cisdi
Center for Indonesia's Strategic Development Initiatives

Scan the QR code for the full report:

POLICY BRIEF

Higher Cigarette Excise Taxes, Simpler Tiers, Greater Economic Benefits for Indonesia

KEY FINDINGS

- **Cigarette excise reform generates positive economy-wide impacts across all simulated reform scenarios.**
  Higher excise taxes consistently reduce cigarette consumption while increasing economic output, aggregate household income, and employment, as additional government revenue generated from higher excise taxes is allocated to public expenditure.

- **Tier simplification strengthens the effects of cigarette excise reform.**
  For any given excise tax increase, simplifying Indonesia's cigarette excise tier structure consistently reduces cigarette consumption and generates higher government revenue by reducing incentives to substitute toward lower-tax products. Tier simplification also strengthens excise reform's positive impacts on economic output, aggregate income, and employment.

- **The most comprehensive reform generates the largest estimated gains.**
  A 50 percent increase in cigarette excise tax rates combined with simultaneous simplification of the SKT and SKM-SPM tiers is estimated to reduce cigarette consumption by 10.1 percent, generate approximately Rp109.6 trillion in additional cigarette excise revenue, increase economic output by Rp315.1 trillion, increase aggregate household income by Rp81.7 trillion, and generate approximately 1.14 million in net additional employment.

BACKGROUND

Indonesia continues to face a substantial tobacco epidemic, with cigarette smoking contributing to a large burden of preventable disease and premature mortality. Despite repeated, mostly small, increases in cigarette excise taxes, cigarettes remain relatively affordable. Moreover, Indonesia's complex excise tax structure continues to create substantial variation in tax rates and prices across cigarette products. These price differentials encourage some consumers to switch to relatively cheaper cigarette products, weakening the effectiveness of excise tax increases on overall cigarette consumption.

Policy discussions also consider the potential effects of cigarette excise reform on employment and the broader economy. Concerns about higher cigarette excise taxes often focus solely on their potential to reduce cigarette demand and economic activity associated exclusively with cigarette production. However, the economic implications of tobacco excise reform extend beyond changes in cigarette consumption and activity within specific sectors. Additional government revenue generated from higher excise taxes can be allocated to public expenditure, generating economic activity across the broader economy. Assessing these economy-wide effects is therefore important for understanding the overall economic implications of cigarette excise reform.

This policy brief presents findings from an updated Input-Output (IO) analysis of cigarette excise tax reform in Indonesia. The analysis evaluates alternative combinations of excise tax increases and tier simplification and estimates their effects on cigarette consumption, government revenue, economic output, aggregate income, and employment.

APPROACH

Utilising the 2020 Input-Output (IO) Table and 2025 Statistics Indonesia data, the analysis simulates twelve cigarette excise tax reform scenarios, combining three levels of excise tax increases—10 percent, 25 percent, and 50 percent—with different degrees of excise tier simplification. The analysis distinguishes three cigarette manufacturing subsectors: machine-made kretek cigarettes (SKM), hand-rolled kretek cigarettes (SKT), and machine-made white cigarettes (SPM).

The IO analysis captures the economy-wide effects of cigarette excise reform through three key transmission channels: (1) changes in cigarette consumption resulting from higher cigarette prices following excise tax increases; (2) adjustments in household spending on non-cigarette goods and services following changes in cigarette expenditure; and (3) additional government revenue generated from higher cigarette excise taxes and its subsequent allocation across sectors of the economy. These changes in final demand are then traced through intersectoral linkages in the IO framework to estimate their effects on economic output, aggregate income, and employment.

The analysis also evaluates four alternative government revenue allocation schemes to examine how different uses of the additional excise revenue affect the resulting macroeconomic impacts.

