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ЕКСПЕРТЕН КЛУБ ЗА ИКОНОМИКА И ПОЛИТИКА

BULGARIA: ESCAPE FROM SMOKERS' PARADISE IS POSSIBLE

(Effects of taxation)

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Taxation is one of the tools used by government to shape consumers' behaviour. This aspect of policy, well established in both theory and practice, should be prioritised by governments over or along with the fiscal revenue or redistributive effects of tax policies. It seems reasonable then to consider the objectives and criteria aimed at designing appropriate taxation in a given country and market context.

'Sin' taxes

The World Health Organisation defines so-called 'sin' taxes, or public health taxes, as funding 'general health promotion activities' or in other cases addressing 'problems in the area from which the tax was derived' (Carol and World Health Organisation, 2004). These taxes are levied on products or services considered harmful from a public health or societal perspective, such as tobacco, alcohol, soft drinks, gambling.

Tobacco in particular, exemplifying distinctly recognised health risks, has been in the focus of both health and tax policies in recent decades. An international convention known as *Framework Convention on Tobacco Control* was adopted by the World Health Organisation at the World Health Assembly in 2003 with the objective being: "providing a framework for tobacco control measures to be implemented by the Parties at the national, regional and international levels", whereas "tobacco control means a range of supply, demand and harm reduction strategies that aim to improve the health of a population by eliminating or reducing their consumption of tobacco products and exposure to tobacco smoke". While the Convention provides a range of measures, "based on current and relevant scientific, technical and economic considerations", including among others is its Art. 6 Price and Tax Measures, "without prejudice to the sovereign right of the Parties to determine and establish their taxation policies, each Party should take account of its national health objectives".

Historically, 'sin' taxes have not been designed for health policy or consumption control purposes. They have their roots in the excise taxes on luxury goods, such taxes serving as sources of government revenue rather than public health policy tools. Excise taxes in general were theoretically rationalised as early as in Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations.* A tax on a tobacco product appeared in the US Tariff Act of 4 July 1789 which introduced excise tax on snuff (powdered tobacco for nose sniffing). The first US excise tax was established on cigars through the *Internal Revenue Act* of 1 July 1862, while the first US excise tax on cigarettes came with the *Internal Revenue Act* of 30 June 1864 (Werner, 1922).

Nowadays countries employ various forms of tobacco taxation. Initially motivated to generate public revenue, tobacco taxation has shifted towards the

centre of public health policy and as a prime mechanism for consumption control. The World Health Organisation (2021a) reports that various tobacco tax revenues are collected in 195 countries across the globe.

Tax effects on tobacco consumption

There is fast-growing empirical evidence of how taxation affects tobacco use. In this process the important aspects to consider include the pass-on of taxes to prices, the substitutability between different tobacco and/or nicotine products, and the price elasticities (kown as well as cross-price elasticities). These all ultimately affect consumption behaviour and the dynamics thereof.

An early literature review by Chaloupka (1999) concludes that taxes can be a 'very effective' tool to reduce tobacco consumption. Noteworthily, the elasticity estimates of consumption and demand prevalence are consistent across both standard econometric studies and laboratory experiments yielding results in the setting of behavioural economics.

A systematic analysis of the impact from tobacco price increases through taxation conducted in 2012 by the US *Community Preventive Services Task Force* reviewed 116 studies, of which 80 in the US and 36 in other high-income countries. The resulting median estimates for the price elasticities of different aspects of tobacco are[1]:

- overall consumption: – 0.37
- consumption among young people: – 0.74
- adult prevalence: – 0.18
- prevalence among young people: – 0.36
- adult cessation: 0.375
- cessation among young people: 0.93
- initiation among young people: – 0.43

Other studies suggest that in developing countries price elasticities, in particular, exceed the ones in richer countries. Demand in the former is more responsive to price changes, so that the low-income smokers in developing countries are less resistant to price hikes, whereas cigarette smoking prevalence in the more affluent markets is arguably less affected by price hikes coming from higher taxes (Chaloupka, 1999).

1 As summarised in Chaloupka (2017).

Indicatively, a new comprehensive review of tax effects on tobacco consumption in Latin America (Miracolo et al., 2021) reports several studies that have identified price elasticities of the demand for cigarettes ranging from – 0.28 to – 0.87.

Until recently the tax policy implications for tobacco consumption have been studied mostly limited to 'traditional', homogeneous tobacco products for smoking, mainly cigarettes. As a result of industry innovation and in response to policies aimed at modifying consumers' behaviour, however, the market is seeing a surge in novel and emerging tobacco and nicotine products. The substantial change in industry and market developments lately thus necessitate research vis-à-vis the new product forms of tobacco and nicotine consumption and how taxation affects preferences and the overall choices of smokers. Modes of taxation and policies may need to adapt, as in the European Union context nowadays, taking into account the health-risk profile of comparable, but different tobacco products, as well as emerging nicotine products.

EU context

The current taxation of tobacco products in the EU is legally based on Directive 2011/64/EU[2]. The Directive defines the categories of manufactured traditional tobacco products for smoking – cigarettes and 'manufactured tobacco other than cigarettes' (cigars and cigarillos, fine-cut tobacco intended for the rolling of cigarettes, and other smoking tobaccos).

Concerning cigarettes in particular, the minimum rate of excise duties must consist of:

- A specific component of between 7.5% and 76.5% of the total tax burden – expressed as a fixed amount per 1000 cigarettes.
- An *ad valorem* component – expressed as a percentage of the maximum retail selling price.

2 Council Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco.

In addition, the overall excise rate must be:

- At least EUR 90 per 1000 cigarettes
- At least 60% of the weighted average retail selling price

Member States that apply excise duties of EUR 115 or more, however, do not need to comply with the 60% criterion above.

These rules are currently under review. On 10 February 2020 the European Commission published an evaluation of Directive 2011/64/EU[3]. The EU had also commissioned an external study on Directive 2011/64/EU, published in January 2019[4].

On 2 June 2020 the Council of the European Union adopted Conclusions[5] about the structure and rates of excise duty applied to manufactured tobacco. Among other things, the Council recommended adding 'new product categories' to Directive 2011/64/EU, as well as increasing the minimum rates of excise duties 'on a number of tobacco products' in order for these minimum rates to make 'an effective contribution to reducing consumption of tobacco products'. A new European Commission proposal is expected soon to start the revision of the tobacco excise duty directive by the Council and the member-states.

