

Increasing Tobacco Taxes Benefits the Poor



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1 | INTRODUCTION

Every year, 43,000 people in Mexico die from diseases related to tobacco consumption. Taxing tobacco is the most effective public policy to reduce tobacco consumption. What's more, increasing cigarette prices through taxes brings greater benefits to the poorest households and the country's tax collection as a whole.

2 | POLICY IMPLICATIONS

Increasing prices of tobacco through taxes minimizes consumption of cigarettes, particularly among the poorest households. Additionally, the most vulnerable households increase their available income as a result of spending less on medical bills. Moreover, lowest income households report more profits in terms of healthy life years when compared to other households.

3 | EVIDENCE

The document *Extended Cost-Benefit Analysis of Tobacco Consumption in Mexico* created by Centro de Investigación Económica y Presupuestaria, A.C. (CIEP) estimates the financial, social and health-related costs caused by smoking as well as the mid-term impact of their reduction by increasing the tax on cigarettes.

An initial step before creating the cost-benefit analysis is understanding how different types of consumers respond to price increases on cigarettes. To do so, CIEP estimated tobacco consumption price elasticity. Elasticity is higher among the lowest income groups (Group 1 in Table 1). This means that more vulnerable people are more responsive to the effect of a price increase in cigarettes and are far more prone to stop consuming them (see Table 1).

Through the elasticities obtained, CIEP simulated the effects of increasing the price of cigarettes over tobacco consumption, medical expenses, and lost life years.

Since tobacco price elasticity may vary among population preferences and time, simulations are estimated for three levels of elasticity, taking the elasticity obtained as point of reference (medium).

The aggregated effect of a tax policy that increases the price of cigarettes across the different income groups in the country was defined as the sum of the change in the household's expenditure on tobacco, a reduction in medical expenses incurred due to tobacco consumption-related diseases, and an increase in income via a healthy life days increase.



Table 1. ELASTICITIES BY INCOME GROUP 2018

| | Average | Low income | Middle income | High income |
|-------------------|---------|------------|---------------|-------------|
| Medium Elasticity | -0.424 | -0.587 | -0.542 | -0.466 |

Source: CIEP

Two scenarios were calculated:

1. A 43% price increase corresponding to a change in the specific tax from 0.49 to 1.49 per cigarette.
2. A 3.4% corresponding to the special tax update 2020-2021.

The results from the simulations showed the following effects for the second scenario:

The households still reserved a portion of the expenditure for tobacco. However, the poorest households do it to a lesser extent since they are more prone to be on the receiving end of the effects of a price increase.

The households with the lowest income spend more in terms of medical services aimed at caring for tobacco consumption-related diseases vs. other groups of households. Therefore, by increasing the price of cigarettes, these households display reductions across these expenses, which account for 3.4% of savings in the household's income (see Figure 1).

The poorest households also show more savings in health days, which have a positive impact on their income due to the increase in their productivity.

Conversely, the scenario of the special tax update shows similar, yet smaller effects due to the 40-percentage points difference in the price increase.

All in all, the results from the simulation conducted on both scenarios showed that the net effect on income would be higher among the households with the lowest income by directly increasing available income by 3.4% and 0.3%, respectively, mainly due to the decrease in medical expenses and the increase in productivity (see Figure 2). Notice that poorer households increase their available income **twelvefold times** when tobacco prices increase 43% (second scenario), rather than only 3.4% (first scenario).

