

Will they quit smoking or switch products? Potential effects of changes to excise duty rates

Maciej Albinowski, Piotr Lewandowski, Karol Madoń, Mateusz Smoter

Problem

High consumption of nicotine products generates significant social costs. An increase in excise duty on individual products may have a limited impact on consumption if consumers are switching between products.

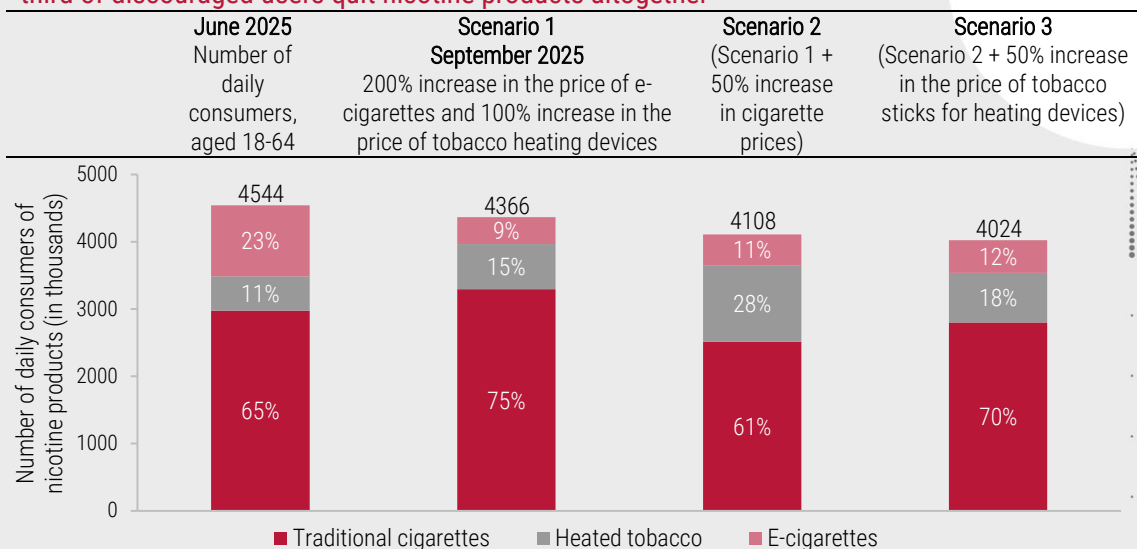
Main message

The September 2025 excise increase on e-cigarettes significantly altered product choices but only moderately reduced the number of nicotine consumers. A substantial reduction in the consumer base requires simultaneous excise increases across all products. There is scope for stronger public education policies, as many users underestimate the harms of alternative products.

Main results

- **75%** of nicotine consumers used cigarettes (June 2025).
- **55%** of heated tobacco product (HTP) users and **49%** of daily e-cigarette users also smoke traditional cigarettes.
- **67%** of cigarette smokers consider them to be very harmful, compared with **30%** of HTP users and **38%** of e-cigarette users.
- Increase in e-cigarette prices from September 2025 could reduce the number of e-cigarette consumers by approximately **660,000**, including around **180,000** who would quit nicotine and about **480,000** who would switch to other products.

Figure 1. A sharp rise in e-cigarette prices significantly reduced their demand, but less than one-third of discouraged users quit nicotine products altogether



Note: estimates based on a survey experiment using a conditional multinomial logit model. The total number of nicotine consumers (18–64) in June 2025 is illustrative and uses consumption prevalence from the nationally representative 2019 European Health Interview Survey. Consumption structure by product comes from a June 2025 survey. Source: own calculations based on a survey (CAWI, n=4542), Eurostat, EHIS 2019

Until recently, the state’s anti-smoking policy could focus primarily on limiting the availability of cigarettes. The rapid increase in the popularity of alternative nicotine products now challenges this approach. These products are frequently promoted as less harmful than traditional cigarettes, although their health risks remain insufficiently understood (Braznell et al. 2025). Their perceived lower harm and the absence of smoke make them attractive to consumers who might not otherwise take up traditional smoking.