Changing tobacco market and risks

Tobacco consumption is clearly declining on a global level. The share of adults (aged 15 years and older) using some form of tobacco has gone from 32.7% in 2000 to 22.3% in 2020 (World Health Organisation, 2021b). Behind this overall trend there is substantial products diversity development underway. Traditional combustible products like cigarettes still dominate the market, and cigarette smokers comprise 91% of all tobacco consumers in the world (World Health Organisation, 2021b). The recent years, however, have witnessed the appearance of a range of new product categories.

Notwithstanding the variety of novel and emerging tobacco and nicotine products, currently they can be grouped into two bigger distinct categories: heated tobacco products (HTPs) and e-cigarettes (or 'vaping' products). A new detailed

3 The Commission staff working document is available at: https://taxation-customs.ec.europa.eu/system/files/2020-02/10-02-2020-tobacco-taxation-report.pdf

4 That report was produced by Economisti Associati; it is available at: https://taxation-customs.ec.europa.eu/system/files/2020-02/study-on-the-tobacco-taxation-directive-2019_en.pdf

5 The Council Conclusions are available at: https://www.consilium.europa.eu/media/44235/st08483-en20.pdf

review by O'Connor et al. (2022) of the evolution of these products, particularly HTPs market penetration and the corresponding regulatory environment traces a, first and rudimental, form of innovation in this area back to 1988 when a tobacco product that is consumed by heating tobacco to below-combustion temperature was launched.

Such developments have warranted research into the market characteristics of these new products, including whether they have the potential to substitute traditional cigarettes. In theory the appeal of other tobacco products to cigarette smokers should be a function of a mix of factors. Among such factors notably the products' risk characteristics should be expected to matter. For this reason, the health-risk profile of the novel tobacco products that is heated is worth considering.

There is accumulating evidence uncovering a risk picture which is now clearly more favourable. Thus Nutt et al. (2014) finds that the novel non-combustible tobacco products release substantially lower concentration of harmful constituents than the traditional cigarettes and cigars' smoke. McNeill et al. (2018) reports much lower health risks from e-cigarettes, including with respect to cancer potencies and cardiovascular and lung diseases. The same study notes no risks from passive vaping to bystanders, while at the same time HTPs are also found to present less harm to both users and bystanders. Simonavicius et al. (2018) presents similar conclusions. According to the US Surgeon General (2018) e-cigarettes may reduce risks for current adult smokers if the latter switch completely from traditional cigarettes to e-cigarettes.

A 2022 report commissioned by the Office for Health Improvement and Disparities (McNeill et al., 2022) concludes that nicotine vaping 'poses only a small fraction of the risks of smoking' traditional tobacco products. Another recent study by Dempsey et al. (2023) highlights the reduced toxicity of HTPs when compared to traditional combustible cigarettes.

The harm reduction potential of latest generations of 'electronic nicotine delivery systems' (e-cigarettes) in comparison to combustible cigarettes is confirmed strongly in Holt et al. (2023). Smokers of traditional cigarettes who turn to e-cigarettes may also likely experience reduced health risk.

The health risks per se, and the awareness and perception thereof, affect the consumption of tobacco products in interactions with the price factor. And as long as prices adjust as a result of taxation changes, the different tax scenarios can be expected to constitute a substantial factor to explain changing consumer behaviour and, ultimately, smoking prevalence.

Modelling tobacco consumption and prevalence under different scenarios

Alternative tax regimes in view of the possibly changing EU regulatory environment are reviewed here drawing on market research modelling and data[6]. Three taxation scenarios encompassing a plausible policy range, including the actual initial conditions and an extreme option, are considered in the model:

- 'Status quo': Keeping the current minimum excise taxes on tobacco products for smoking and zero minima[7] for some novel products.
- '2020 differential': Raising the minimum excise taxes on tobacco products for smoking, including the novel products, with tax differentials close to the 2020 values.
- 'Full equalisation': An extreme 'corner' scenario with minimum excise taxes higher than the current ones and equalization across all categories of tobacco products, including the novel products.

The likely evolution of the EU regulatory framework is assessed against these scenarios in the case of Bulgaria first, and then France, Hungary, and the entire EU27[8]. A comparative assessment between the 'full equalisation' scenario and the rest is of particular interest. It essentially puts into contrast two diametrically opposing strategies: designing tax policy duly accounting for the health-risk features of the tax base, on the one hand, versus tax policy undiscerning the health risks from different tobacco products, on the other hand.

The model involves two steps. First, the evolution of the consumption of tobacco products is being considered. Second, the model converts the changes in consumption into changes in the share of adult population smoking traditional cigarette, that is change in the smoking prevalence.

The three taxation scenarios result in changes in the prices of tobacco products. The price effects, however, are only one element in our comprehensive analytical framework. The model incorporates four dimensions:

6 Data sources include: ECigIntelligence (2020); ECigIntelligence (2021); European Commission (2011-2021) Duty tables; European Commission (2021) Revision of Excise Rules; European Commission (TAXUD.C.1, 2021); European Commission. (2014, 2017, 2020) Eurobarometer; TobaccoIntelligence (2021).

7 For example the 0% excise duty in the case of Bulgaria, the country of focus in this paper.

8 The European Union in its current composition of 27 members.

- Price effects
- Social factors
- Market growth factors
- Product switching

Hence the research strategy commences with the price effects ensuing from the different tax scenarios. The price changes are modelled to affect demand by utilising price elasticities derived from relevant literature.

Studies analysing demand sensitivity with respect to price changes, for both traditional and novel tobacco products, typically find a strong negative own price elasticity across the products (Bracco et al., 2022). Recently Prieger (2022) notes that e-cigarettes exhibit higher price elasticity of demand compared to traditional cigarettes. Cross-price sensitivity is also present, capturing the extent to which demand for one product changes following a shift in the price of another product. Cross-price sensitivity would reflect the substitutability between products of different level of harmfulness. The elasticities used here are calculated on the basis of own and cross-price elasticities derived from relevant empirical literature such as Huang et al. (2018), Maier-Rigaud (2013) and Zheng (2016).

Second in the model come the social factors. They include the projected population growth and the reduction of the absolute number of smokers (e.g. due to health awareness or regulations) over the years. These demographic and specific trends in smoking prevalence follow relevant World Health Organisation projections.

Then the model applies certain market growth/decline rates for the different products, under the three tax scenarios.

Under the 'status quo' scenario with no tax increase for any product, the initial market growth rate[9] is assumed to range between 27% and 33% for HTPs. The latter is based on growth rates estimated from historical data (Alvarado et al., 2021, or Licari et al., 2000). It depends on whether a market is more or less mature, growth being relatively slower on markets where the product has been present for longer. As for e-cigarettes, the initial market growth rate is assumed to be 10%. The subsequent growth rates decline every year until 2030 by 28% for HTPs and by 17% for e-cigarettes: rates derived again from the historical data (sources: *TobaccoIntelligence* and *Action on Smoking and Health*, UK).

