



TAX REGULATION OF THE TOBACCO PRODUCTS MARKET IN THE CONDITIONS OF ITS TRANSFORMATION



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This work covers the challenges of excise duty collection from tobacco products and nicotine-containing products, driven by the tobacco market development. It also studies the in-depth theoretical basis of excise taxation of heated tobacco products and e-cigarettes in the context of achieving fiscal and regulatory goals. It describes the types and general approaches to the classification of novel tobacco products and nicotine-containing products. This research determines the tendencies and features of excise duty collection from heated tobacco products and e-cigarettes in EU countries in terms of broader distribution of these products on national markets. It describes specific aspects of the tobacco products excise policy in Moldova and Georgia. It also analyzes the specifics of the transformation of domestic tobacco products market due to the high excise duty burden carried by these products. The work also proposes ways of improving excise taxation of heated tobacco products and e-cigarettes in Ukraine to pump up the budget and regulate the tobacco market development.

The survey findings can be useful to the state agencies and a broad range of other stakeholders when developing proposals regarding the formation and implementation of the excise policy for tobacco products and alternatives.

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INTRODUCTION

Modern economic processes are rapidly changing along with the transformation of the global and national economy, sectoral markets and the public finance system. It would seem that the functioning of the tobacco products market is protected from significant changes in size due to the persistence of the harmful habit of smoking. But the market also undergoes substantial changes. On the one hand, such changes are determined by agreements to establish stricter rules of state regulation of the manufacture and turnover of tobacco products in general, and gradual increase of excise burden carried by these products to reduce access to them in particular, and on the other hand, by the promotion of healthy lifestyles. However, the consequences of such processes lie not only in the reduction of smokers' number and volumes of tobacco products consumption, but also in the development of illegal markets and the spread of cheap loose tobacco, which deprives the government of a share of tax revenues.

The spread of alternatives to conventional tobacco (mainly heated tobacco products and e-cigarettes) became an important trend in the tobacco market development in recent years. The goal of these alternatives development was to reduce of the risk of their consumption for human health. The cigarette market gradually scales down under the influence of the increase of excise duty rates, among other things. Novel products play the role of a buffer between cigarettes and the illegal and more harmful tobacco. Consumption of such novel products instead of illegal products ensures the excise duty revenues.

In terms of the tobacco market transformation, the current tobacco products excise policy must ensure a sufficient level of tax revenues and regulate the consumption of tobacco products and alternatives in order to promote the reduction of smoking prevalence while avoiding the increase of illegal products turnover and usage of more harmful tobacco. However, it is especially crucial for countries that have chosen the European integration vector of economic development, to consider not only development aspects of national tobacco markets and public finance systems (fiscal needs and practices of excise taxation), but also the EU legislation and experience of Member States in excise duty collection.

1. CHALLENGES OF EXCISE DUTY COLLECTION FROM TOBACCO PRODUCTS AND NICOTINE-CONTAINING PRODUCTS, DRIVEN BY MARKET DEVELOPMENT

1.1. The theoretical basis of excise taxation of heated tobacco products and e-cigarettes in the context of achieving fiscal and regulatory goals

The current tobacco market is going through a period of active transformation, mostly under the influence of the trend towards higher excise rates for these excisable products and the increasing popularity of alternative products for the consumption of nicotine – *heated tobacco products* and *electronic cigarettes (e-cigarettes)*. In a number of countries, the volumes of consumption of fine-cut tobacco used for roll-ups and other loose tobacco¹ grow and/or the illegal turnover of cigarettes and their substitutes expands. The excise policy of the European countries has a complex goal: to regulate the consumption of different categories of tobacco products in a way that ensures the optimal balance between such goals as budget revenues, healthcare and the European integration. This fact actualises the research of scientific approaches and experience of EU countries in collecting excise duty from these alternative products in terms of the tobacco market transformation in order to develop appropriate recommendations for Ukraine.

