TOBACCO TAXES IN THE EUROPEAN UNION

An evaluation of the European Commission's Tobacco Tax Directive proposals for cigars, cigarillos, pipe tobacco, electronic cigarettes, heated tobacco products, and nicotine pouches

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Abstract

Background and objectives

This research presents an evaluation of the European Commission's proposals for the reform of taxation of cigars, cigarillos, pipe tobacco, and so-called "novel products"—electronic cigarettes, heated tobacco products (HTP), and nicotine pouches—in the context of the revision of the European Union's (EU) Tobacco Tax Directive (TTD). It is a companion to a previous study that focused on cigarettes and fine-cut tobacco (FCT). Both this study and its predecessor analyze a draft that circulated unofficially after a postponement in the revision process was announced in late 2022.

The overall objective is to contribute to the evidence base that should inform the policy process. This study first provides an overview of the current situation of the markets for the products under focus and their fiscal treatments. Second, it presents a simulation of the likely effects of the Commission's plans. This evaluation highlights the opportunity cost of the delay in the launch of the revision plans and also suggests ways to enhance the plans' strength since the revision plans are crucial to tobacco control policy in the bloc as well as potential future members' willingness to harmonize their tax systems with those of the EU.

Methods

The analysis is based on a panel database of prices, taxes, market volumes, and sales for the EU member states over the period 2012–2022, which is supplemented with data on several other variables such as population, purchasing power parities, and inflation. The effects of the rules proposed in the draft are simulated by computing the excise yield that they would generate from products selling at representative prices.

Results

Cigarettes and FCT are still the predominant products in the market for tobacco and tobaccorelated products in the EU. However, the share of the rest of the products in this market has grown remarkably over the past seven years and is expected to increase further. This trend is driven by the advent and consolidation of novel products.

A simulation of the effects of the Commission's proposals on the excise yield at currently representative price levels shows little impact on cigarillos, cigars, or pipe tobacco. For novel products, the effects of the proposals are more nuanced. In the case of electronic cigarettes and

nicotine pouches, the most tangible impact is the imposition of excise duties in countries where they currently do not apply. On the other hand, for HTP, the impact on excise yields at current prices is noticeable in most countries.

Conclusions

The European Commission's proposals for the revision of the TTD include the creation of separate tax categories for HTP, liquids for electronic cigarettes, and nicotine pouches. They also include increases in the rates for traditional tobacco products and adjustments for inflation and purchasing power differences across member states. While these are welcome innovations, the proposed architecture of the minimum rates for the products considered here is found lacking from the point of view of tobacco control because the revised TTD would allow their excise tax to be a fraction of the retail selling price, likely leading to the proliferation of cheap brands. The onus would be on member states to close this loophole, which permits industry undervaluation as a strategy to minimize tax burdens.

Perhaps the most important single reason why the EU's TTD is recognized as a crucial piece of legislation for tobacco control is its potential to create an excise tax floor for tobacco products. This is strongest in the case of cigarettes, for which both a fixed minimum and a relative minimum based on the product's weighted average price (WAP) must be satisfied. This strength is partly undermined in the case of FCT because the excise tax floor must reach either one or the other minimum rather than both. This limitation also affects the products under focus here. Moreover, if the base for the relative minimum is the brand's retail price—instead of a measure less vulnerable to manipulation, such as the WAP—the ability of the legislation to set an effective excise floor is severely undermined. Foregoing the chance to close this loophole in this round of revision would be regrettable, especially when the market outlook for the novel products is one of strong growth.

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Introduction

This study presents an evaluation of the European Commission's proposals for the reform of the taxation of cigars, cigarillos, pipe tobacco, liquid for electronic cigarettes, heated tobacco products (HTP), and nicotine pouches in the context of the revision of the European Union's (EU) Tobacco Tax Directive (TTD), formally known as Council Directive 2011/64/EU. This is a companion to a previous study that focused on cigarettes and fine-cut tobacco (FCT) (López-Nicolás, 2023). Both this study and its companion analyze the draft directive revision that circulated unofficially after a postponement in the revision process was announced in late 2022 (Smoke Free Partnership, 2022).

The analysis leading to revision of the current TTD carried out by the EU institutions highlighted the limitations of the current legislation on two main fronts (European Commission, 2020; European Council, 2020). One, is its inability to promote upwards convergence across products and countries in the prices of the products that it covers. This affects not only the main combustible products—cigarettes and FCT—but also the rest of combustible tobacco products: cigars, cigarillos, and other smoking tobacco (OST), a category that includes pipe tobacco. The other limitation is that it lacks adequate provisions for the numerous new products that have appeared in the market since its enactment back in January 2011 such as electronic cigarettes, HTP, and nicotine pouches. These considerations call for accompanying the study on cigarettes and FCT, cited above, with a corresponding analysis for the rest of tobacco and tobacco-related products. The objective is, likewise, to contribute to the policy making process from the point of view of the economics of tobacco control.

Section 1 presents an overview of the recent developments in the markets for the products under focus. Section 2 discusses their current fiscal treatment across the EU. Section 3 introduces the proposals in the draft for the revision of the TTD and analyzes their effects. Section 4 concludes the study.

1. Overview of the Market

At 13.7 percent of total sales by value in 2022, the market for tobacco products other than cigarettes and FCT in the European Union is relatively small. However, it is growing at a rapid pace. While in 2015 it accounted for only 5.1 percent of sales, by 2022 it reached 13.7 percent (Figure 1).

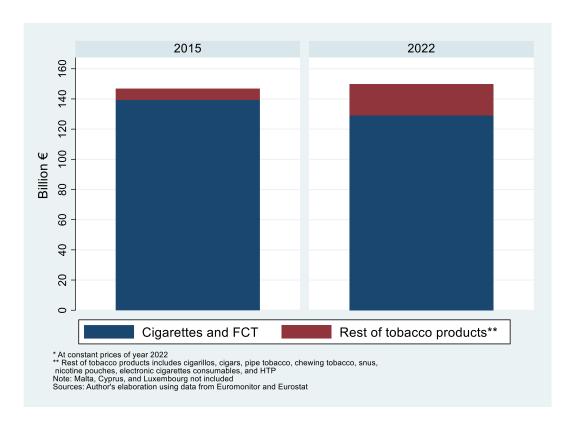


Figure 1. Value* of sales of tobacco and tobacco-related products in the EU

There are heterogeneous patterns in market trends for the products within this group, as seen in Table 1. While the sales of traditional products such as cigars and cigarillos have barely changed since 2015, the sales of consumables for electronic cigarettes¹ have more than doubled. Those of HTP (excluding the heating devices) have gone from a trivial figure to more than €10 billion and now account for roughly 50 percent of the group's sales. Likewise, the sales of nicotine pouches have overtaken those of pipe tobacco in less than five years.