The second tax scenario is if the EU introduces higher tax minima across all tobacco categories. This scenario involves high and close to current values tax differential between HTPs and e-cigarettes, on the one hand, and traditionally

9 Defined as growth rate between 2020 and 2021.

manufactured cigarettes, on the other hand. On the basis of historical evidence of price-demand interactions (Alvarado et al., 2021, or Licari et al., 2000), the initial market growth rate is between 18.9% and 23.1% for HTPs in more mature or less mature markets, respectively. The initial market growth rate for e-cigarettes falls to 8.9% under this scenario.

The third alternative scenario to consider is 'full equalisation': higher, equal for all tobacco products, tax minima in the EU. This 'corner' scenario envisages no initial market growth rates for any tobacco product category. Higher taxes clearly imply lower, asymptotically to zero, market growth.

The initial market growth rate assumptions are summed up in following table.

	Status quo (no new excise mimima)	2020 differential scenario	Full equalisation scenario
market growth rate for e-cigarettes	10%	8.9%	0%
Market growth of HTPs on mature markets 2021	27%	18.9%	0%
Market growth of HTPs on new (less mature) markets 2021	33%	23.1%	0%

Finally, the model considers consumers' switching behaviour from conventional (combustible) tobacco products to the novel alternatives – HTPs and e-cigarettes. Such product switching to the non-combustible alternatives is due to their increased marketing visibility and appeal to users and, particularly, by their potential to attract health-apprehensive traditional tobacco consumers.

Rather than initiation for the new products (which is assumed to be absent), the model implies that half of the increased demand for e-cigarettes comes from former smokers of traditional tobacco products. The latter also account for 90% of increased demand for HTPs. Such assumptions are fairly consistent with Eurobarometer (2021) findings that 57% of e-cigarette users say they started vaping 'to stop or reduce tobacco consumption, primarily smoking'.

Prices are certainly an important determinant of product switching even without tax hikes, i.e. given the current prices. Eurobarometer (2021) reports that around one quarter (23%) of e-cigarette users say they resorted to e-cigarettes because they were cheaper than other tobacco products. Among consumers of HTPs, 14% share the same reason.

Hence, product switching attitudes are a key factor to consider when designing taxation policies incentivising a shift towards the less harmful tobacco products.

As a last step, the model converts consumption into smoking prevalence. Calculations for changes in smoking prevalence are based on changes in consumption

of conventional products per year using the average consumption per smoker per year. Several assumptions are hereby employed.

The price effects on smoking behaviour are split into two: the smoking prevalence is reduced due to smokers quitting following the price increase, and the smoking intensity is reduced due to lower consumption per smoker following the price increase.

The dimension of the social factor only considers smokers who have completely stopped smoking traditional tobacco products. Conversion from traditional combustible tobacco products to the novel non-combustible alternatives is not included.

Then product switching is modelled on the assumption that smokers who switch from traditional products to non-combustible alternatives replace one factory-made cigarettes with one stick of non-combustible products. Furthermore, the average number of cigarettes smoked per day (i.e. the smoking intensity) is assumed not to be affected by the switching behaviour. Lastly, the share of dual users (i.e. consumers of more than one tobacco product in parallel) does not change over time.

The empirical results from the model are presented next.

Effects in Smokers' Paradise

Bulgaria displays the highest cigarette smoking prevalence in the EU. According to the latest Eurostat data (for 2019), the share of smokers is between 36-38% in the last 10 – 12 years and share of only the daily smokers amounts to 28.7%, compared to 18.4% on average in the EU. At the same time, excise duty on cigarettes in Bulgaria is the lowest in value in the EU, and the weighted average retail selling price (including excise and VAT) is also the lowest in the EU (Enache, 2022). Bulgaria is seemingly a true *Smokers' Paradise, but….*

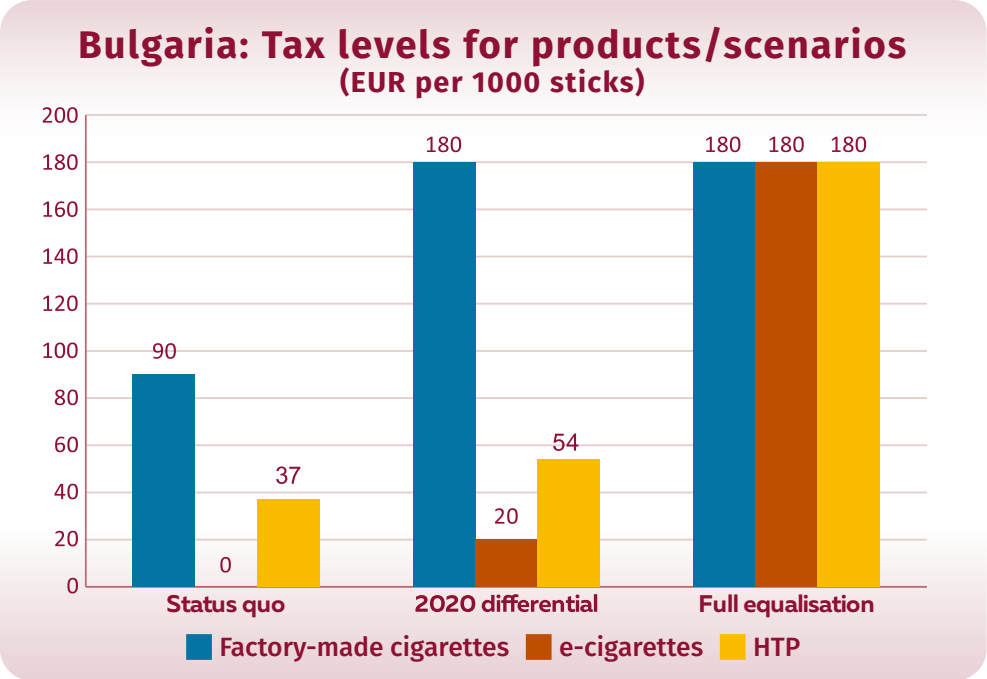
Going into details, however, reveals that in Bulgaria the level of taxation is a substantial price contributor. The tax as a share of the weighted average retail selling price is 82%, which exceeds the EU average of 80.8%. Furthermore, considering the fact that Bulgaria has the lowest level of GDP per capita in the EU (Eurostat, 2022), the affordability levels of these products seem relative lower than in other EU countries. It is reasonable to assume that the purchasing power of Bulgarian consumers is already rather constrained.