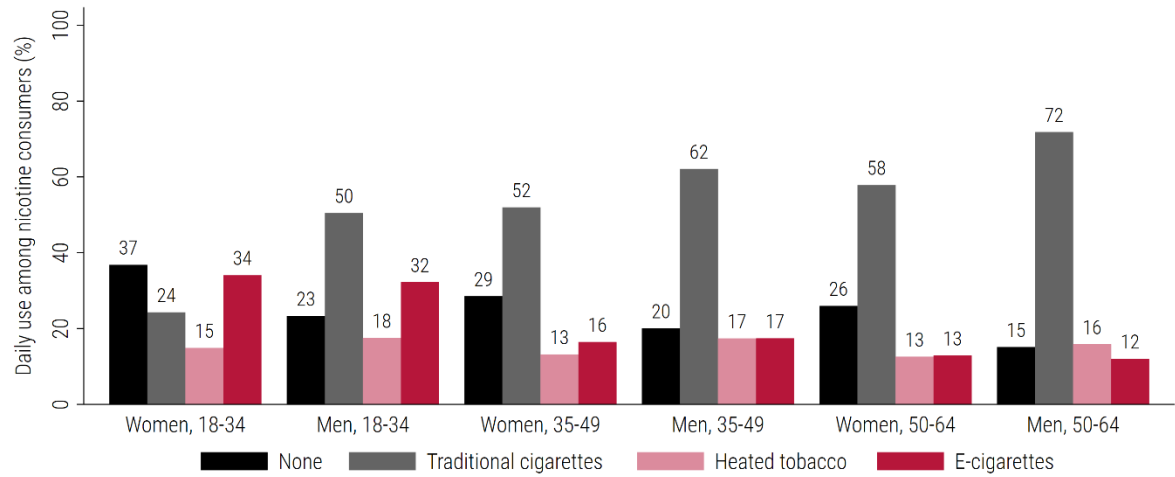
To identify patterns of nicotine product use, in June 2025 we surveyed more than 4,500 Poles aged 18–64 who had used one of three main products in the previous 30 days: (i) traditional cigarettes, (ii) heated tobacco (e.g., IQOS, Glo), or (iii) e-cigarettes. Using a survey experiment, we estimated the potential impact of price changes on nicotine consumption and on the choice of leading product.

Nicotine consumption patterns vary significantly between socio-demographic groups

Cigarettes remain the dominant nicotine product in Poland. In the past 30 days, 75% of nicotine consumers reported using them, while alternative products also held a substantial market share: e-cigarettes were used by 42%, heated tobacco by 33%, and nicotine pouches by 8%. The differences between cigarettes and alternative products were more pronounced in terms of daily consumption: 55% of respondents smoked traditional cigarettes daily, 20% smoked e-cigarettes, and 16% used heated tobacco products (HTP).

Daily nicotine use increases with age, as does the popularity of traditional cigarettes. Among younger adults, a substantial share – 37% of women and 23% of men aged 18–34 – did not use any of the main nicotine products daily (Figure 2). Clear gender differences are also evident: in every age group, men smoke traditional cigarettes daily much more often than women.

Figure 2. Older consumers are more likely to consume cigarettes and to use nicotine daily



Note: The percentages do not add up to 100, as some consumers use two or three products daily.
Source: Own study based on a June 2025 survey (CAWI, n=4542)

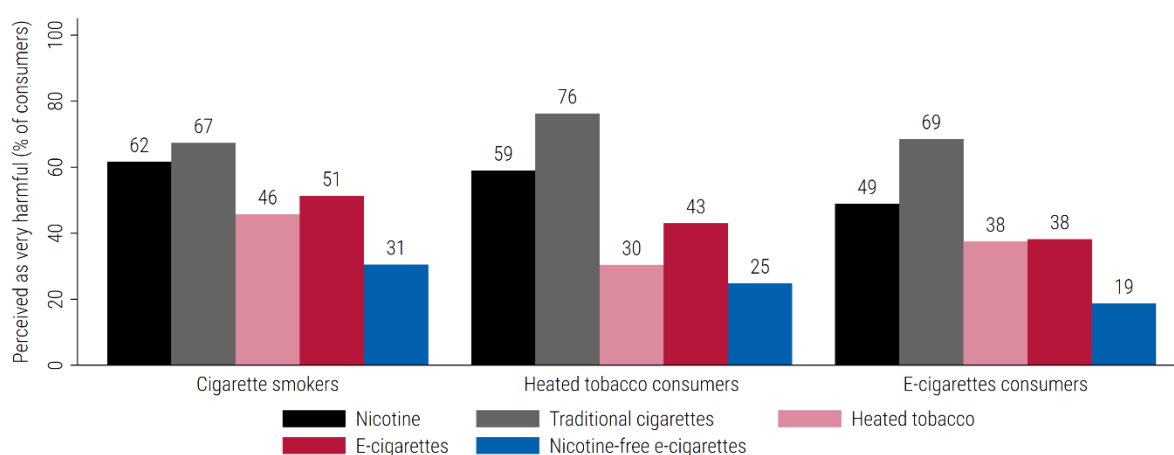
Product choice is also linked to socio-economic characteristics. People with tertiary education are less likely to smoke cigarettes (by 9.5 p.p.) or e-cigarettes (by 4.1 p.p.) daily, but more likely to use HTPs (by 3.1 p.p.) than people without tertiary education. HTP use is particularly associated with social factors: it is more common among city residents, employed individuals, and parents of minor children. In contrast, people living in rural areas and those with low incomes generally use alternative products less frequently.