Heated tobacco products are alternative nicotine delivery systems that heat but do not burn tobacco². These are products that have been designed to be less harmful to human health than smoking cigarettes or other harmonised tobacco product categories (primarily due to the absence of tar-emitting combustion when consuming). The above has been repeatedly confirmed by medical research. In particular, *the United States Food and Drug Administration (FDA)* confirmed the lower levels of toxins emitted by heated tobacco products compared to cigarettes. It became the basis for official permission to sell IQOS and HEETS sticks in the US in 2019³. Other influential toxicology research carried out in EU countries reached similar conclusions⁴.

Nevertheless, heated tobacco products can not be deemed as absolutely safe, as the tobacco in its nature is toxic and carcinogenic even untreated. A person consumes

¹ Both in some EU countries and in former Soviet Union countries, namely in Ukraine.

² Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. Final Report. May 2017. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/study_on_directive-2011_64_main_text_en.pdf.

³ FDA permits of IQOS Tobacco Heating System through premarket tobacco product application pathway. 30.04.2019 URL: <https://www.fda.gov/news-events/press-announcements/fda-permits-sale-iqos-tobacco-heating-system-through-premarket-tobacco-product-application-pathway>.

⁴ Mallock N., Boss L., Burk R. et al. Levels of selected analytes in the emissions of “heat not burn” tobacco products that are relevant to assess human health risks. *Archives of Toxicology*. 05.05.2018. URL: https://www.researchgate.net/publication/324970293_Levels_of_selected_analytes_in_the_emissions_of_heat_not_burn_tobacco_products_that_are_relevant_to_assess_human_health_risks.

harmful nicotine while consuming sticks, as well as cigarettes. Therefore they are recommended only to those people who have a long history of smoking and can not quit this habit. Neither should IQOS devices and their analogues be perceived as trendy gadgets. After all, given the novelty and relatively short period of sale of heated tobacco products, databases for medical conclusions on their long-term consumption have not yet been formed.

According to the European Parliament and Council Directive 2014/40/EU on the approximation of laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC dated 3 April 2014⁵, an *e-cigarette* is a product that can be used for the consumption of nicotine vapour via a mouth piece or any component of such product, including a cartridge, a tank and a device without a cartridge or tank. E-cigarettes can be disposable or refillable by means of a refill container and a tank, or rechargeable with single use cartridges.

E-cigarettes, as well as heated tobacco products, do not burn, and one of the main objectives in creating such products was to provide smokers with an alternative less harmful to health. However, the market of nicotine-free e-liquids is also actively developing these days. The consequences of consuming the latter fluids, especially if it is possible to mix different fluids (in particular, of illegal origin) or add some components (such as cannabinoids), cause the biggest discussion in the medical establishment. There are also findings of medical research proving the health risks of vitamin E in e-liquids⁶. Under the influence of such conflicting conclusions, the New York City Council even supported a ban on all flavoured e-liquids and flavours for such liquids, which does not apply to nicotine-containing e-liquids. Proponents of the ban claimed that they were seeking to protect young people, who had begun to use e-cigarettes more⁷.

A recent official survey held in the EU concerning the health effect of heated tobacco products and e-cigarettes showed that the majority of respondents (representatives not only of tobacco companies and tobacco product chains but of the healthcare sector as well) recognise a possibility of a lower harm level of such

⁵On the approximation of laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC. European Parliament and Council Directive dated 3 April 2014 (2014/40/EU). URL: <https://www.kmu.gov.Ua/storage/app/sites/1/55-GOEEI/2014-40-es.pdf>.

⁶ The voice of vaping. Don't panic about E-cigarettes. The Economist. URL: https://www.economist.com/leaders/2019/09/12/dont-panic-about-e-cigarettes?utm_source=YouTube&utm_medium=Economist_Films&utm_campaign=Link_Description&utm_term=Science_and_Technology&utm_content=Story_behind_the_facts&linkId=100000010523164.

