

Modelling the Impacts of Tobacco Tax Increases in Slovakia: A simulation model

Given recent tobacco tax policy changes in Slovakia, the current excise tax system has demonstrated relative success in reducing smoking prevalence and raising government revenues. However, evidence suggests that more ambitious annual tax increases could yield even greater benefits.

This brief presents a comparative analysis of the current tax calendar and an alternative accelerated tax calendar, focusing on the implications for government revenue, smoking prevalence, and public health. Drawing on international best practices, including those recently observed in New Zealand, this analysis underscores the potential for Slovakia to achieve more substantial fiscal and health outcomes through its tobacco tax policy.

The current excise tax calendar increases specific excise taxes on cigarettes every two years, starting at 84.6 € per 1,000 cigarettes in 2023 and rising to 113.5 € by 2028, with a total increase of 28.9 € per 1,000 cigarettes over six years. The ad valorem rate increases from 23 percent to 25 percent in 2024 and remains unchanged thereafter, while VAT rises from 20 percent to 23 percent starting in 2025. In contrast, the accelerated excise tax calendar accelerates these increases in the specific part of the excise tax, achieving a tax rate of 113.5 € per 1,000 cigarettes by 2026 and continuing to 138.1 € by 2028, resulting in a larger total increase of 53.5 € per 1,000 cigarettes over the same period. This approach involves annual adjustments allowing for consistent tax growth.

Table 1. Current and accelerated excise tax calendars

Year	Current			Year	Accelerated		
	Specific excise tax (€)	Ad valorem rate	VAT rate		Specific excise tax (€)	Ad valorem rate	VAT rate
2023	84.6	23%	20%	2023	84.6	23%	20%
2024	91.3	25%	20%	2024	91.3	25%	20%
2025	91.3	25%	23%	2025	102.5	25%	23%
2026	102.5	25%	23%	2026	113.5	25%	23%
2027	102.5	25%	23%	2027	125.0	25%	23%
2028	113.5	25%	23%	2028	138.1	25%	23%

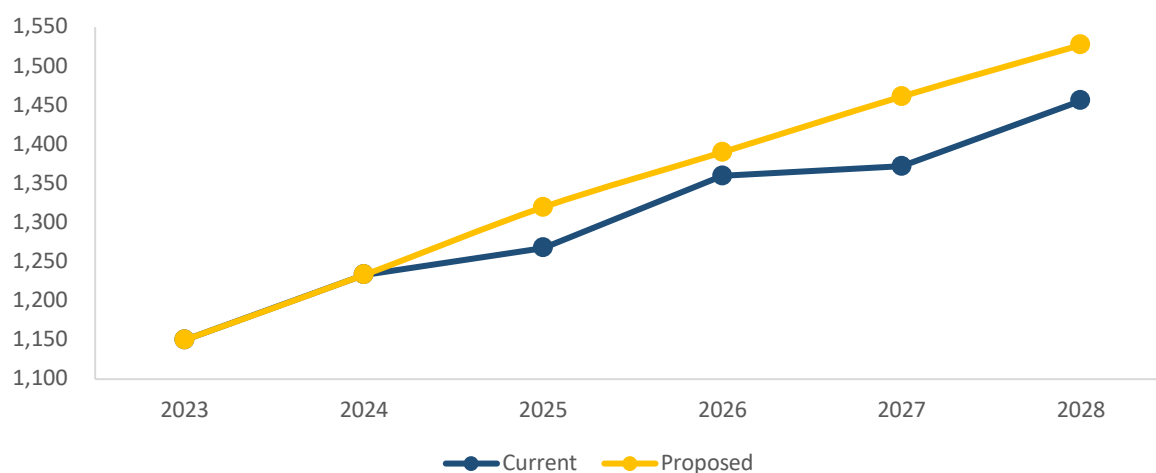
Source: Authors' calculations based on Tobacco Act 106/2004 Coll.

Fiscal Benefits

Tobacco taxes are a reliable source of government revenue, even as consumption declines due to higher prices. Under the current biennial excise calendar, revenues from excise taxes and VAT are projected to grow by 26.6 percent by 2028. However, the accelerated annual tax increases could achieve a higher growth rate of 32.8 percent over the same period.

Despite a steeper decline in the volume of cigarette packs sold under the accelerated tax calendar (a 22.0-percent reduction versus a 13.1-percent reduction under the current system), government revenue grows due to the higher tax rates applied to each unit sold. By 2028, the price per cigarette pack would rise by 60.4 percent, reaching 7.38 € under the accelerated calendar, compared to 6.53 € under the current system.

Figure 1. Estimated excise tax and VAT revenue in current and accelerated excise tax calendars, 2023–2028 (mil. €)



Source: Authors' calculations

Health Benefits

Higher tobacco taxes not only generate revenue but also serve as a deterrent to smoking. The accelerated annual tax calendar would achieve a 16.4-percent reduction in adult smoking prevalence, compared to an 11.5-percent reduction under the current calendar. This translates to 125,789 fewer adult smokers in the longer term. Similarly, youth smoking prevalence would decrease by 33.1 percent, deterring more than 48,900 youth from starting to smoke.