¹ These consumables are cartridges, single-use units, and liquids for use in open vaping systems.

Table 1. Evolution of sales of products other than cigarettes and FCT in the EU (million €)

	Year	
	2015	2022
Cigarillos	2,272	2,599
Cigars	2,253	2,382
Snus	1,267	1,043
Pipe tobacco	530	782
Chewing tobacco	11	16
Electronic cigarettes: Cartridges	78	326
Electronic cigarettes: Single use	35	641
Electronic cigarettes: Liquids	1,064	1,550
Heated tobacco products	13	10,485
Nicotine pouches	0	796
TOTAL	7,522	20,620

Note: Million € at constant 2022 prices

Sources: Author's elaboration using data from Euromonitor and Eurostat

Moreover, the sales of both heated tobacco products and nicotine pouches are expected to continue to grow robustly over the next few years. The sales of electronic cigarettes are also on the rise, although at a slower pace (Table 2).

Table 2. Forecast annual rates of market growth in Western Europe (%)

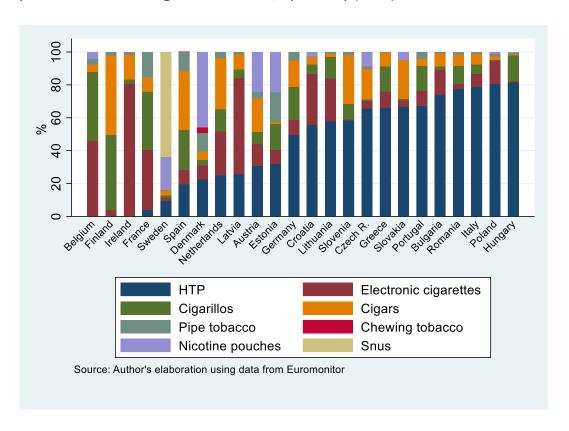
Product	2023-2024	2024-2025	2025-2026	2026-2027
Cigarillos	-2.3	-2.1	-1.9	-1.8
Cigars	-2.7	-2.3	-1.9	-1.6
Snus	-1.2	1.2	1.1	1.7
Pipe tobacco	11.8	2.0	1.4	1.2
Chewing tobacco	-1.6	-1.3	-1.5	-1.9
Electronic cigarettes: Cartridges	11.7	7.2	5.3	3.4
Electronic cigarettes: Single use	3.9	3.4	3.6	1.2
Electronic cigarettes: Liquids	11.5	8.5	8.2	7.1
Heated tobacco	21.5	19.1	16.6	14.5
Nicotine pouches	15.9	11.8	8.8	n.a

Note: Figures express rates of growth in market volumes, except for electronic cigarettes, for which rates of growth in market value are shown.

Source: Author's elaboration using data from Euromonitor

The market outlook for HTP is particularly worth noting considering that they are not commercialized to date in some member states. This relatively new product appears to have outgrown the "niche product" label applicable to some of the products discussed in this paper. Attention should also be directed to the expected growth in sales of nicotine pouches—although their base sales are an order of magnitude smaller than those of HTP, and their geographical expansion is much more limited. Indeed, product penetration across member states is not uniform, as seen in Figure 2. Electronic cigarettes are by far the most popular product of the group in Ireland and Latvia; cigars are popular in Finland, Spain, and the Netherlands; nicotine pouches are consumed mostly around the Baltic; and snus is banned in the EU except for Sweden, where it accounts for the largest market share of the group.

Figure 2. Products' market share within the group of tobacco and tobacco-related products other than cigarettes and FCT, by country (2022)



2. Current Fiscal Treatment

The current TTD establishes a fiscal regime that can be included in the general class of "mixed specific and ad valorem excise with a minimum specific excise tax," as per the World Health Organization (WHO) taxonomy (WHO, 2021b). The tax base for the specific part is the physical quantity of product, while for the ad valorem part, the tax base is its retail price. For some products, the sum of the specific and ad valorem excises is required to be greater or equal to a minimum excise tax (MET hereafter) per quantity of product.

The TTD establishes relevant differences in the rules applicable to cigarettes and the rest of the tobacco products from the perspective of public health. Most notably, while in the case of cigarettes it is obligatory to use both a specific tax and an ad valorem tax, for the rest of products member states may opt for using just one of the two types of taxes. Furthermore, in the case of cigarettes the TTD sets a lower bound for the MET that must exceed <u>both</u> a fixed monetary amount per quantity (€90 per 1000 units) of product <u>and</u> a percentage (60 percent) of the weighted average retail price (WAP hereafter).

This double requirement is not applied to other products. For instance, in the case of FCT, the TTD specifies that the MET must be greater than or equal to <u>either</u> €60 per kilogram <u>or</u> 50 percent of the product's WAP. The substantive consequence of this so-called "relative minimum" clause is a reduction of the minimum excise duty per unit of product applicable to FCT (López-Nicolás, 2023). An even laxer form of the relative minimum clause applies to the products under focus in this study, as discussed in the following section.

Cigars and cigarillos

The current TTD establishes a lower bound for the MET applicable to these products in the following terms:

either

€12 per 1,000 units OR per kilogram (fixed minimum clause)

OR

5 percent of the retail selling price (relative minimum clause).

The fixed minimum clause is specified in terms of either units or product weight, and the convention around the weight content per unit of cigarillos and cigars is 1.25 grams and 2.5

grams, respectively (Economisti Associati, 2019), which would make the per-weight option redundant for the typical brand. It should also be noted that this option could incentivize the marketing of cigarillos weighing less than one gram per unit.² The small tax rate of \le 12 further distinguishes this clause from the corresponding fixed minimum clause applicable to cigarettes (\le 90) or FCT (\le 60).

Nonetheless, perhaps the most relevant difference from the point of view of tobacco control, and one that affects all of the products covered in this study, is that the relative minimum clause allows for the value of the MET to be set at a fraction—five percent, a tiny portion in the case of this particular product class—of the retail selling (RSP) price of <u>each individual brand</u>. Therefore, the current TTD does not establish an absolute excise floor per physical unit of product, opening the possibility of undervaluation as a strategy to reduce tax burdens (WHO, 2021b).

Domestic taxes partly close this loophole, as many member states apply specific taxes and/or MET, but that is not the case for all countries. Tables 3 (for cigarillos) and 4 (for cigars) present the domestic tax parameters that, along with EU rules, determine the ensuing lowest excise duty (LED)³ applicable to these products.