⁷ New York City Authorities Ban Flavoured E-Cigarettes. Ekonomichna Pravda. 27.11.2019. URL: <https://www.pravda.com.ua/news/2019/11/27/7233140/>.

alternative products vs cigarettes. At the same time, they remind about the necessity of further medical research in this area⁸.

It should also be noted that, according to the EU approach, heated tobacco products and e-cigarettes belong to the broader category of "*novel tobacco products*"⁹. In addition, heated tobacco products can also be attributed to "*smokeless tobacco products*", the consumption of which does not involve the combustion process. The latter category includes chewing tobacco, sniffing tobacco and tobacco for oral use¹⁰. With the development of the electronic cigarettes market, the term "*market of tobacco products and nicotine-containing products*" becomes more used. More details about the types and characteristics of such products are provided in Chapter 1.2.

Excise taxation of heated tobacco products and e-cigarettes should be based, on the one hand, on scientific approaches applied to all tobacco products and, on the other hand, taking into account their physical characteristics and focusing on reducing the risk to human health from their use.

Excise taxation of such excisable goods as tobacco products is characterized by a number of features. According to research by Western scholars, the price elasticity of demand on tobacco products is rather low (from 0.3 to 0.5), which serves as an argument in favour of strengthening the fiscal role of excise taxation thereof. The increase of excise rates does not significantly reduce the consumption of these excisable goods, which creates preconditions for increasing budget revenues. At the same time, the effectiveness of a fiscal-oriented excise policy largely depends on whether the following is taken into account: 1) the number of consumers and the corresponding consumption volumes by type of tobacco products; 2) the elasticity of demand for various types of these goods, taking into account possible increases in the volume of their illegal turnover and replacing consumption of some tobacco products with others (there may be a switching to the consumption of cheap alternatives, which leads to a loss of tax revenue)¹¹. When increasing the excise rates, the goals of pumping up the budget and regulatory tasks have to be balanced (it means using not only the fiscal potential of excise duty but its role in regulating the consumption of different tobacco products).

⁸ Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. Final Report. January 2019. P. 81. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/annexes-to-the-study-on-the-tobacco-taxation-directive-2019_en.pdf.

⁹ Report from the Commission to the Council on Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. 12.01.2018. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/report_excise_duty_manufactured_tobacco_12012018_en.pdf.

¹⁰ On the approximation of laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC. European Parliament and Council Directive dated 3 April 2014 (2014/40/EU). URL: <https://www.kmu.gov.Ua/storage/app/sites/1/55-GOEEI/2014-40-es.pdf>.

¹¹ Tobacco Taxation: Theory and Practice by Arthur B. Laffer, Ph.D. The Laffer Center at the Pacific Research Institute. San Francisco, 2014.

Despite the low elasticity of demand for tobacco products upon the price change, in practice it has been proved that with higher excise rates, budget revenue increases only to a certain point – the point of the optimal tax rate of the Laffer curve, after reaching which there is a decrease in this tax revenue. However, the excise policy should focus not only on the "best tax revenue point". It is also necessary to take into account the possible negative consequences of the spread of misuses in collection of excise taxes, which, in particular, generates the demand of low-income consumers (it makes it economically attractive to use various tax evasion schemes). In order to prevent unwanted expansion of such processes, it is often important to stop raising the tax rate without ensuring the collection of maximum excise duties. However, if the strengthening of the excise duty role is highly effective in reducing the number of smokers and/or volumes of consumption of tobacco products, then there is a sense to move along the Laffer curve to maximise budget revenue (but not beyond that point of maximum excise duty revenue), in spite of the risk of increased volumes of illegal production and import of tobacco products¹².

The negative human health effects of consumption of conventional tobacco products are now widely recognized. But the issue of increasing the excise duty burden of tobacco products to ensure a significant reduction of consumption remains controversial. Indeed, the spread of illegal trade of tobacco products not only causes difficulties for accumulating tax revenues, but also prevents from decreasing smoking prevalence.