As a consequence of any tax increases, therefore, it is likely to affect prices, hence affordability and demand, more strongly than in wealthier countries. This would be in line with the observation that wealthier countries are characterised by a smoking prevalence more resistant to price increases, as noted

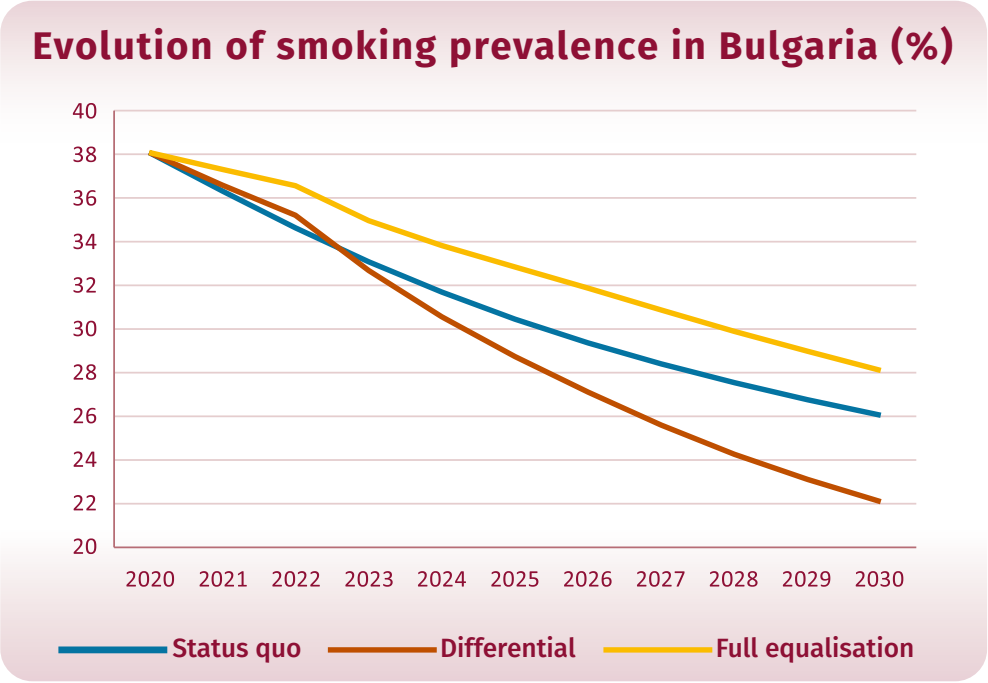
above (Chaloupka, 1999). By itself, however, this would not necessarily translate into a shift from more harmful (traditional cigarettes) to less harmful (HTPs and e-cigarettes) tobacco products, especially if tax differentials shrink. Therefore potential future tax scenarios need to be conceived carefully, to target the health policy effects appropriately. Also strong negative demand elasticity with respect to price increases would tend to offset expected gains in tax revenue.

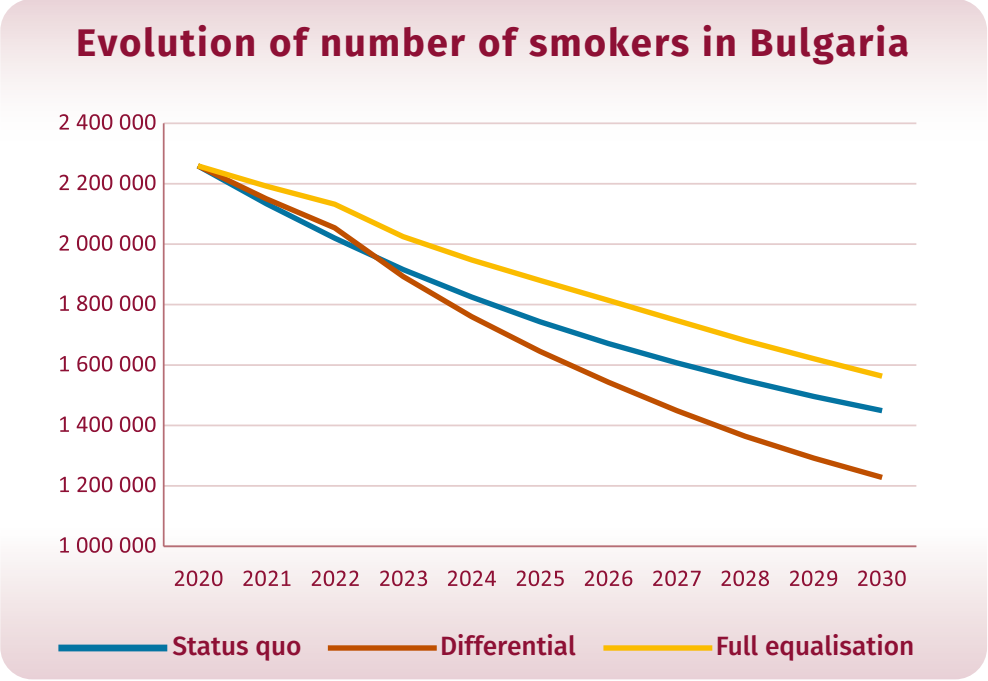
This implies the need to seek a more subtle optimisation of taxation structures with respect to the whole range of tobacco products, both traditional and novel. Employing the model described above produces relevant policy findings.

The tax levels under the three scenarios in Bulgaria assuming increasing the mimimum excise tax to EUR 180 per 1000 cigarettes by 2030 are visualised as follows.



The corresponding evolution of both smoking prevalence and total number of smokers in Bulgaria over the model horizon is illustrated in the following charts[10]:





It is obvious that the third scenario of 'full equalisation' yields worse-off outcomes from a policy perspective. By 2030 the smoking prevalence under that

10 The input numbers in the model come from Eurobarometer (2021) and differ from the 2019 Eurostat data cited above.

scenario becomes 6 percentage points higher than under the '2020 differential' scenario. Correspondingly, there will be 335 000 more smokers of traditional factory-made cigarettes in the country.

In contrast, the scenario of a taxation structure targeted to incentivized switching to less harmful products yields optimal outcome, as measured by the reduced smoking prevalence and number of smokers in the country.

There is clear reasoning behind such trends. The higher taxes are levied on the novel tobacco products, the less consumers will perceive cost benefits from switching away from traditional cigarettes. That 'tax discourage' effect will be especially pronounced when reducing the tax differentials between products, rather than just raising the nominal levels of taxation.

There may be a further suggestion why smoking prevalence and numbers of smokers decline less under the third scenario. Tobacco products satisfy essentially similar physical appeals but 'the sensory properties of cigarette alternatives are still generally rated lower than cigarettes by smokers' (O'Connor et al., 2022, p. 177). As long as this is the case, certain (less health-concerned) consumers may even be expected to be attracted back to the traditional product as the tax differentials between tobacco substitutes decline. In the extreme 'corner' case of full tax equalisation, there will be no economic incentives anymore to use less harmful tobacco products.