Table 3. Tax policy parameters: cigarillos, 2023

	SPECIFIC	AD VALOREM	MET	LED
Country				
Austria	0.00	0.13	105.00	105.00
Belgium	0.00	0.12	109.70	109.70
Bulgaria	151.85	0.00	0.00	151.85
Croatia	114.50	0.00	0.00	114.50
Czech R.	93.36	0.00	0.00	93.36
Denmark	159.36	0.10	306.45	306.45
Estonia	151.00	0.10	211.00	211.00
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² There is ample evidence documenting tobacco industry efforts to exploit loopholes in the regulation of cigars and cigarillos to make them look like cigarettes while avoiding the stricter rules applicable to the latter (Branston et al., 2021; Delnevo et al., 2017; Lindblom et al., 2020).

³ The LED subsumes the effects of the EU's complex tobacco tax system into a useful metric that represents the excise yield per physical unit of product from a brand generating no revenue to either producers or distributors and retailers. It thus measures the capacity of the tax system to provide an excise floor to the corresponding product and permits straightforward comparisons across countries. See (López-Nicolás, 2023) for details on its definition.

Finland	125.80	0.34	353.60	353.60
France	52.20	0.36	288.00	288.00
Germany	14.00	0.01	75.04	75.04
Greece	0.00	0.35	0.00	0.00
Hungary	0.00	0.14	11.39	11.39
Ireland	567.59	0.00	0.00	567.59
Italy	0.00	0.23	92.00	92.00
Latvia	126.70	0.00	0.00	126.70
Lithuania	98.75	0.00	0.00	98.75
Luxembourg	0.00	0.10	23.50	23.50
Netherlands	0.00	0.10	0.00	0.00
Poland	123.13	0.00	0.00	123.13
Portugal	0.00	0.25	64.93	64.93
Romania	111.15	0.00	0.00	111.15
Slovakia	111.63	0.00	0.00	111.63
Slovenia	0.00	0.06	54.00	54.00
Spain	0.00	0.16	41.50	41.50
Sweden	143.45	0.00	0.00	143.45

Notes: All figures in € per 1,000 cigarillos except AD VALOREM, which is expressed as a fraction of the retail price.

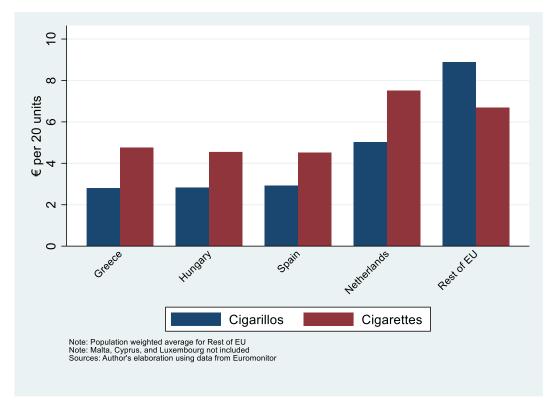
A weight of 1.25 grams per unit is assumed to express tax rates based on weight in terms of product units.

Source: Authors' elaboration using data from the European Commission

As Table 2 shows, Greece and the Netherlands apply a purely ad valorem system for this product class, and, consequently, the resulting LED for cigarillos is 0. In practical terms, this means that the tax system in these two countries enables manufacturers to generate revenue from cigarillos, regardless of how small their retail price may be. There are other member states that have set a low domestic MET rate leading to relatively low values for the LED including Hungary, Luxembourg, and Spain. In these cases, the tax system creates a price threshold below which manufacturers are unable to generate revenue. However, this threshold is set at a low level.

This is a concern for public health. The tobacco industry has marketed products that are formally classified as cigarillos but are very similar to cigarettes (the so-called borderline cigarillos). Even if the extent of this problem in the EU has subsided over time (WHO, 2021b), there are still countries where cigarillos sell at a significant discount with respect to cigarettes—notably Greece, Hungary, the Netherlands, and Spain, as shown in Figure 3.





Member states use the same domestic rates for cigars and cigarillos—with the exceptions of Portugal and Italy, which have allowed for the differences in weight between the two products when setting their domestic MET rates. Other differences between cigarillos and cigars derive from the fact that some member states use a specific tax or a MET expressed in terms of weight instead of physical units (Ireland, Lithuania, Poland, and Slovakia). Allowing for the typical differences in weight between the two products introduces differences in the tax burden per unit of product, as shown in Table 4.

But the main insights about the ineffectiveness of the EU minimum—and the consequent greater relative importance of domestic policies in the determination of retail prices—carry over from cigarillos to cigars. Unless member states apply high specific rates and/or MET rates, manufacturers are able to offer a long tail of cheap brands leading to low average prices and abundant choice for the price-sensitive smoker to trade down in the face of price hikes.

Table 4. Tax policy parameters: cigars, 2023

	SPECIFIC	AD VALOREM	MET	LED
Country				
Austria	0.00	0.13	105.00	105.00
Belgium	0.00	0.12	109.70	109.70
Bulgaria	151.85	0.00	0.00	151.85
Croatia	114.50	0.00	0.00	114.50
Czech R.	93.36	0.00	0.00	93.36
Denmark	159.36	0.10	306.45	306.45
Estonia	151.00	0.10	211.00	211.00
Finland	125.80	0.34	353.60	353.60
France	52.20	0.36	288.00	288.00
Germany	14.00	0.01	75.04	75.04
Greece	0.00	0.35	0.00	0.00
Hungary	0.00	0.14	11.39	12.00
Ireland	1135.18	0.00	0.00	1135.18
Italy	0.00	0.23	175.00	175.00
Latvia	126.70	0.00	0.00	126.70
Lithuania	197.50	0.00	0.00	197.50
Luxembourg	0.00	0.10	23.50	23.50
Netherlands	0.00	0.10	0.00	0.00
Poland	246.25	0.00	0.00	246.25
Portugal	0.00	0.25	432.87	432.87
Romania	111.15	0.00	0.00	111.15
Slovakia	223.25	0.00	0.00	223.25
Slovenia	0.00	0.06	54.00	54.00
Spain	0.00	0.16	41.50	41.50
Sweden	143.45	0.00	0.00	143.45

Notes: All figures in € per 1,000 cigars except AD VALOREM, which is expressed as a fraction of the retail price.

A weight of 2.5 grams per unit is assumed to express tax rates based on weight in terms of product units.