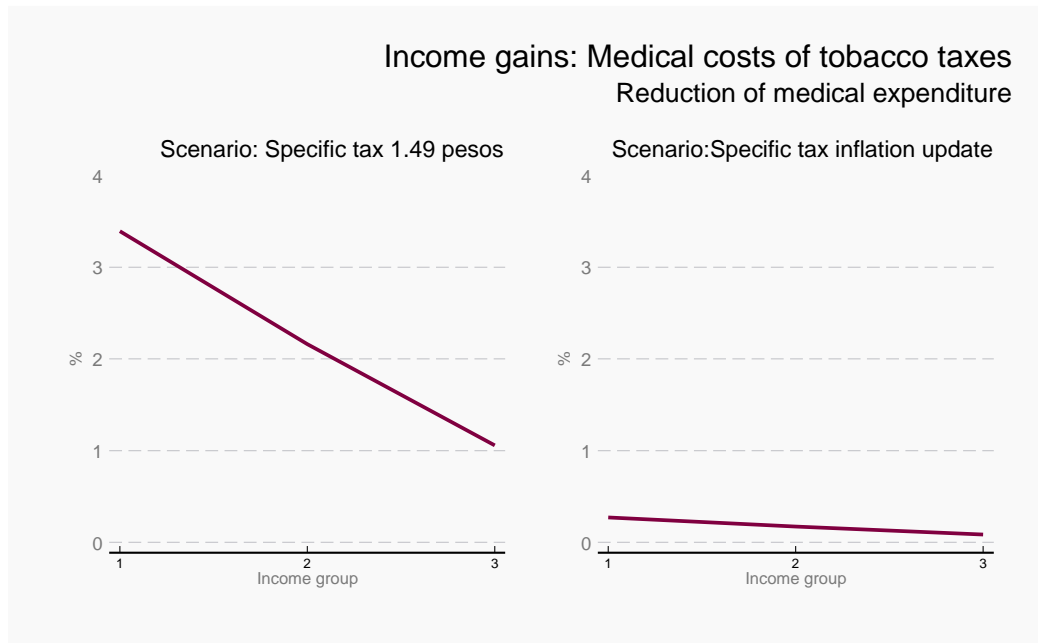
4 | CONCLUSIONS

Tobacco taxes revolve around two main goals: to discourage tobacco consumption to improve the population's health and wellbeing and collect more revenues for the Federal Government.

Introducing a higher tax on cigarettes would have a **progressive effect** on the income distribution since it would allow the population with the lowest income to increase their income level through reducing their expenditure on cigarettes, healthcare for tobacco-related illness and disease, and ultimately allowing them to be more productive.

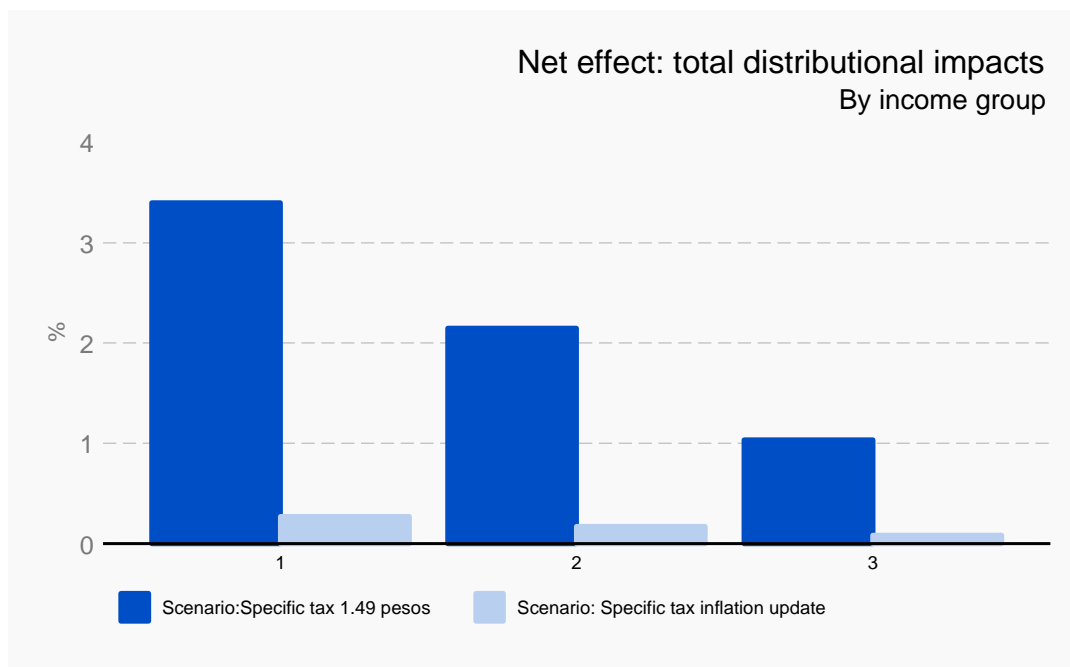
Considering the restricted tax arena, the high financial costs incurred by smoking, and how progressive the tax is, the increase in special taxes on cigarettes should be seriously taken into consideration by decision-makers in the country.

FIGURE 1. INCOME EARNINGS: MEDICAL EXPENDITURE REDUCTION



Source: Own calculations based on INEGI (2017, 2019); IECS (2013).

FIGURE 2. NET EFFECTS: TOTAL DISTRIBUTIVE



Source: Own calculations based on INEGI (2017, 2019); IECS (2013); IHME (2017).



ACRONYMS

CIEP Centro de Investigación Económica y Presupuestaria, A.C.

IECS Instituto de Efectividad Clínica y Sanitaria

IHME Institute for Health Metrics and Evaluation

LITERATURE

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