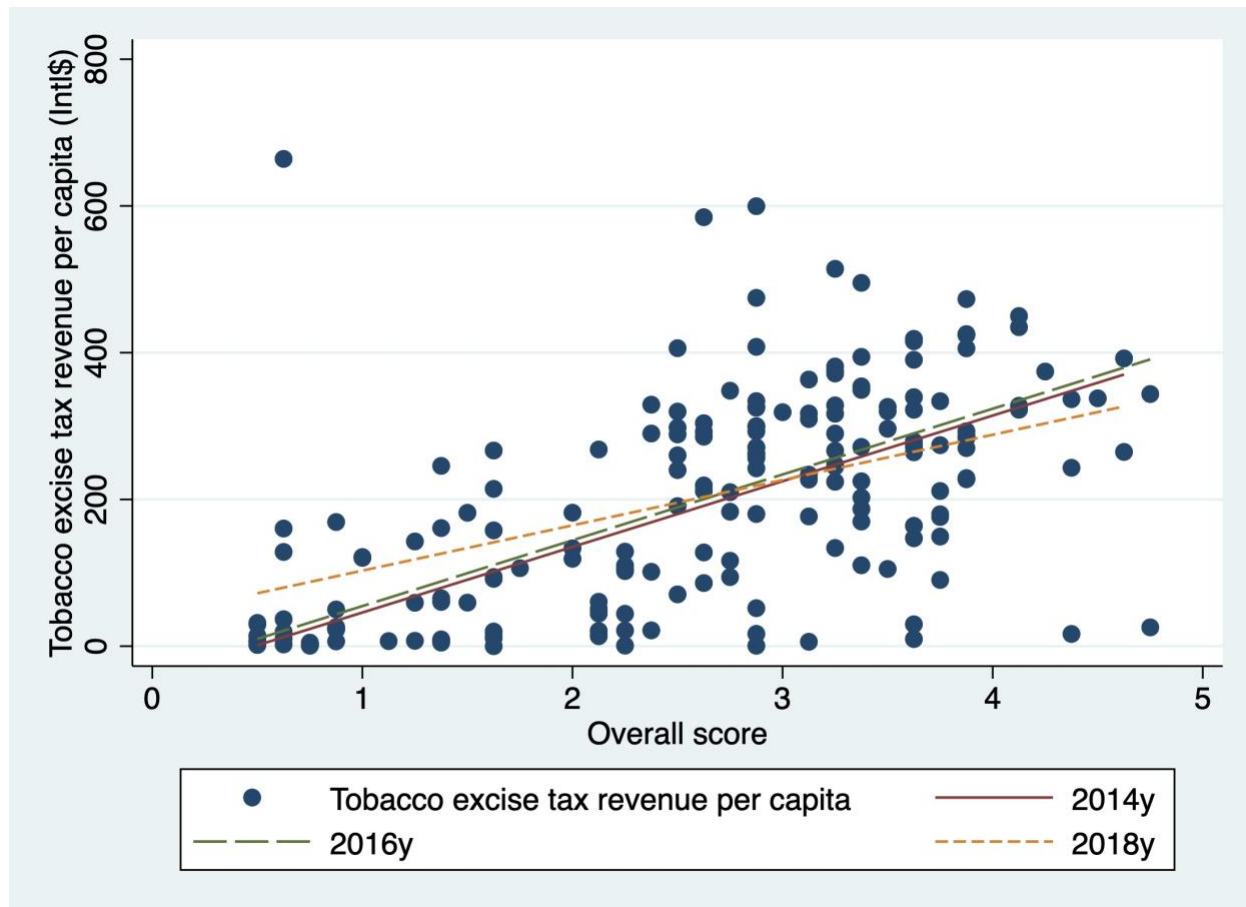


Better Cigarette Tax Policy Increases Tax Revenues

Key Findings

- Higher scores on the *Tobacconomics Cigarette Tax Scorecard* are associated with significantly higher tobacco excise tax revenues.
- On average, a 1-point increase in the 5-point overall score is associated with a \$11.57 per capita increase in tobacco excise tax revenue.
- If all countries had increased their scores to ‘5’ in 2018, per capita tobacco excise tax revenue would have increased by 21.6 percent on average.

Figure: Tobacco Tax Revenue Per Capita and *Tobacconomics Cigarette Tax Score*



Background

The second edition of 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 total score reflects an average of the four component scores.

Existing research has established that increases in the *Cigarette Tax Scorecard* overall score are associated with significant decreases in cigarette consumption (Ngo et al., 2022). Less is known about the relationship between overall score and tobacco tax revenues. To assess the validity of using the *Scorecard* to predict and evaluate tobacco tax revenue, this study examines the association between the overall score and tobacco excise tax revenue in 70 countries from 2014 to 2018.¹

Data & Methodology

Data on cigarette tax scores for 2014, 2016, and 2018 were obtained from the second edition of the *Tobacconomics Cigarette Tax Scorecard*. Countries' tobacco excise tax revenues were retrieved from the World Health Organization (WHO), which collects data from national governments. Tobacco control environment information and other demographic and socioeconomic information were gathered from various editions of the WHO *Report on the Global Tobacco Epidemic* and the World Development Indicators in the World Bank database. This study uses Ordinary Least Squares estimation to examine the association between the overall cigarette tax scores and tobacco excise tax revenues with a final sample of 70 countries.

Findings

Estimation results show that higher overall scores of the *Cigarette Tax Scorecard* are associated with higher tobacco revenue. A 1-point increase in overall cigarette tax score is associated with a \$11.57 per capita increase in tobacco excise tax revenue (in constant 2017 international \$ converted by purchasing-power-parity). For low- and middle-income countries, a

1-point increase in overall cigarette tax score is associated with a \$11.04 per capita increase in tobacco excise tax revenue. Similarly, for countries with low overall scores at the study's baseline in 2014, a 1-point increase in the overall cigarette tax score is associated with a \$6.77 per capita increase in tobacco excise tax revenue. Simulation results suggest that if all countries had increased their scores to a maximum score of '5' (indicating optimal cigarette price, reduced affordability, high tax share of price, and well-designed tax structure) in 2018, they would have experienced a 21.60 percent per capita increase in their tobacco excise tax revenue on average.

Policy Recommendations

In 2020, the global average overall score was 2.28, indicating substantial opportunities for policy improvement in many countries. Governments should aim to achieve the highest score for all four components in the *Cigarette Tax Scorecard* by raising cigarette prices, reducing cigarette affordability, increasing cigarette tax shares, and applying well-designed tax structures.

This study suggests these tax policy changes not only improve public health by reducing smoking behavior, but also generate additional revenue to fund programs that help low-income smokers quit and support key development priorities such as health and education.

References

Ngo, A., Drope, J., Guerrero-López, C. M., Siu, E., & Chaloupka, F. J. (2022). As countries improve their cigarette tax policy, cigarette consumption declines. *Tobacco control*. <http://dx.doi.org/10.1136/tc-2022-057486>).

¹ This policy brief is based on a Tobacconomics working paper "Better Cigarette Tax Policies and Higher Tobacco Excise Tax Revenues."