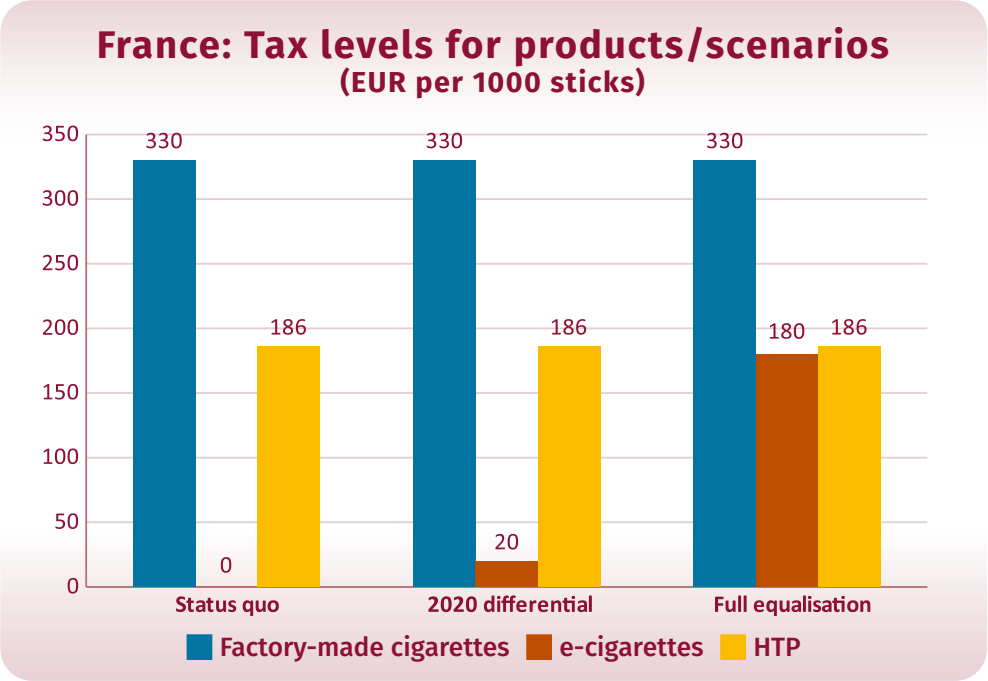
Consistency of tax change outcomes

Modelled on other national markets and the EU27 as a whole, increasing the minimum excise rates on tobacco products would produce consistent effects regarding smoking prevalence and smokers' numbers. The analysis on Bulgaria may be extended to indicative cases like France and Hungary, for reasons noted below.

The focus on France to study the effects from changing tobacco taxation is motivated by it being a more mature, compared to Bulgaria, market for novel tobacco products[11]. Furthermore, France tops the EU in terms of both the size of its excise duty on cigarettes and the weighted average retail selling price (including excise and VAT) of cigarettes (Enache, 2022).

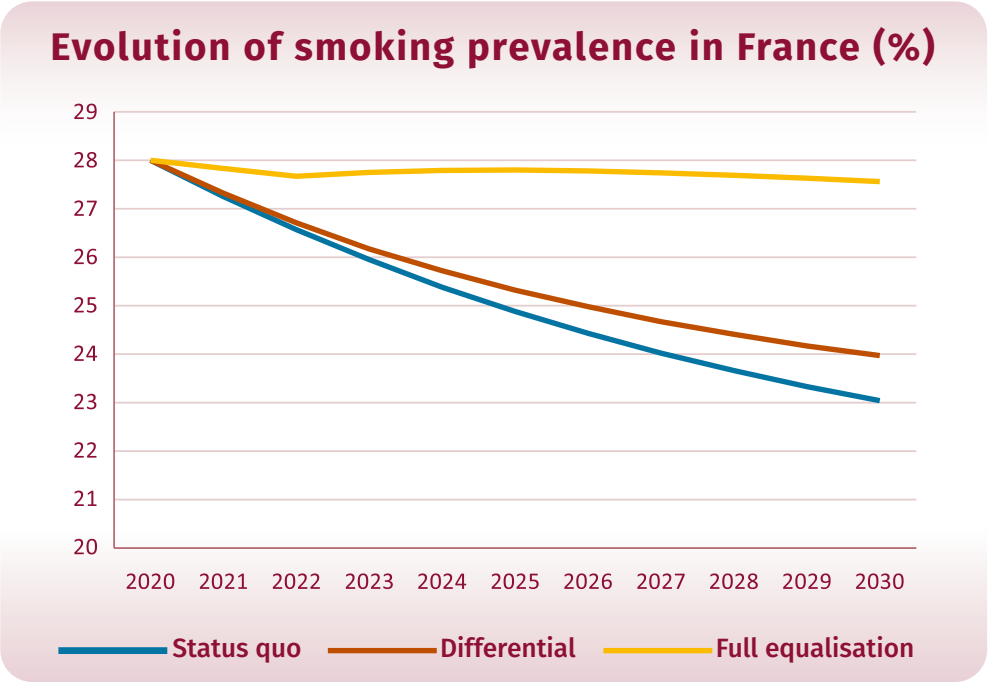
The model employs the following tax levels under the three scenarios in France if increasing the minimum excise tax to EUR 180 per 1000 cigarettes by 2030:

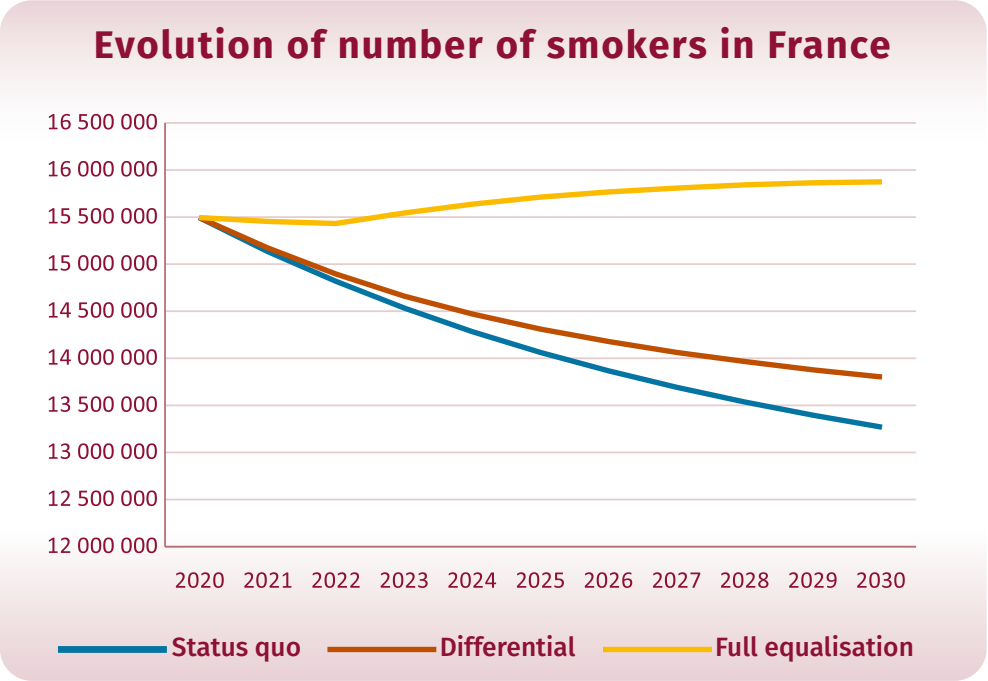
11 See the country market report by ECigIntelligence: https://ecigintelligence.com/market-report-france-a-mature-market-dominated-by-open-system-products/