Research by WHO and the World Bank¹³ usually shows that only a significant increase in taxes can be deemed as an effective way of reducing the demand for tobacco products. Meanwhile, several alternative research papers¹⁴ explain that high taxation of tobacco products is among the main factors of illegal trade development as it triggers the retail prices growth. And along with slow growth or reduction of consumers' income, it triggers lower availability of the products. Under such conditions, the demand for alternatives grows and triggers tobacco smuggling and/or counterfeiting.

¹² Tobacco Taxation: Theory and Practice by Arthur B. Laffer, Ph.D. The Laffer Center at the Pacific Research Institute. San Francisco, 2014.

¹³ WHO Technical Manual on Tobacco Tax Administration. Geneva: World Health Organization, 2010. URL: http://apps.who.int/iris/bitstream/10665/44316/1/9789241563994_eng.pdf; Confronting Tobacco Illicit Trade: A Global Review of Country Experiences. Technical Report of the World Bank Group. Ed. S. Dutta. 2019. URL: <http://documents.worldbank.org/curated/en/677451548260528135/pdf/133959-REPL-PUBLIC-6-2-2019-19-59-24-WBGTobaccoIllicitTradeFINALvweb.pdf>.

¹⁴ A Review of the WHO Technical Manual on Tobacco Tax Administration: One Size Does Not Fit All. Special Report. ITIC and Oxford Economics. December 2011; Causes & Control of Illicit Tobacco. Alvarez & Marsal Report. Second Edition. 2019. P. 2-15. URL: https://www.alvarezandmarsal.com/sites/default/files/causes_and_control_of_illicit_tobacco_report_ed_2.pdf; Lester A., Allen E. SADC Review - Study into the illicit trade in excisable products with particular reference to alcohol and tobacco products. GFA Consulting Group Report. 2012. P. 29- 32. URL: https://www.sadc.int/files/3913/5895/1270/SADC_study_into_the_illicit_trade_in_excise_products.pdf.

Researchers note that any means of combating illegal traffic of tobacco products can be more effective in combination with the excise policy that understands the effects of a too sharp increase of tax burden on the affordability of such products¹⁵. Affordability of tobacco products, determined by the level of their retail prices and income level of smokers, is one of the main factors that can provoke the spread of illegal tobacco trade. The correlation between the factors mentioned above is high¹⁶.

The report of the Transnational Alliance to Combat Illicit Trade published on UNCTAD¹⁷ website, among other things, elaborates that breaking the parity of prices and excise rates is a driver of tobacco smuggling spread. Significant differences in tobacco products taxes in different countries (mainly neighbouring) create opportunities to profit from illegal activities in this area. That is why the influence of these aspects has to be considered while planning the increase of tobacco products excise rates¹⁸.

The above conclusions regarding the possible consequences of increased excise duty rates on tobacco products have been repeatedly confirmed in practice. In particular, it is worth noting that Denmark, Norway, Finland, and Switzerland currently have the highest cigarette excise rates in the world. These countries are neighbours and/or are surrounded by sea, which minimises the risk of smuggling. Meanwhile, Germany, which, like the Scandinavian countries, has high consumer purchasing power, when determining the excise burden for cigarettes must take into account the fact that it borders on Poland, where the relevant excise rate is much lower than in the EU-15 area countries¹⁹.

In a number of post-socialist countries, a significant increase in excise duty rates for cigarettes to meet EU accession requirements has triggered the development of the above undesirable processes without increasing budget revenues in the expected amounts. The experience of these EU countries is a vivid illustration of the destabilising impact of a sharp increase of excise rates on the white market. It also shows how fast can illegal trade of counterfeit and smuggled tobacco products

¹⁵ Lester A., Allen E. SADC Review - Study into the illicit trade in excisable products with particular reference to alcohol and tobacco products. GFA Consulting Group Report. 2012. P. 31. URL: https://www.sadc.int/files/3913/5895/1270/SADC_study_into_the_illicit_trade_in_excise_products.pdf.