Source: Author's elaboration using data from the European Commission

An example of the consequences of this loophole may be illustrated with the case of Spain, where the current LED for cigars is at €41.50 per 1,000 units, amongst the lowest in the bloc. This relatively low excise floor explains why the (weighted average) retail price of cigars in Spain (€25 per 20 cigars) was the fourth lowest in the EU in 2022. Nonetheless, averages do not provide information on the degree of within-product price differentiation alluded to above, nor, on the possibilities for consumers to switch to cheaper brands, which are remarkable in the case of the Spanish market. For instance, the price for 20 cigars of the cheapest and most expensive brands marketed by Davidoff (one of the many cigar manufacturers operating in this market) range from €3.26 (Ambassatrice) to €1,060 (Oro blanco), respectively.⁴ Moreover, the wide spectrum between the top and bottom deciles of the prices of Davidoff cigars shown is densely populated, with 159 different brands (Figure 4).

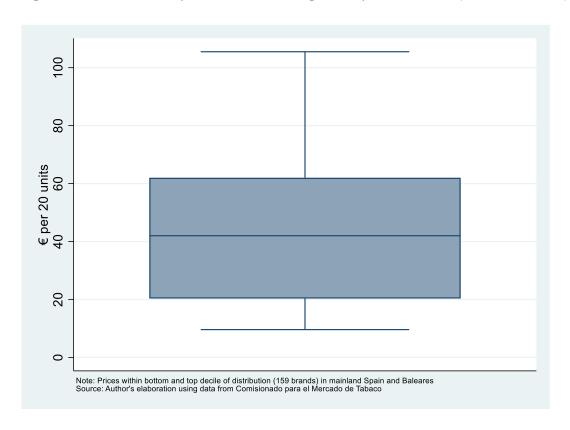


Figure 4. Distribution of prices of Davidoff cigars in Spanish market (3 October 2023)

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⁴ Official price data in mainland Spain and Baleares, obtained from Comisionado para el Mercado de Tabacos on 3 November 2023.

Pipe tobacco

Pipe tobacco is the most important product in the OST category, which also includes water pipe tobacco. The current TTD establishes a lower bound for the MET in the following terms:

either

€22 per kilogram (fixed minimum clause)

OR

20 percent of the retail selling price (relative minimum clause).

Table 5 presents the domestic rates and the resulting LED for this product category.

Table 5. Tax policy parameters: other smoking tobacco, 2023

-	SPECIFIC	AD VALOREM	MET	LED
Country				
Austria	0.00	0.34	0.00	0.00
Belgium	93.42	0.32	172.10	172.10
Bulgaria	144.18	0.00	0.00	144.18
Croatia	114.50	0.00	0.00	114.50
Czech R.	122.31	0.00	0.00	122.31
Denmark	201.82	0.00	0.00	201.82
Estonia	107.00	0.00	0.00	107.00
Finland	107.50	0.48	0.00	265.78
France	33.60	0.51	145.10	145.10
Germany	15.66	0.13	26.00	26.00
Greece	156.70	0.00	0.00	156.70
Hungary	61.10	0.00	0.00	61.10
Ireland	315.01	0.00	0.00	315.01
Italy	0.00	0.56	0.00	0.00
Latvia	91.90	0.00	0.00	91.90
Lithuania	104.60	0.00	0.00	104.60
Luxembourg	19.50	0.35	59.34	59.34
Netherlands	216.64	0.00	0.00	216.64

Poland	35.46	0.32	69.84	69.84
Portugal	87.00	0.15	188.00	188.00
Romania	115.15	0.00	0.00	115.15
Slovakia	101.30	0.00	0.00	101.30
Slovenia	54.00	0.00	0.00	54.00
Spain	0.00	0.28	22.00	22.00
Sweden	199.18	0.00	0.00	199.18

Note: All figures in € per kilogram except ad valorem, which is expressed as a fraction of the retail price.

Source: Author's elaboration using data from the European Commission

Similar to the case of cigars and cigarillos, Table 5 shows that there are some member states that—by using a purely ad valorem system—have not closed the loophole that permits manufacturers to minimize the tax burden through undervaluation (Austria and Italy). Likewise, there are other member states where the domestic MET is set at or just above the EU fixed minimum (Spain and Germany). Not surprisingly, these are member states whose WAP for pipe tobacco rank amongst the lowest in the bloc (Figure 5).

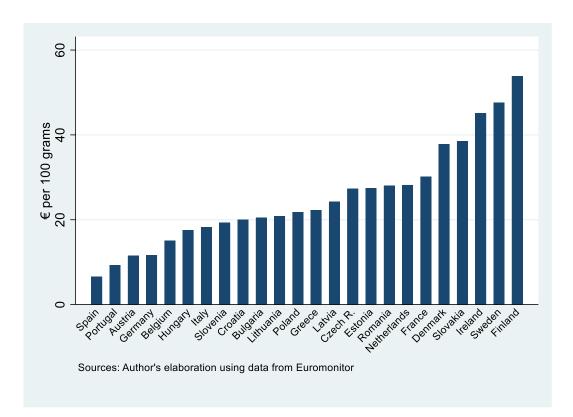


Figure 5. Weighted average price (WAP) of pipe tobacco, 2022

Heated tobacco products

The current TTD does not cover heated tobacco products, but the member states where they are commercialized have introduced excise taxes using ad hoc criteria. These vary enormously. While in Spain, HTP are taxed under the OST regime discussed above, the tax authorities in Italy apply a fraction of the excise borne by cigarettes, the value of which depends on the necessary time to consume each HTP product in comparison with cigarettes. Croatia, France, Germany, and Lithuania are the only member states so far that express excise duty for HTP on a per-stick basis. It is nonetheless possible to express taxes in terms of sticks by means of the weight of the tobacco blend contained in a representative HTP stick, which is 0.3 grams. Using this weight equivalence, Table 6 presents the current rates and the resulting LED, both in absolute terms

⁵ The tax structure and rates for HTP in EU member states was obtained from the online database on the fiscal treatment of these products around the world that Campaign for Tobacco Free Kids has made available (CTFK, 2023).

⁶ A Phillip Morris International web page informs about the weight of tobacco in its IQOS "heets" for fiscal purposes https://www.iqos.com/de/en/support/faq/why-are-there-two-weights-on-the-heets-package.html (accessed on 16/11/2023). This is consistent with the independent evidence of 0.35 grams obtained by (Golpe et al., 2022) using Spanish data. Economisti Associati use a 0.31 grams conversion rate in their study on the TTD (Economisti Associati, 2019).

and as a fraction of the LED on cigarettes for comparison purposes, in the member states where HTP are commercialized.