These reductions in prevalence have profound implications for public health. The accelerated calendar is projected to avert 35,211 premature adult deaths and 19,560 premature youth deaths, compared to 24,388 and 13,543 under the current system, respectively. By reducing smoking rates among youth, the proposed policy ensures long-term health benefits and a lower societal burden from smoking-related illnesses.

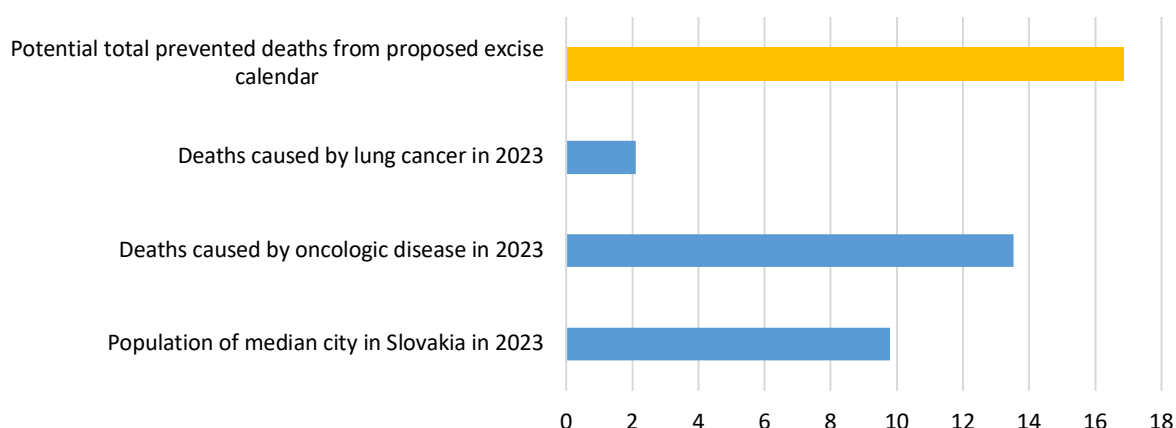
Table 2. Estimated impact of current and accelerated excise calendars on health of adults and youth

<i>Adults</i>	Reduction in adult prevalence	Fewer adult smokers	Fewer adult deaths	<i>Youth</i>	Reduction in youth prevalence	Deterred youth smokers	Fewer youth deaths
<i>Current</i>	-11.5%	-87,098	-24,388	<i>Current</i>	-22.9%	-33,859	-13,543
<i>Accelerated</i>	-16.6%	-125,789	-35,211	<i>Accelerated</i>	-33.1%	-48,900	-19,560
Difference	-5.1 pp	-38,691	-10,834	Difference	-10.2 pp	-15,041	-6,016

Source: Authors' calculations

The estimated total number of deaths prevented (adults and youth) under the accelerated excise calendar particularly stands out when put into the Slovak perspective. The figure is 72-percent higher than the population of a median Slovak city in 2023, exceeds the total number of deaths caused by cancer-related diseases in 2023 by almost a quarter, and is eight times greater than the number of deaths attributed to lung cancer in 2023 in Slovakia.

Figure 2. Comparison of health benefits yield from accelerated excise calendar to selected population groups (in thousands)



Source: Authors' calculations, Statistical Office of Slovak Republic

Key Recommendations

- Increase tobacco taxes for greater health impact and revenue growth.**
 Annual tax increases could significantly reduce smoking rates, preventing an estimated 35,221 adult deaths and 19,560 youth deaths, far exceeding the benefits of the current schedule. Despite declining tobacco consumption, the accelerated schedule ensures consistent revenue growth through higher per-unit taxes, making it a dual success for public and fiscal health.

- **Boost revenue for fiscal stability.**

The increased frequency in excise tax rate growth would generate 232 million euros more in cumulative revenue by 2028, strengthening public finances and supporting sustainable economic growth. These additional funds could be used to address fiscal challenges and fund critical government programs.

- **Focus on youth smoking prevention.**

The accelerated calendar offers a 10.2-percentage-point greater reduction in youth smoking prevalence compared to the current calendar, emphasizing the need to deter smoking initiation through stronger tax policies. By targeting youth, the policy ensures long-term reductions in tobacco consumption and associated health risks.

- **Establish a Tobacco Control Authority.**

Slovakia lacks a dedicated Tobacco Authority. A dedicated body is needed to monitor and evaluate the impact of tobacco tax policies, track emerging trends, and refine strategies over time. Such an authority would ensure data-driven decision-making and the adaptability of tobacco control measures to changing market dynamics.

- **Expand smoke-free zones to reduce tobacco use.**

Strengthen enforcement of smoke-free zones, particularly in public spaces such as pubs, restaurants, and recreational areas to reduce exposure to second-hand smoke and discourage smoking. Enhancing these protections aligns Slovakia with best practices observed in other European countries.

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