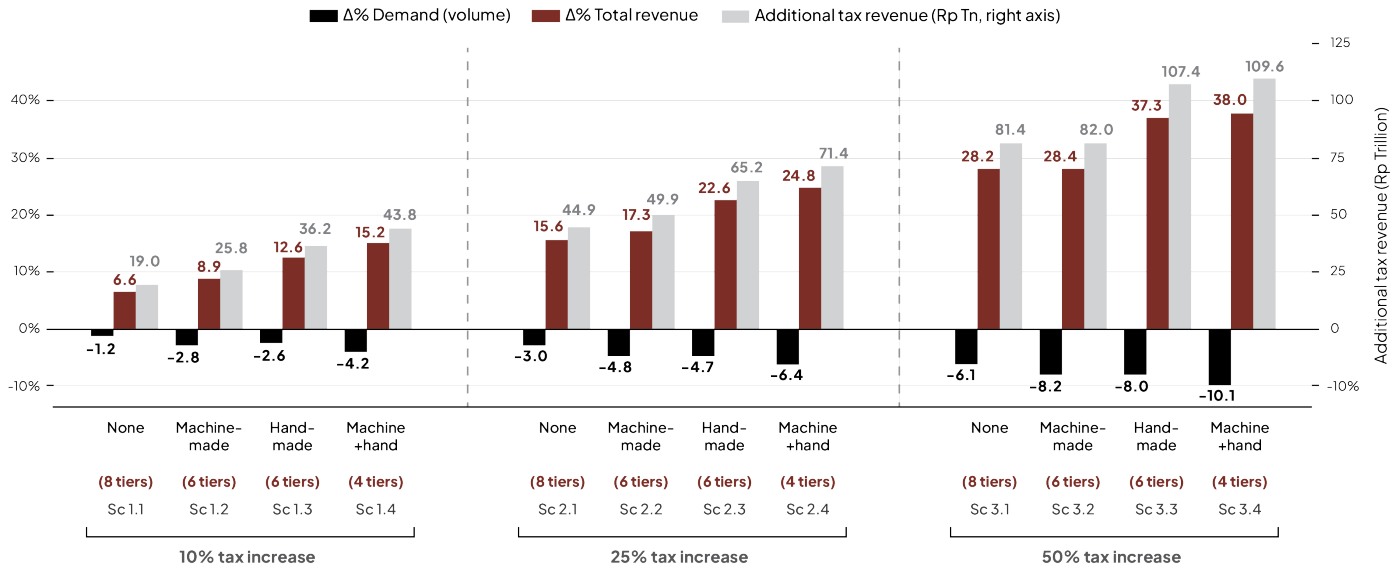
FINDINGS

Higher excise taxes reduce cigarette consumption and increase government revenue

Higher cigarette excise tax rates lead to larger reductions in cigarette consumption and greater additional government revenue. These effects are amplified when the excise tiers are simplified. This is particularly evident when the SKT and SKM/SPM tiers are simplified simultaneously, reducing price differentials across cigarette types and limiting consumers' ability to switch to cheaper products.

Figure 1 indicates that the most comprehensive reform—combining a 50 percent increase in cigarette excise tax rates with simultaneous simplification of SKT and SKM/SPM tiers from eight into a four-tier structure—produces the largest estimated reduction in cigarette consumption, at 10.1 percent, while generating approximately Rp109.6 trillion in additional cigarette excise revenue.

Figure 1. Impacts of cigarette excise tax reform on consumption and excise revenue



Tier simplification refers to merging excise tiers for machine-made (SKM/SPM) and/or hand-made (SKT) products; The numbers in dark red on the X-axis labels refer to the number of tiers remaining after simplification.

Cigarette excise reform generates positive impacts on economic output, aggregate household income, and employment