 Table 6. Tax policy parameters: heated tobacco products, 2023

					As fraction of
					LED
	SPECIFIC	AD VALOREM	MET	LED	for cigarettes
Country					
Austria	49.20	0.00	0.00	49.20	0.31
Belgium					
Bulgaria	43.22	0.00	0.00	43.22	0.42
Croatia	55.50	0.00	0.00	55.50	0.47
Czech R.	36.69	0.00	0.00	36.69	0.27
Denmark	60.55	0.00	0.00	60.55	0.23
Estonia	32.10	0.00	0.00	32.10	0.20
Finland					
France	19.30	0.51	232.00	232.00	0.69
Germany	89.20	0.16	141.23	141.23	0.80
Greece	47.01	0.00	0.00	47.01	0.39
Hungary	91.64	0.00	0.00	91.64	0.92
Ireland					
Italy	56.41	0.00	0.00	56.41	0.36
Latvia	65.40	0.00	0.00	65.40	0.48
Lithuania	60.20	0.00	0.00	60.20	0.46
Luxembourg	0.00	0.00	0.00	0.00	0.00
Netherlands	64.99	0.00	0.00	64.99	0.27
Poland	34.16	0.00	0.00	34.16	0.32
Portugal	26.88	0.15	81.71	81.71	0.57
Romania	50.34	0.00	0.00	50.34	0.42
Slovakia	56.34	0.00	0.00	56.34	0.45
Slovenia	34.80	0.00	0.00	34.80	0.27
Spain	0.00	0.28	6.60	6.60	0.05

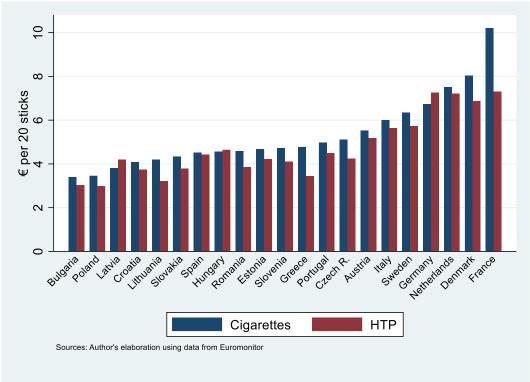
Notes: All figures in € per 1000 sticks except ad valorem, which is expressed as a fraction of the retail price; HTP are not commercialized to date in Belgium, Finland, or Ireland; The reported figure for Italy corresponds to the brand Heets Amber Selection.

Sources: Author's elaboration using data from CTFK (2023) and the European Commission

As seen in the last two columns of Table 6, the excise tax floor for HTP is smaller than that of cigarettes in all member states. On average, across the bloc it represents 50 percent of the excise floor of cigarettes. Previous research has found that this substantial tax advantage does not translate to proportionally cheaper retail prices and instead acts as a profit signal for manufacturers (Liber, 2019). This perception is corroborated by a comparison of the retail prices for the two products across the bloc (Figure 6), where HTP sell at 91 percent of the price of cigarettes on average.

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Figure 6. Weighted average price (WAP) of cigarettes and HTP, 2022



In fact, the price of HTP is more strongly correlated with the excise tax floor of cigarettes—as measured by their LED (correlation coefficient 0.91) or with the price of cigarettes (correlation

coefficient 0.95)—than with its own excise tax floor (correlation coefficient 0.62), which suggests that HTP manufacturers aim to mostly track the prices of cigarettes.

The WHO recommendation that "HTPs should be taxed at the same level and in the same way as tobacco cigarettes" (WHO, 2021b) is therefore not reflected in the typical fiscal approach of EU member states. Although countries such as Germany and Hungary are approximating the tax rates to those of cigarettes, other states are a long way from it.

Liquids for electronic cigarettes

Similar to the case of HTP, a variety of ad hoc approaches to the taxation of liquids for electronic cigarettes have been adopted across the EU, and a substantial number of states do not apply excise taxes on these products to date. In those that do, excise taxes have been introduced in the form of specific taxes using product volume as the tax base. A further difference across states is whether liquids not containing nicotine are excised and whether the tax rate increases with the level of nicotine concentration. Table 7 presents the tax policy parameters according to these characteristics as per the recent results of Dauchy and Fuss (Dauchy & Fuss, 2023). The first column contains the tax rate for liquids without nicotine. The second and third columns contain, respectively, the rates for liquids with nicotine in concentrations above and below the threshold of column 4.

Table 7. Tax policy parameters: liquids for electronic cigarettes, 2023

	SPECIFIC (1)	SPECIFIC (2)	SPECIFIC (3)	THRESHOLD (4)
Country				
Austria				
Belgium				
Bulgaria	0.09	0.09	0.09	
Croatia				
Czech R.				
Denmark	0	0.20	0.33	12.00
Estonia	0.20	0.20	0.20	
Finland	0.30	0.30	0.30	
France				

Germany	0.16	0.16	0.16	
Greece	0.10	0.10	0.10	
Hungary	0.09	0.09	0.09	
Ireland				
Italy	0.08	0.13	0.13	
Latvia	0.20	0.20	0.20	
Lithuania	0.19	0.19	0.19	
Luxembourg				
Netherlands				
Poland	0.12	0.12	0.12	
Portugal	0	0.34	0.34	
Romania	0	0.16	0.16	
Slovakia	0			
Slovenia	0.10	0.21	0.21	
Spain				
Sweden	0	0.17	0.34	15.00

⁽¹⁾ Without nicotine; €/ml

Source: Author's elaboration using data from Dauchy and Fuss (2023)

The WHO recommends taxing all liquids, regardless of whether they contain nicotine. Additionally, recognizing that nicotine delivery depends not only on the concentration, but also on vaping devices' characteristics such as battery power, it is not clear how relevant it is to use differential rates for high concentration liquids, especially considering that this may create undue verification burdens for tax administrators (WHO, 2021b). The data in Table 7 show that Bulgaria, Estonia, Finland, Germany, Greece, Hungary, Latvia, and Poland apply a single rate to all liquids, although the level varies across countries. On the contrary, there are 10 countries where no excise taxes are levied on these products.

Nicotine pouches

A systematic search in the "manufactured tobacco" and "other indirect taxes" sections of the European Commission's Taxes in Europe database found that only Sweden and Denmark apply

⁽²⁾ With nicotine; €/ml

⁽³⁾ With nicotine, concentration above threshold; €/ml

⁽⁴⁾ mg/ml

excise duties on nicotine pouches as of 1 November 2023. As seen in Figure 2 earlier, these are two countries where pouches are relatively popular. In the case of Denmark, the tax base is the nicotine content at a rate of 0.055 Danish kroner per milligram. Considering the median nicotine content (9.48 milligrams.) and weight (0.64 grams) per pouch reported in Mallock et al. (Mallock et al., 2022), this implies an excise of €105.4 per kilogram at the current⁷ exchange rate in November 2023. In the case of Sweden, the tax base is the product's weight, with a tax rate of €17.6 per kilogram at the current exchange rate.

