Montenegro has one of the highest smoking prevalence in the region of 36.5 percent (WHO, 2017) [1] mostly driven by increases in female smoking rates in all age groups. The most recent Global Youth Tobacco Survey research indicates substantial growth in smoking prevalence among girls, which increased by 5.3 percentage points in 2018 compared to 2014 [2]. Without changes in regulations, Montenegro’s adult smoking rates will rise to 52 percent by 2035, with adult women as the majority of smokers [3]. This would result in a higher prevalence of smoking-related diseases, and consequently, increase direct healthcare costs.

This ISEA research focuses on the effectiveness of tax policy changes in Montenegro for the reduction of cigarette consumption and prevalence, especially in the context of socioeconomic status. Global evidence demonstrates that tobacco taxation policy is one of the most effective tools to reduce smoking prevalence, specifically among youth and low-income group [4].

Data from Montenegrin Household Budget Survey shows a decreasing trend in the consumption of cigarettes (2006-2017) across all income groups, which is a result of price increases. Even if poorer households spend less on cigarettes, they allocate a larger share of their budget on tobacco compared to wealthier groups. On the other hand, as expected, the high-income group has the highest total expenditure on cigarettes.

Despite these decreases in consumption, smoking prevalence in Montenegro remains high at 36.5 percent. To achieve further reductions, the Government of Montenegro recently adopted a new Law on Limiting Use of Tobacco Products (2019), fully aligned with EU Directives, and also promoting non-price measures by limiting tobacco use and smoke-free spaces [5, 6].

The results of this ISEA research show that a cigarette price increase would decrease the number of smokers and the quantity consumed. On average, a price increase of 10 percent would reduce smoking prevalence by 6.4 percent. However, considerable differences can be seen between different income groups, with the highest responsiveness to price changes on smoking prevalence in the low-income group. At the same time, an increase in income could potentially neutralize the effects of price increases, and even make cigarettes more affordable.

The low-income group spends a relatively larger share of their budget on cigarettes (Figure 1). This fact is alarming as it assumes that spending on basic necessities are most likely being sacrificed. Moreover, high prevalence and consumption can lead to increased morbidity, lost earnings, and high medical expenses for treatment of smoking related diseases [7].
Changes in price have a strong potential effect on cigarette consumption, generating broader socioeconomic impacts. This aspect is related especially to health outcomes, but also to the additional government revenues generated through increased excises taxes on these goods. [8]

Simulation of an impact of the excise tax calendar which assumes an increase in specific excise from EUR 0.60 per pack to EUR 0.95 per pack and an ad valorem decrease from 32.0 percent to 24.5 percent of the retail sales price shows a reduction in consumption by 7.5 percent, while increasing total government revenues by 11.3 percent.

The strongest effect of excise tax changes on consumption occurs in the low- and middle-income groups. At the same time, changes in consumption in these groups have a smaller effect on public revenues, compared to the high-income group. On the other hand, wealthier households contribute the most to public revenues (Figure 2).
**POLICY IMPLICATIONS**

Poor households are much more sensitive to price changes. This is especially important in the context of poverty and growing disparities in health. Smoking results in higher healthcare costs and spending on cigarettes has an impoverishing effect. Moreover, taking into account the high prevalence in the low-income group, it is important to reduce the harmful use of tobacco, applying evidence-based price and non-price policies. An increase in cigarette taxes, especially through a specific tax would, according to ISEA results, would significantly decrease the number of smokers and cigarette consumption, while increasing public revenues. In that manner, initiation would be reduced, while motivating cessation.

**KEY MESSAGES**

*Smoking prevalence and consumption are very responsive to price and income changes.*

A 10 percent increase in price would reduce the number of smokers by 6.3 percent and smoking intensity of those who smoke by 4.3 percent. A corresponding increase in income would lead to about 6 percent increase in consumption.

*Poorer households spend a disproportionally larger share of their budget on cigarettes.*

Current smoking prevalence and spending on cigarettes by the poor are high, and they can contribute to deeper poverty and growing health disparities. Having in mind that the poor are the most responsive to changes in prices, tax increases can be an effective policy tool to reduce cigarette consumption by the poor, which would allow reallocating those household resources to more necessary spending.

*Increase in excise taxes on tobacco would reduce cigarette consumption, and at the same time, bring additional government revenue.*

The implementation of the Government excise tax calendar would reduce cigarette consumption in Montenegro by 7.5 percent, with total government revenue increase by 11.3 percent. This is a significant decrease in smoking, which would have important positive results for public health.

*The planned policy would increase the progressivity of the tobacco tax system, and would mostly benefit low- and middle-income households.*

Taxation policy has a positive impact in changing patterns of consumption and public revenues across each income group. The low- and middle-income households would benefit the most, with 8.7 and 8.3 percent reduced consumption, respectively. On the other hand, the most tax revenue is generated from the high-income group.
References


8. Law on Excise Taxes, Official Gazette of Montenegro, 76/08, 50/09, 78/10, 40/11, 61/11, 28/12, 38/13, 45/14, 8/15, 1/17, 50/17, 55/18

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