¹⁶ Causes & Control of Illicit Tobacco. Alvarez & Marsal Report. Second Edition. 2019. P. 10. URL: https://www.alvarezandmarsal.com/sites/default/files/causes_and_control_of_illicit_tobacco_report_ed_2.pdf.

¹⁷ TRACIT: Mapping the Impact of Illicit Trade on the Sustainable Development Goals. URL: https://unctad.org/meetings/en/Contribution/DITC2020_TRACIT_IllicitTradeandSDGs_summary_en.pdf.

¹⁸ Lester A., Allen E. SADC Review – Study into the illicit trade in excisable products with particular reference to alcohol and tobacco products. *GFA Consulting Group Report*. 2012. URL: https://www.sadc.int/files/3913/5895/1270/SADC_study_into_the_illicit_trade_in_excise_products.pdf.

¹⁹ Based on the materials of the seminar "Taxation of Excisable Goods in the European Union and Its Implementation in Energy And Electricity Products, Alcohol and Tobacco Products Taxation", held by the Ministry of Finance of Ukraine on 24-28 February 2020 with the support of the German Corporation for International Cooperation (GIZ) as part of the Development of Administrative Capacities in Ukraine's Public Finance project. Experts: Friedrich Seewald and Dennis Nehring (Germany).

expand under favourable conditions²⁰. However, the greatest negative impact of the increase in the fiscal role of excise taxes was observed in the least developed countries with relatively low consumer purchasing power²¹. It should be noted in particular that there were considerable difficulties with the recovery of the white tobacco market to overcome the consequences of the sharp increase in excise rates²².

In Ukraine, the growth rate of excise duty revenues from tobacco products is significantly lower than the growth of relevant rates. The latter often increased by 30-40% per year. For comparison: the average growth rate of the minimum excise burden on cigarettes was 28.65% for the period and 4.77% per year in the post-socialist EU countries in 2012-2018²³. Moreover, in Ukraine only in 2016-2019 the share of the illegal tobacco market grew from 0.2% to 6.5%, and the volume of sales of smuggled and counterfeit cigarettes grew from 2.6 to 3.5 billion units only during 2019²⁴.

The experience, in particular that of EU countries, suggests the following conclusions: raising excise rates without taking into account the consumer purchasing power harms the development of the tobacco market, undermines the stability of tax revenues and most often leads to the formation of sizable unregulated illegal markets. However, when the affordability of tobacco products, first of all, cigarettes, is taken into account, then excise rates and revenues therefrom can be increased, the consumption will go down, while the illegal trade stays under control²⁵.

Taking into account the recommendations of foreign and domestic researchers²⁶ and modern trends in the transformation of the tobacco market, when forming the excise policy in the field of tobacco products and nicotine-containing products, it is necessary to:

²⁰ Project SUN. A Study of the Illicit Cigarette Market in the European Union, Norway and Switzerland. KPMG Report, 2015 Results. URL: <https://assets.kpmg/content/dam/kpmg/pdf/2016/06/project-sun-report.pdf>; Project SUN. A Study of the Illicit Cigarette Market in the European Union, Norway and Switzerland. KPMG Report, 2017 Results. URL: https://assets.kpmg/content/dam/kpmg/uk/pdf/2018/07/project_sun_executive_summary_2018.pdf.

²¹ Sokolovska A. M., Rainova L. B., Harmonization of Excise Taxation of Tobacco Products. *Economics and Forecasting*. 2017. No. 2. P. 98, 100-102.

²² Ganev P. Excise Taxation of Tobacco Products in Bulgaria - Review and Recommendations. Review and Analysis of Excise Taxation of Tobacco Products in Bulgaria in the 2007-2013 Period and Recommendations in view of Achieving New EU Requirements by 2018. IME Analysis. October 2013. URL: https://ime.bg/var/images/IME_excise_tobacco_report_2013_EN.pdf.