Thus the analysis reflects the existing rather high levels of excise taxes on traditional tobacco products (factory-made cigarettes) and HTPs in France. The 'full equalisation' scenario therefore largely sums up to raising the tax rates on e-cigarettes and reducing the tax differential over time. Also, France would keep its practice of tax rates above the EU minimum.

The three scenarios lead to very different dynamics of the smoking prevalence and total number of smokers in France, as illustrated below.





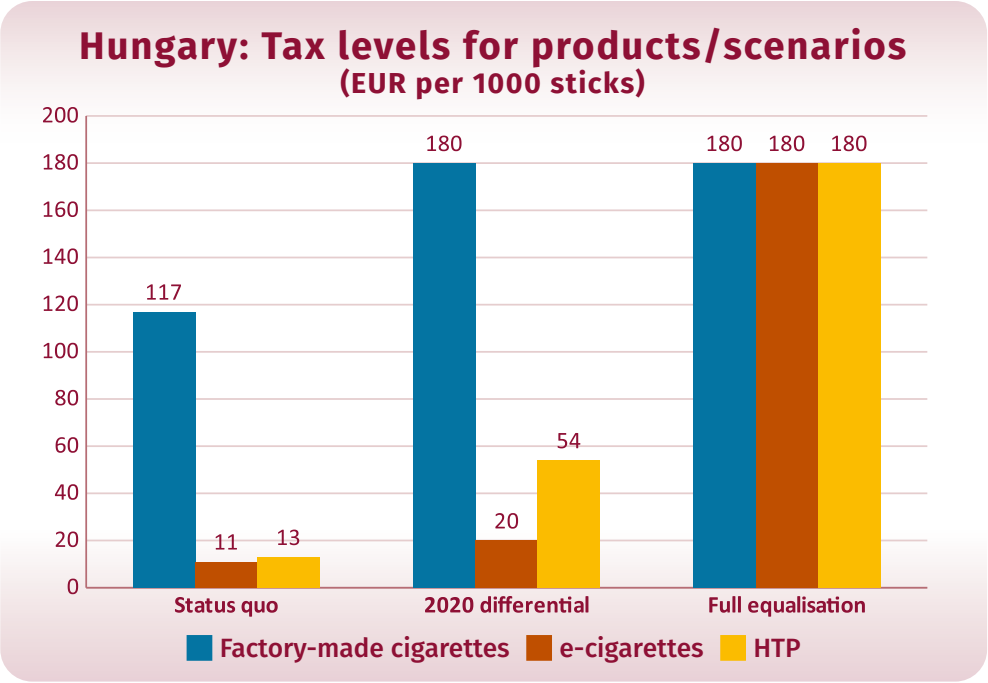
Smoking prevalence drops most under the 'status quo' scenario (no new minimum excise tax rates), as also does the number of smokers. Raising the tax rates on cigarettes, and especially reducing the tax differential of alternative non-combusted products vis-à-vis the traditional combustible tobacco product, would result in an alarming trend from a health-risk perspective. Smoking prevalence is about 4.5 percentage points higher under 'full equalisation' compared to the 'status quo', and the number of smokers is over 2.6 million people higher.

With taxation 'fully equalised' across both old and new tobacco product categories, smoking prevalence in France stays nearly constant over the period in the model, whereas smokers of traditional cigarettes would even slightly increase in line with the underlying demographics in the country. Notably in the case of France, one may surmise that the existing high excises on traditional tobacco products is the country-specific factor apparently hindering a design of taxation geared towards achieving better health-related effects. The higher the taxes on novel tobacco products, the lower (if at all) the incentives for smokers, already taxed heavily, to swich to the less harmful alternatives.

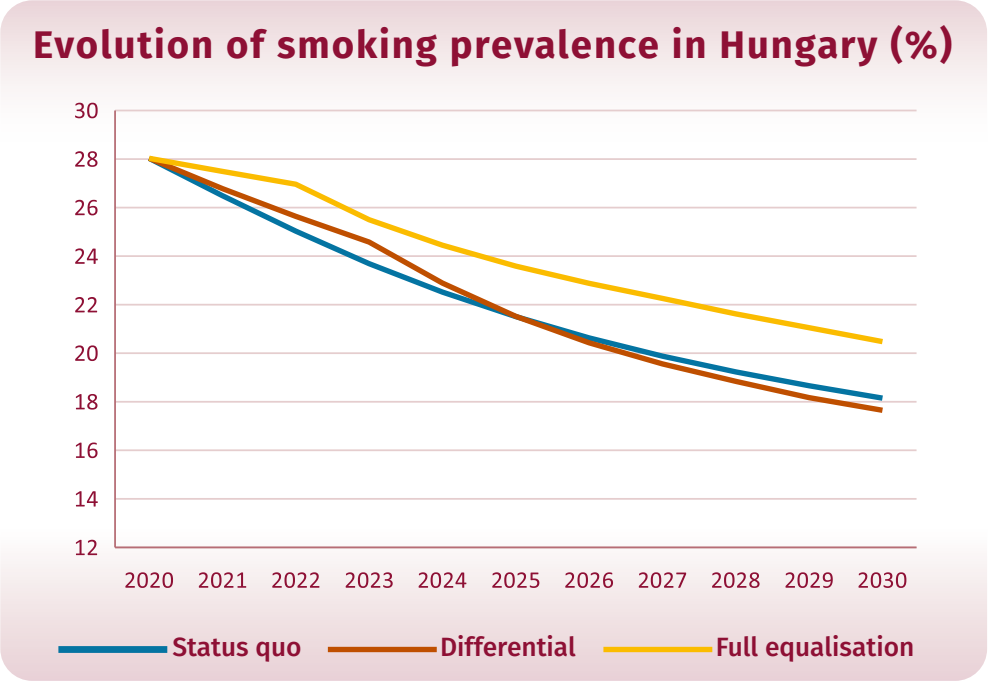
To check the consistency of findings and related policy conclusions, a third country with own specificities is also worth considering. Hungary provides such an appropriate case, as a Central European market standing somewhat just between the polar opposites of Bulgaria and France. Indeed Hungary is situated between the former two in terms of both excise duty size on cigarettes and weighted average retail selling price (including excise and VAT) of cigarettes (Enache, 2022). Also, the share of daily smokers in Hungary (19.3%) is close to though slightly above the EU average (18.4%)[12].

