valuable guidance for policy optimisation.

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