

# The distribution of cigarette prices under different tax structures: Findings from the International Tobacco Control Policy Evaluation (ITC) Project

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## **Abstract**

**BACKGROUND:** The distribution of cigarette prices has rarely been studied and compared under different tax structures. Descriptive evidence on price distributions by countries can shed light on opportunities for tax avoidance and brand switching under different tobacco tax structures, which could impact the effectiveness of increased taxation in reducing smoking.

**OBJECTIVE:** This paper aims to describe the distribution of cigarette prices by countries and to compare these distributions based on the tobacco tax structure in these countries.

**METHODS:** We employed data for 16 countries taken from the International Tobacco Control Policy Evaluation Project to construct survey-derived cigarette prices for each country. Self-reported prices were weighted by cigarette consumption and described using a comprehensive set of statistics. We then compared these statistics for cigarette prices under different tax structures. In particular, countries of similar income levels and countries that impose similar total excise taxes using different tax structures were paired and compared in mean and variance using a two-sample comparison test.

**FINDINGS:** Our investigation illustrates that, compared with specific uniform taxation, other tax structures, such as ad valorem uniform taxation, mixed (a tax system using ad valorem and specific taxes) uniform taxation, and tiered tax structures of specific, ad valorem and mixed taxation tend to have price distributions with greater variability. Countries that rely heavily on ad valorem and tiered taxes also tend to have greater price variability around the median. Among mixed taxation systems, countries that rely more heavily on the ad valorem component tend to have greater price variability than countries that rely more heavily on the specific component. In countries with tiered tax systems, cigarette prices are skewed more towards lower prices than are prices under uniform tax systems. The analyses presented here demonstrate that more opportunities exist for tax avoidance and brand switching when the tax structure departs from a uniform specific tax.

## **Recommended Citation**

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