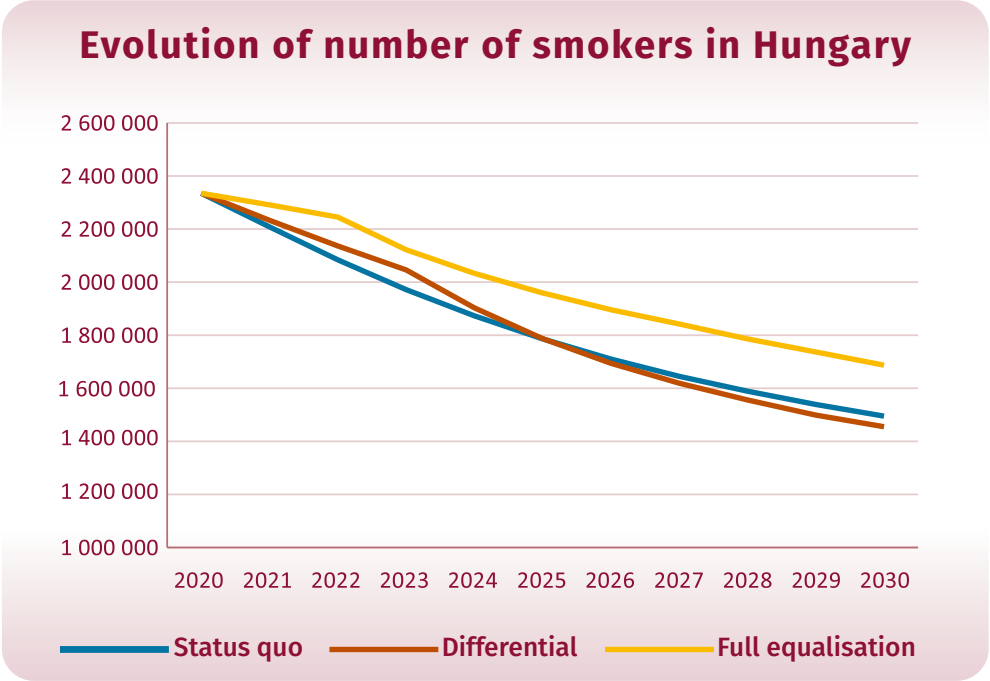
12 As reported in Eurostat: https://ec.europa.eu/eurostat/databrowser/view/hlth_ehis_sk3e/default/table?lang=en

Using the same three scenarios and product categories, Hungary's tax levels by 2030 look as follows:



Then raising the taxes on factory-made cigarettes, as well as minimising the tax differentials, would affect consumers of tobacco products in Hungary to change behaviour as illustrated below:

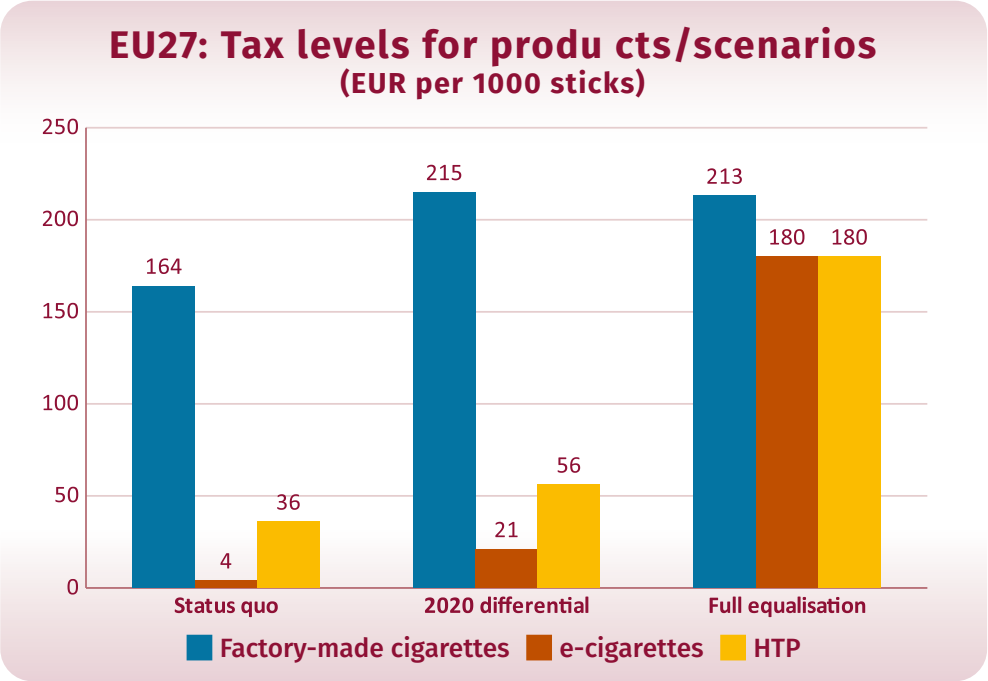




The case of Hungary therefore reaffirms the implications from a hypothetical 'full equalisation' of taxation across the entire spectrum of tobacco products, traditional and novel. Such a scenario results in a worst off, relative to other scenarios, outcome with higher smoking prevalence and more smokers in the country by the end of the period. Smoking prevalence is almost 3 percentage points higher under 'full equalisation' compared to the '2020 differential' scenario (optimal in the case of Hungary). Correspondingly, there will be over 230 000 more smokers if excise taxes are equalised for all kinds of tobacco products.