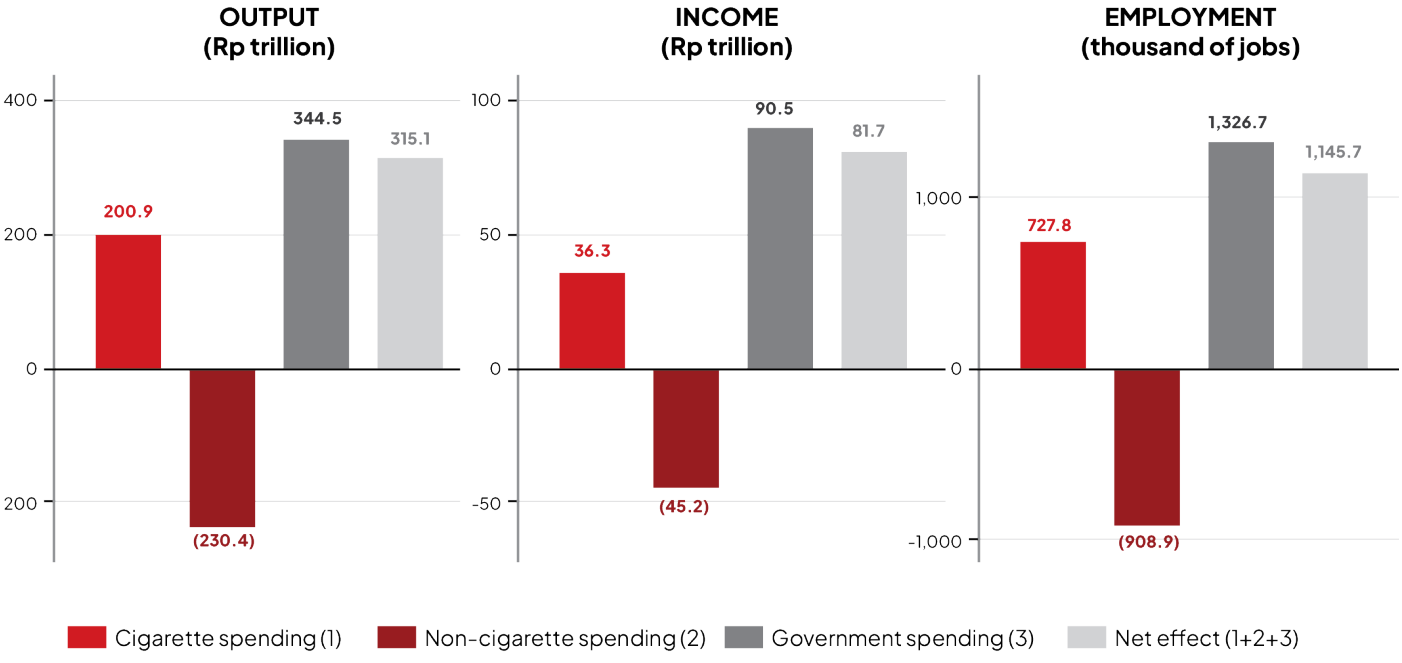
Cigarette excise reform is estimated to generate positive net impacts on economic output, aggregate income, and employment across all simulated reform scenarios. While the reform affects economic activity through changes in cigarette expenditure and household expenditure on non-cigarette goods and services, the overall results indicate that additional economic activity associated with government expenditure financed by higher excise revenue more than offsets these effects.

As shown in Figure 2, under the most comprehensive reform, total economic output is estimated to increase by Rp 315.1 trillion, while aggregate income is estimated to increase by Rp 81.7 trillion. The reform is also estimated to generate positive net employment outcomes, with net employment estimated to increase by approximately 1.14 million under the most comprehensive reform.

Employment gains are expected across a range of sectors such as agriculture (e.g., food crops agriculture, livestock farming, agricultural and hunting services), manufacturing (e.g., construction, food and beverage industry, paper industry and paper goods), trade, and services (e.g., big and retail trading (not cars and motorcycles), accommodation provision, and company services). Given the unsustainable nature of the tobacco industry, these gains in non-tobacco sectors indicate where this transition could occur and where alternative employment can be created.

Overall, these findings indicate that cigarette excise reform can reduce cigarette consumption while simultaneously generating positive net macroeconomic outcomes in terms of economic output, aggregate income, and employment.

Figure 2. Impacts of cigarette excise tax reform on economic output, aggregate income, and employment



POLICY RECOMMENDATION

1. Increase cigarette excise taxes and comprehensively simplify the tier structure.

The government should pursue substantial cigarette excise tax increases alongside comprehensive simplification of the tier structure across SKT, SKM, and SPM products. Implementing these measures together would reduce cigarette consumption, increase government revenue, and limit incentives for consumers to switch toward lower-taxed, cheaper products. Importantly, the analysis indicates that these reforms are also associated with positive net impacts on economic output, aggregate income, and employment across all simulated scenarios. Among the scenarios assessed, a 50 percent increase in excise tax rates combined with consolidation into a four-tier structure generates the largest estimated fiscal and economy-wide gains. The government should therefore consider this scenario as a benchmark for future cigarette excise tax reform.

2. Incorporate labor transition measures into the cigarette excise roadmap.

The government should incorporate labor transition measures into the cigarette excise roadmap to anticipate potential gradual shifts in employment away from tobacco-related activities. Existing research in Indonesia suggests that a significant share of these workers have prior experience in sectors such as food production, farming, retail, and services, meaning they already possess transferable skills that can ease the transition. Such measures can help workers transition into expanding sectors and enable the economy to fully and more quickly realise the net additional employment opportunities associated with excise reform.

AUTHORS

Muhammad Zulfiqar Firdaus

Fariza Zahra Kamilah

Beladenta Amalia

Sofwatun Nida

Muhammad Anugrah Saputra

Usman

I Dewa Gede Karma Wisana