

THE CROWDING-OUT EFFECT OF TOBACCO CONSUMPTION IN BOSNIA AND HERZEGOVINA

KEY FINDINGS

- Tobacco-consuming households spend greater shares of their budgets on less productive categories such as alcohol.
- Tobacco consumption crowds out available resources for households to invest in human capital, such as health and education.
- Low-income households face the greatest relative burden due to tobacco spending, threatening their ability to meet basic needs.

BACKGROUND

Bosnia and Herzegovina (BiH) has one of the highest smoking prevalence rates in Europe, with more than 43 percent of adults smoking daily.¹ This high prevalence translates into significant household expenditures on tobacco. For low-income households, the burden is particularly distinct, as various studies show that tobacco takes a substantial share of limited household budgets, diverting scarce resources away from essential items such as food, health, and education. This expenditure directly displaces resources that could otherwise improve well-being.

The affordability of cigarettes in BiH has risen steadily in recent years. Between 2020 and 2023, consumer prices increased by 22 percent and real GDP by more than 10 percent, while cigarette prices grew by only 12 percent.² With an income elasticity of demand estimated at 0.587, rising incomes can lead to higher tobacco affordability, potentially encouraging higher consumption.¹

This pattern means that households—especially the poorest—allocate increasing amounts of their limited resources to tobacco. As a result, tobacco consumption not only harms health but also reduces household capacity to spend on basic needs. Understanding the magnitude of this crowding-out effect is essential for designing fiscal and public health policies in BiH.

RESULTS AND TRENDS

The analysis uses Household Budget Survey (HBS) data from 2011, 2015, and 2021/2022,

and the results demonstrate clear and consistent patterns, outlined below.

- **Reallocation of spending priorities:** Households that do not consume tobacco allocate a larger share of their budget to food, housing, and health; whereas households that consume tobacco tend to spend more on alcohol, entertainment, transportation, and clothing. These findings suggest that tobacco-consuming households are more likely to redirect resources towards less productive categories.
- **Low-income households most affected:** The relative burden of tobacco is highest among the poor, who spent more than six percent of their household budgets on tobacco across all years. With an average monthly per capita income of only 321 BAM (compared to 565 BAM for middle-income and 1,121 BAM for high-income households), these households are most vulnerable. Higher tobacco spending reduces resources for food and clothing, leaving them at risk of failing to meet even basic needs.
- **Human capital risks:** Overall, tobacco crowds out expenditures essential for well-being and human capital—such as food, housing, health, and education—while simultaneously crowding in short-term or status-oriented spending, including alcohol, restaurants, and beverages.

Table 1. Impacts of tobacco spending on allocation of household budgets

	Categories	Impacts of tobacco spending
Crowding-out effect	Food, Clothing, Housing, Education, Health, Entertainment	Reduces essential welfare-related expenditures such as nutrition, housing, health, education, clothing.
Crowding-in effect	Beverages, Alcohol, Ready-made food, Transport	Increases expenditure on less productive categories, mainly beverages, alcohol, and prepared food.

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These findings confirm that tobacco crowds out essential consumption and deepens socioeconomic disparities.

POLICY RECOMMENDATIONS

In the context of BiH, where tobacco consumption has been shown to displace essential household spending—most notably on housing, clothing, and food, but also on health and education—policy efforts should focus on both the affordability and the social acceptability of smoking. To achieve this, BiH should adopt a comprehensive package of fiscal, health, and regulatory measures that address not only public health but also broader socioeconomic challenges.

- **Fiscal measures:** Clear and consistent tax policy is the most effective way to make cigarettes less affordable. Bringing back a multi-year excise plan, with regular annual increases, would gradually raise cigarette prices and reduce consumption. To maximize the impact, fiscal policies should be complemented by locally relevant public health campaigns that emphasize the economic as well as health costs of smoking, tailored to resonate with low-income households where the crowding-out effect is most pronounced.
- **Health system response:** Support for smoking cessation should be made more available by including these services in primary health care and by building stronger community programs, especially in rural areas where access is limited. Information campaigns should explain not only the health dangers of smoking but also the financial pressure it creates on households. By showing that quitting frees money for food, housing, and education, these campaigns can motivate people to change their behavior in ways that improve both health and family welfare.
- **Regulatory action:** In addition to fiscal and educational measures, a comprehensive ban on smoking in bars

and restaurants, alongside stricter enforcement of existing workplace and public smoking restrictions, is essential to reduce the social acceptability of tobacco use and protect non-smokers.

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REFERENCES

1. Gligorić, D., Borović, Z., Vidović, N., & Ritan, V. (2025). *Cigarette consumption and affordability in Bosnia and Herzegovina, 2010–2023* (Working Paper No. 25/4/1). UBL.
www.economicsforhealth.org/research/cigarette-consumption-andaffordability-in-bosnia-and-herzegovina-2010-2023-working-paper-series/
2. *The Indirect Taxation Authority of Bosnia and Herzegovina*. (2024). Data obtained upon request; International Monetary Fund. (2024). *World Economic Outlook database, April 2024*. International Monetary Fund.
<https://www.imf.org/en/Publications/WEQ/weo-database/2024/April>