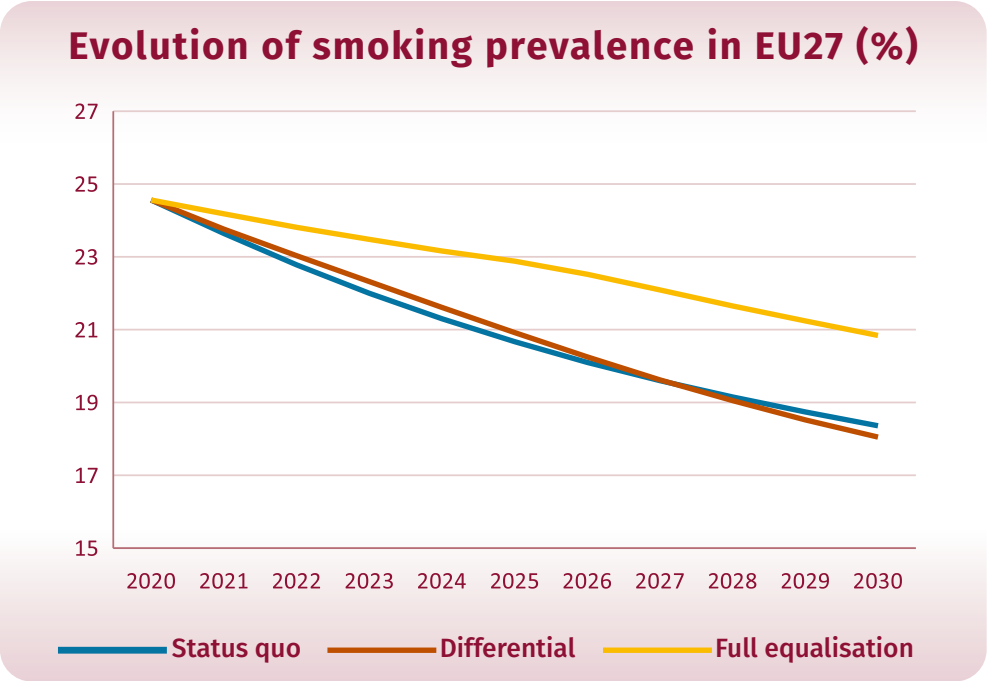
These results confirm the argument that if a taxation structure does not incentivise consumption of less harmful products, the appeal of combustible tobacco products will be harder to overcome.

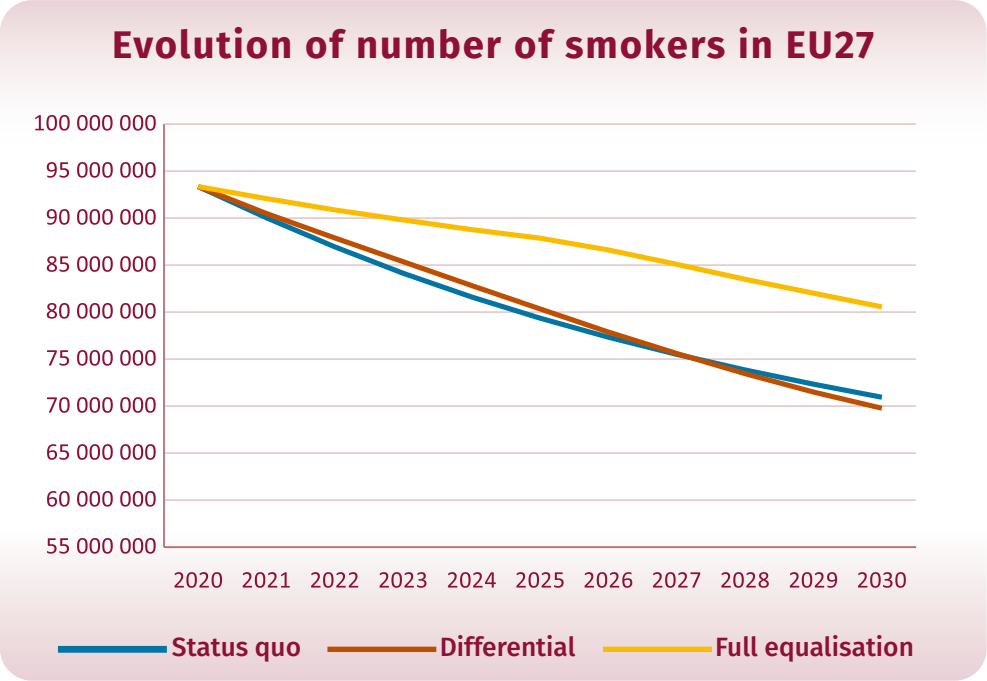
Finally, applying the same analytical model to the EU27 as a whole yields similarly consistent results. The three scenarios as modelled and lead to the following tax levels by the end of the period:



The model assumes that even under the 'full equalisation' scenario the EU27 on average will display slightly higher excise duty levels for traditional tobacco products (factory-made cigarettes). This is explained by the fact that actual tax levels in some countries will continue to exceed, as is the case today, the minimum levels set in the EU.

Such tax levels result in the following dynamics of consumption of traditional (combustible) tobacco products:





Therefore the EU27 results on average confirm the overarching conclusion, evidenced by Bulgaria and several other individual country markets, that the best taxation strategy to reduce smoking or otherwise said, the consumption of harmful combustible tobacco products is *not* to impose excise taxes that are of same levels for both traditional and novel tobacco products. If the EU

embraces such suboptimal strategy, it will have an average smoking prevalence 2.8 percentage points higher, with 10.8 million more smokers, than if adopting the relatively better off choice of somewhat raising, but keeping differentiated, the excise taxes on tobacco products.

Conclusions

This policy paper confirms previous findings that taxes have the potential to mould consumer preferences. Therefore policymakers should seek to design optimal taxation strategies targeting pre-defined goals – implying, in the context of tobacco products, a reduction of prevalence of the consumption of the more harmful traditional combustible products while, at the same time, inducing users to choose less harmful tobacco alternatives instead, when they do not stop fully any tobacco or nicotine consumption.

The European Commission proposal for revision of the tobacco excise rules will have bigger effect on tobacco consumer behaviour in Member States with lower relative income like Bulgaria. The model applied here draws on existing theory and empirical literature, producing alternative solutions under three plausible trajectories, reflecting the evolving EU market development and the regulatory context.

If taxes on tobacco products are to be raised, users would reduce consumption. This would tend to offset expected gains in tax revenue but, from a health policy perspective, the factor deserving utmost consideration is the degrees of tax variation between alternative/substitutable products and traditional tobacco products. If minimum tax levels are to be raised *and* equalised across all tobacco and nicotine categories, consumers will be disincentivised to switch from traditional to less harmful products. This will constitute the least desirable outcome health-wise, in terms of the prevalence of consumption of tobacco products and the absolute numbers of smokers. This conclusion is valid both for Bulgaria, the *Smokers' Paradise* in the EU, and other Member States with rather different market and socio-economic specifics.

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