Table 8 presents the WAP of nicotine pouches in the countries for which the Euromonitor database records sales. These prices vary considerably. The highest WAP is recorded in Estonia, a country that does not levy excise on this product. On the contrary, Sweden's WAP is among the lowest, even if there is an excise tax on this product.

Table 8. WAP of nicotine pouches, 2022 (€/kg)

	WAP
Country	
Austria	432.6
Belgium	501.8
Croatia	338.5
Czech R.	362.7
Denmark	554.2
Estonia	798.6
France	390.6
Hungary	603.1
Ireland	223.2
Italy	452.0
Poland	272.4
Romania	452.3
Slovakia	372.3
Sweden	283.5

Note: € per kilogram

Source: Author's elaboration using data from Euromonitor

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⁷ 5 November 2023

3. The European Commission's Proposals for a Revised TTD

Regarding the products covered in this paper,⁸ a relevant innovation in the European Commission's proposals is the creation of tax categories for products not covered under the current TTD: HTP, liquids for electronic cigarettes, and nicotine pouches. In parallel, catch-all categories are proposed for "other manufactured tobacco" and "other nicotine products," in an attempt to provide for the potential emergence of new products.

It is also noteworthy that within the traditional categories, a subdivision is created to allow for differential taxes on cigars and cigarillos (hitherto considered a single category for fiscal purposes) and on water pipe tobacco (hitherto included in the "other smoking tobacco" category). A transition period of four years from the enactment of the revised directive is allowed for cigarillos, cigars, water pipe tobacco, other smoking tobacco, nicotine pouches, and other manufactured tobacco to reach the new minimum rates.

The proposals for the products under focus in this paper respect the general architecture of the current directive. Table 9 presents a breakdown of the new rules and rates (bottom panel) along with the corresponding provisions under the current directive for comparison purposes (top panel).

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⁸ For these products, as well as for cigarettes and FCT, the European Commission proposes "moving from nominal rates to an approach partially based on purchasing power parities," explicitly recognizing that nominal rates are inadequate from a tobacco control perspective, "as the combination of inflation and income growth results, over time, in a rapid erosion of the minima" and that "any nominal minimum rate set at the EU level is generally too low to have an impact on higher income countries." This is achieved by adjusting one-third of the nominal value of the fixed minima by purchasing power parity (PPP), thus obtaining country-specific minima. Also, such EU-level nominal fixed minima are to be periodically updated by inflation. See López-Nicolás (2023) for a detailed discussion of these innovations.

⁹ The Commission's proposals also include the creation of a category for raw tobacco subject to a minimum tax rate of €0 per kilogram.

 Table 9. Structure and rates for minima in current TTD and draft proposal TTD

		CURRENT DIRECTIVE						
		Fixed minimum	Conjunction	Relative minimum	Base for relative minimum			
	Cigarettes	€90 / 1000 units	AND	60%	WAP (average across brands)			
Traditional	FCT	€60 /kg	OR	50%	WAP (average across brands)			
categories	Cigars and cigarillos	€12 / 1000 OR €12 /kg	OR	5%	RSP (brand specific)			
	Other smoking tobacco	€22 /kg	OR	20%	RSP (brand specific)			
			DRAFT PROPOSAL					
		Fixed minimum*	Conjunction	Relative minimum	Base for relative minimum			
	Cigarettes	€180 / 1000 units	AND	63%	WAP (average across brands)			
Traditional categories	FCT	€180/kg	OR	62%	WAP (average across brands)			
	Cigarillos***	€120 / 1000 OR €120 /kg	OR	40%	RSP (brand specific)			
	Cigars***	€120 / 1000 OR €120 /kg	OR	40%	RSP (brand specific)			
	Water pipe tobacco***	€90 /kg	OR	50%	RSP (brand specific)			
	Other smoking tobacco***	€120 /kg	OR	50%	RSP (brand specific)			
New categories	Other manufactured tobacco***	€120/kg	OR	50%	RSP (brand specific)			
	НТР	€91 / 1000 OR €130 /kg	OR	55%	RSP (brand specific)			
	Liquids for electronic cigarettes	€0.10 /ml; €0.30 / ml**	OR	20%; 40%**	RSP (brand specific)			
	Nicotine pouches***	€120 / kg	OR	50%	RSP (brand specific)			
	Other nicotine products***	0	Not applic.	50%	RSP (brand specific)			

^{*} Adjusted by PPP and periodically updated with inflation

^{**} If nicotine concentration > 15mg/ml

^{***} Adjustment over 4 years

Comparing the top and bottom panels in Table 9, it is evident that the proposals contain a remarkable increase in the rates for both the fixed minima and the relative minima. This is a welcome change from the point of view of tobacco control.

However, it is important to consider the architecture of the minima, particularly the "OR" conjunction linking the fixed minimum and the relative minimum. The analysis of the effects of the Commission's proposals on FCT in this research's companion publication shows that the possibility to choose either the fixed or the relative minimum dampens the impact on their excise tax floor. Unfortunately for public and fiscal optimization, this choice is preserved in the proposals for the products analyzed here.

Moreover, the basis for the calculation of the relative minimum for such products remains the brand's retail sales price. This implies that the proposals cannot be expected a priori to lift their excise tax floor. That is, the possibility of minimizing tax burdens—by means of undervaluation—would not be altered and will ultimately depend on whether member states close this loophole with the application of a specific tax and/or a MET.

Effects of the proposals on the excise yield at representative price levels

The effects of the Commission's proposals for the changes in the minima applicable to the products under focus may be evaluated by checking whether the current excise yield of a representative brand/price would comply with the new minima. Thus, for each member state, we calculate the current excise yield at the product's WAP and the excise yield that would be generated by a product with the same retail price if the minimum rates in the proposals were in force, all else held equal—that is, assuming that there are no concomitant changes in domestic policies. Intuitively, if the new minima do not require changes in the pricing structure of representative brands, either by translating them to retail prices and/or by reducing margins, the reforms may be expected to have little impact on consumption or excise revenue.

The following subsections present the results of these comparisons. The WAP values are those of year 2022.¹⁰

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¹⁰ In the case of reforms where a transition period has been proposed, the impact is calculated using the full rates.

Cigars and cigarillos

As Figure 7 shows, the excise yield for average-priced cigarillos would remain unchanged in 12 out of the 24 member states for which data are available. The markets where an increase in yield would be expected include Greece, Hungary, the Netherlands, and Spain. As shown earlier (Figure 3), these are all markets where cigarillos sell at a discount with respect to cigarettes.