Nicotine consumers often combine different products. Although 54% of daily cigarette smokers report using only this product, the remaining 46% also use other nicotine products. Even greater diversification is observed among daily users of alternative products: only 30% of daily HTP users and 35% of daily e-cigarette users rely exclusively on these products. Among daily HTP users, 55% also smoke traditional cigarettes, and among daily e-cigarette users, the figure is 49%.

Consumers doubt the high harmfulness of nicotine products

Awareness of health risks remains limited. Only 60% of respondents consider nicotine to be very or extremely harmful, and 70% hold this view about traditional cigarettes. This level of perceived harm is relatively low given public health efforts in Poland. Traditional cigarettes are most often rated as very or extremely harmful by daily HTP users (76%), yet only 30% of them assign the same level of harm to HTPs (Figure 3). Similarly, only 38% of daily e-cigarette users consider their product very or extremely harmful.

Figure 3. Most consumers of alternative products do not consider them to be very harmful



Source: Own study based on a survey from June 2025 (CAWI, n=4542)

Consumers who only smoke cigarettes are the most likely to quit nicotine altogether when prices rise

The impact of price increases on quitting nicotine varies markedly across consumer groups. Exclusive users of a single product are more likely to quit nicotine than consumers who combine multiple products. Among exclusive cigarette smokers, a 10% increase in cigarette prices would reduce the number of smokers by 3.7%, with most of this decline (2.0%) reflecting exits from nicotine use. Among smokers who combine cigarettes with other products, the same price increase would lead to a slightly larger reduction in the number of smokers (4.4%), but only 0.8% would quit nicotine altogether.

Among e-cigarette consumers, exclusive users are also more likely to quit nicotine. In response to a 10% increase in e-cigarette prices, 2.6% of exclusive users would stop using e-cigarettes, with 1.1% abandoning nicotine altogether. In contrast, among consumers who also use other products, 2.3% would stop using e-cigarettes, but only 0.3% would quit nicotine.

The 200% increase in e-cigarette prices and the 100% increase in tobacco-heating device prices introduced in September 2025 substantially altered the consumption structure (Figure 1, p. 1). Our simulations indicate a decline in the number of daily e-cigarette users by around 660,000 (62%), alongside an increase of 320,000 in traditional cigarette smokers and 160,000 in HTP users.

To reduce the total number of nicotine consumers, the most effective strategy is to substantially increase the prices of all products. The second scenario examines the effect of an additional 50% increase in cigarette prices (Figure 1, p. 1). This would reduce the number of daily cigarette smokers by 780,000 (24%) relative to the September 2025 scenario. The total number of nicotine consumers would fall by 5.9%, while the number of HTP users would rise by almost 470,000 (69%).

An additional 50% increase in HTP stick prices would have an even stronger effect (scenario 3 in Figure 1). The number of HTP consumers would fall by approximately 400,000 compared with scenario 2, while the number of cigarette smokers would increase by around 290,000. The total number of nicotine consumers would decline by 2.0% relative to scenario 2. Higher prices for alternative products not only reduce demand among existing consumers but also limit the inflow of new users, particularly young people (Stokłosa et al., 2022). These additional benefits are not captured in our simulations. At the same time, higher prices for alternative products may increase the share of cigarette smokers among nicotine consumers, especially if cigarette prices remain unchanged.

Both a review of excise duty rates and improvements in the state's information policy are needed. The current structure of excise rates favours heated tobacco (approx. PLN 4.7 per pack) relative to traditional cigarettes (approx. PLN 12.8). In the absence of a medical consensus on substantially lower health risks of heated tobacco, such a large differential is difficult to justify. Providing consumers with information about the potential risks of alternative products could also play an important role in reducing the consumption of these products.

Study details: Albinowski M., Lewandowski P., Madoń K., Smoter M. (2025). *Patterns of nicotine use in Poland and potential policy responses*. IBS Research Report 01/2025

IBS Policy Paper Series

The IBS Policy Paper series presents the results of economic research in an accessible form with the aim of improving the quality of public debate.

Series editor - Jan Rutkowski

IBS Policy Paper 4/2025

ISSN: 2451-4365

Additional information

The authors would like to thank Łukasz Balwicki, Bartosz Jusypenko, Nora Kungl, Kristijan Fidanovski, Hana Ross and Jan Rutkowski for their valuable comments.

This publication was produced as part of a project funded by the Vienna Institute for International Economic Studies (wiiw). wiiw is a partner of Bloomberg Philanthropies' Initiative to Reduce Tobacco Use.

The content of this publication reflects the views of the authors and does not necessarily represent the position of the Institute for Structural Research. The usual disclaimers apply.