As Countries Improve Cigarette Tax Policy, Cigarette Consumption Declines

Key Findings

- Higher overall scores on the Tobacconomics Cigarette Tax Scorecard are associated with significantly lower cigarette consumption.

- The modest improvement in scores from 2014 to 2020 reduced consumption by about 3.3 percent, while consumption could have been reduced by an additional 17 percent if countries had implemented optimal tax policies that would earn the highest score of 5.

- On average, a one-point increase in the overall score is associated with an 8.5-percent reduction in cigarette consumption.

- The association is more pronounced in low- and middle-income countries, where a one-point increase in overall score is associated with a 9.4-percent reduction in consumption.

From 2014 to 2020, countries' overall cigarette tax scores increased on average from 2.23 in 2014 to 2.53 in 2020. At the same time, countries' average per capita cigarette consumption decreased from more than 1,060 cigarette sticks in 2014 to 877 cigarette sticks in 2020.
Background

The Cigarette Tax Scorecard evaluates countries’ cigarette tax systems based on a five-point rating system that incorporates international guidance and best practices in tobacco taxation. The five-point index uses data to score countries on the following four components: 1) cigarette price, 2) changes in the affordability of cigarettes over time, 3) the share of taxes in retail cigarette prices, and 4) the structure of cigarette taxes. The overall score reflects an average of the four component scores.

Existing literature has established the separate effect of each of the four tax performance measures on cigarette consumption. However, little is known about the relationship between the Cigarette Tax Scorecard overall score and smoking behavior. To assess the validity of using the overall score to aid governments in evaluating their cigarette tax policies, this study examines the association between overall score and actual smoking behaviors in 97 countries during the period of 2014–2020.

Data & Methodology

Countries’ overall cigarette tax scores for 2014, 2016, 2018, and 2020 are drawn from the second edition of the Cigarette Tax Scorecard. Information on annual per capita cigarette consumption is based on Euromonitor International cigarette data, and tobacco control environments and demographic variables are from the WHO Report on the Global Tobacco Epidemic and World Bank data. Due to missing data for some countries, the final sample includes 97 countries, of which 44 percent are classified by the World Bank as high-income countries (HICs).

Implications

Results of the simulation demonstrate the efficacy of the four Scorecard components in collectively reducing cigarette consumption. There is a statistically significant association between overall scores and cigarette consumption (-0.085 overall, -0.063 among HICs, and -0.094 among low- and middle-income countries (LMICs)).

The modest improvement in scores from 2014 to 2020 reduced consumption by about 3.3 percent, while consumption could have been reduced by an additional 17 percent if countries had implemented optimal tax policies that would earn the highest score of 5.

If countries move from a score of 0 to 5, they could experience a reduction of 46.7 percent in per capita cigarette consumption, with the reduction greater among LMICs, at 49.0 percent, than in HICs, at 39.6 percent.

Score increases of one point reduce cigarette consumption significantly, and even the impact of score increases of less than one point are not trivial. On average, for every one-point score increase, countries would experience a reduction of 8.5 percent in per capita cigarette consumption, with the reduction greater among LMICs, at 9.4 percent, than in HICs, at 6.3 percent.

Policy Recommendations

With a global average overall cigarette tax score in 2020 of 2.28—just less than half of the highest possible score—there is ample room for cigarette tax policy improvement. Governments should strive to achieve the highest score in all four components of the Cigarette Tax Scorecard by increasing cigarette prices, reducing cigarette affordability, increasing the tax share of cigarette prices, and applying best practice tax structures.

A stronger score-to-consumption link in LMICs suggests particular promise using excise taxes for reducing consumption in countries where the majority of tobacco-related deaths occur.