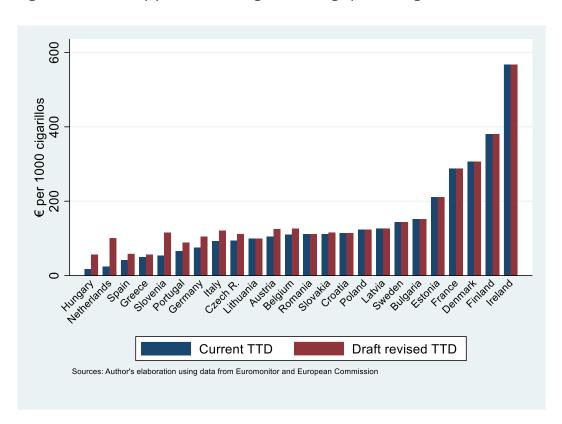


Figure 7. Excise duty yield at the weighted average price of cigarillos

In the case of cigars, however, the excise duty yield at the current WAP would increase only in Belgium, the Czech Republic, and Germany (Figure 8).

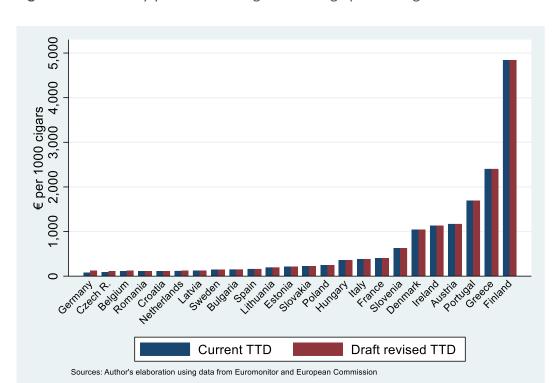


Figure 8. Excise duty yield at the weighted average price of cigars

Pipe tobacco

For pipe tobacco, the new minima would require a greater excise yield from brands selling at the current WAP in 9 out of the 24 member states, represented in Figure 9.

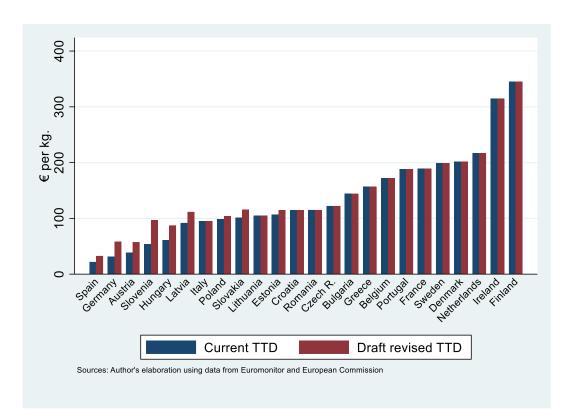


Figure 9. Excise duty yield at the weighted average price of pipe tobacco

Heated tobacco products

The proposals would raise the excise yield at the current WAP of this product in most countries where it is currently commercialized. The exceptions are France, Germany, and Hungary (Figure 10).

According to the proposed structure of minimum taxes outlined in Table 9, the minimum tax applicable to HTP is determined as the lower of two values: the fixed minimum set at €91 (adjusted for purchasing power parity) per 1000 units, or the relative minimum set at 55 percent of the retail selling price. Additionally, as shown in Figure 6 earlier, it is important to note that the WAP of HTP closely aligns with that of cigarettes, whose average price is relatively high due to taxes. Under the proposed rules, the fixed minimum is lower than the relative minimum, making it the applicable minimum tax for HTP brands at current average prices in all countries. This fixed minimum surpasses the excise yield under the current tax rules in most.

In a scenario where the status quo regarding the prices and market shares of current brands is preserved, the new rules would lead to a noticeable increase in excise revenue. However, the possibility of relying on the relative minimum condition is likely to result in the emergence of cheap brands. This could be easily addressed by eliminating the reliance on the relative

minimum condition or, even better, by mandating compliance with both the fixed minimum and the relative minimum, as is the case with cigarettes.

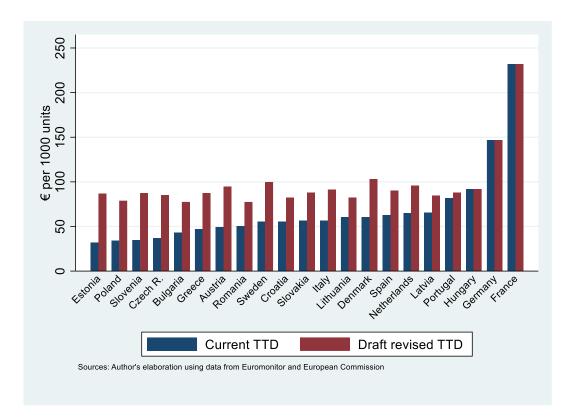


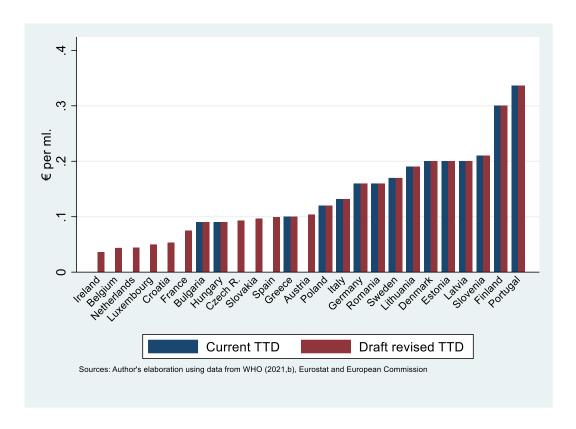
Figure 10. Excise duty yield at the weighted average price of heated tobacco products

Liquids for electronic cigarettes

The data on electronic cigarette liquids used for the purposes of this comparison refer to the retail price of one millilitre of the cheapest brand for use in open systems, 11 and excise yield is calculated for the standard rate (that is, the rate applicable to nicotine concentrations below 15 mg/ml). As Figure 11 shows, the Commission's proposals would not modify the current excise yield in any of the countries that currently apply excise taxes on this product. The only tangible effect would consist of the introduction of excises in those countries that do not yet do so.

¹¹ Source: (WHO, 2021a). The figures provided by this source have been updated for inflation since 2020 using Eurostat's Harmonized Indices of Consumer Prices.

Figure 11. Excise duty yield at the cheapest price of liquids for use in open-system electronic cigarettes

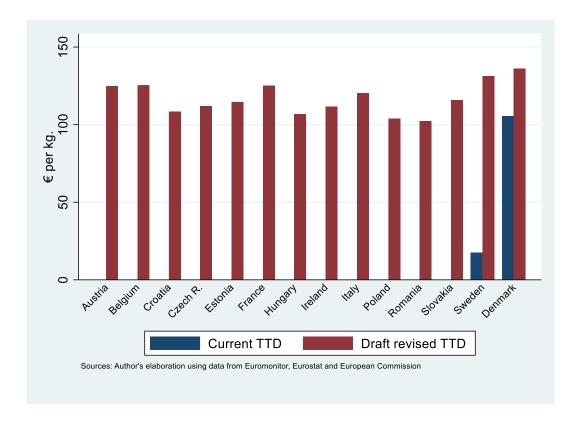


Nicotine pouches

The Commission's proposals for nicotine pouches would require 12 of the countries where the product is currently commercialized to introduce excise taxes. In the cases of Denmark and Sweden, which already excise this product, the new minima would lead to larger excise yields for brands selling at the current WAP, as shown in Figure 12.

In the case of Sweden, the increase in yield would not be dissimilar to the cases of countries that do not levy excise taxes on nicotine pouches, reflecting the country's light—relative to its neighbor Denmark—fiscal stance on the product. Reportedly, the reaction of some of Sweden's political representatives in EU institutions to the Commission's plans for the taxation of nicotine pouches in the new TTD have played a major role in the cancellation of the release of the proposal. The reason, according to Tao (2023), would lie in the wish to protect the interests of Swedish manufacturers of nicotine pouches in the context of robust growth in the consumption of this product in the EU.

Figure 12. Excise duty yield at the weighted average price of nicotine pouches



4. Conclusions

Cigarettes and FCT are still the predominant products in the market for tobacco and tobacco-related products in the EU, and there is little doubt that they constitute the most important threat to public health within this market in the immediate future. However, the share of the rest of the products in this market has grown remarkably over the past seven years and is expected to increase further. This trend is driven by the advent and consolidation of the so-called novel products. Indeed, while the sales of traditional components of this group—such as cigars, cigarillos, and pipe tobacco—have experienced little variation, the combined value of the sales of heated tobacco, electronic cigarettes, and nicotine pouches has increased more than tenfold between 2015 and 2022 in the bloc. Clearly, the tax regime to which these products are subject is an important concern for public health.

Cigars, cigarillos, and pipe tobacco are covered by the current TTD, but the structure of their minimum rates differs from that of cigarettes and FCT in an important way: the value of the minimum tax may be set as a percentage of the product's retail selling price. This facilitates the minimization of tax burdens by means of undervaluation in the member states that have not closed this loophole with sufficiently high specific or MET rates. Low product WAPs and/or long tails of cheap brands ensue.

The novel products are not covered by the current TTD, and a variety of treatments have emerged across member states. Some, tax HTP with the rules applicable to pipe tobacco, while others have advanced towards an equal treatment with cigarettes, as the WHO recommends. Some, levy excise tax on liquids for electronic cigarettes using volume as the tax base, and others do not levy taxes other than the general value-added tax. Nicotine pouches are not excised in most of the states where they are commercialized.

The European Commission's proposals for the revision of the TTD include the creation of separate tax categories for each of these novel products. They also include substantial increases in the rates for traditional products and adjustments for inflation and purchasing power differences across member states. These innovations are positive for both public health and tax performance, and the argument about the desirability of re-launching the legislative process as soon as possible that was made for the case of cigarettes and FCT in this paper's companion is equally appropriate here.

A simulation of the effects of the Commission's proposal on the excise yield at currently representative price levels, all else held equal, shows little impact on cigarillos and cigars or pipe tobacco. For novel products, the effects of the proposals are more nuanced. In the case of

electronic cigarettes and nicotine pouches, the most tangible impact is the imposition of excise duties in countries where they currently do not apply. On the other hand, for HTP, the impact on excise yields at current prices is noticeable in most countries.

However, it is important to note that the estimation of these impacts has been made under the assumption that the price structure and market shares of current brands will be preserved under the new rules. It is reasonable to assume that the industry will respond by offering cheap brands to minimize the tax burden in the new scenario.

Certainly, the possibility of such a rection exists, as the proposed rules for these products preserve the option to invoke a relative minimum condition that uses the brand's retail price as the tax base. The onus is thus on member states to close the loophole that permits undervaluation as a strategy to minimize tax burdens. Given that one of the motivations for the renewal of the TTD is to contribute to the objectives of Europe's Beating Cancer Plan, this is an unfortunate missed opportunity.

Perhaps the most important single reason why the EU's TTD is recognized as a crucial piece of legislation for tobacco control is its potential to create an excise tax floor for tobacco products. This is strongest in the case of cigarettes, for which both a fixed minimum and a relative minimum based on the product's WAP must be satisfied. This strength is partly sapped in the case of FCT because the excise tax floor must reach either one or the other minimum instead of both. This limitation also affects the products under focus here; but, additionally, if the base for the relative minimum is the brand's retail price, instead of a measure less amenable to manipulation such as the WAP, the ability to set an effective excise floor is severely undermined. Foregoing the chance to close this loophole in this round of revision would be regrettable for the goals of improving public health and fiscal performance (that is, tax revenue generation), especially when the market outlook for the novel products is one of strong growth.

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Appendix

The results presented in this report are based on data on:

- tobacco tax rates and value-added tax rates;
- the volume-weighted average prices for cigarettes, fine-cut tobacco, cigarillos, cigars, pipe tobacco, HTP, and nicotine pouches;
- the value of sales of electronic cigarette consumables;
- a general consumption price index;
- an index reflecting purchasing power differences across countries; and
- population and inflation.

The analysis is carried out at the member state level, from which EU aggregates are computed. Results are not available for Malta and Cyprus due to lack of data. Due to data limitations, only some results are available for Luxembourg.

The sources for these data are:

The European Commission's Taxes in Europe Database (European Commission, 2023)

- Tax rates for all EU member countries. Yearly data for the period 2011–2023.
- For Luxembourg, the weighted average price of cigarettes and fine-cut tobacco. Yearly data for the period 2011–2022.
- For Estonia, the weighted average price of cigarettes. Yearly data for the period 2011– 2022.

Eurostat (Eurostat, 2023)

- Harmonized Index of Consumer Prices for all EU member countries. Yearly data for the period 2011–2022.
- Comparative Price Levels for all EU member countries. Year 2021.

Euromonitor International Passport Database (Euromonitor International, 2023)

- Smoking prevalence and legal market volumes and sales of cigarettes, fine-cut tobacco, cigarillos, cigars, and pipe tobacco for all EU member states except Cyprus, Malta, and Luxembourg. Yearly data for the period 2011–2022.
- Population. Yearly data for the period 2011–2022.

• Forecast values for consumer expenditure, population, consumer prices inflation, and sales of tobacco products. Yearly data for the period 2023–2028.

Values for the weighted average price of tobacco products are computed by dividing sales by market volumes.