²³ Dialectics of Reforming the Excise Taxation of Tobacco Products in Ukraine: The European Integration Aspect / Ed. by V. I. Korotun. K.: Alerta, 2018. P. 46, 65-67.

²⁴ Based on TNS Kantar data.

²⁵ Cooper A., Witt D. The Linkage Between Tax Burden and Illicit Trade of Excisable Products: The Example of Tobacco. *World Customs Journal*. 2012. Vol 6. No. 2. P. 54-55. URL: [http://worldcustomsjournal.org/Archives/Volume%206,%20Number%202%20\(Sep%202012\)/06%20Cooper_Witt.pdf](http://worldcustomsjournal.org/Archives/Volume%206,%20Number%202%20(Sep%202012)/06%20Cooper_Witt.pdf).

²⁶ Tobacco Taxation: Theory and Practice by Arthur B. Laffer, Ph.D. The Laffer Center at the Pacific Research Institute. San Francisco, 2014; Tax Harmonisation in Ukraine In Terms of the Association Agreement Between Ukraine and the EU: Monograph / ed. A. M. Sokolovska; Academy of Financial Management. Kyiv, 2017. 448 p.; The Transformation of Excise Policy of Ukraine: Monograph / [V.I. Korotun, S.S. Brekhov, N.V. Novytska, et al.] Ed. by V. I. Korotun. – Irpin: Publishing House of the National University of the SFS of Ukraine, 2015. 404 p.; A.M. Sokolovska, Ya.V. Petrakov. Harmonisation of the Administration of Excise Duty in Ukraine in the Process of Implementing the Association Agreement. *Business Inform*. 2017. No. 11. Pp. 389-394.

- firstly, choose a balanced approach to defining excisable goods and establishing their excise duty burden;
- secondly, ensure that increases in excise rates are translated into adequate increases in budget revenues, and that the excise duty system contributes to reducing the consumption primarily of the most harmful products;
- thirdly, since the price elasticity of demand for tobacco products is quite low, it is possible to tighten the fiscal role of their excise taxation only as long as the positive effect of higher excise duty revenues offsets the negative effects of a rate increase in relation to the impact on macroeconomic processes;
- fourthly, it is necessary to ensure a high level of efficiency of the system of administering the excise duties, which should promote the maximum collection of tax revenue without violating the rights of taxpayers and be as simple as possible for the latter.

However, each country must find an answer to the question of what its excise policy on tobacco products should be and what are the conditions for its successful implementation. It would seem that it is necessary to only give scientific credence and implement optimal changes in the use of the fiscal and regulatory potential of excise taxation, and the desired changes will quickly follow. But in practice, it is not easy to find the optimum and achieve positive results in reforming the tax mechanisms. Even in developed economies, changes in taxation often fall short of expectations, and for Ukraine, the problem of avoiding numerous "pitfalls" on the path of developing an effective excise policy is very acute. This complicates the adoption of tax decisions and requires a heterogeneous analysis of their impact on the institutional environment.

It is possible to distinguish, representing three dimensions of the institutional environment in the form of a pyramid: formal institutions (vertex), informal institutions, cultural traditions and values (foundation). It is important to take into account the peculiarities of transformation of each of these levels.

Firstly, different levels of the institutional environment change at different rates. The laws on increasing the rates of excise taxes on cigarettes for fiscal purposes, as well as adapting domestic taxation to the harmonised EU standards and restrictions on tobacco smoking, can be adopted fairly quickly. Yet, the informal rules supporting the spread of illegal tobacco business are significantly less likely to undergo change aimed at achieving socially beneficial goals. The greatest inertia is typical for established traditions and values (fiscal mentality, the habit of smoking cheap illegal cigarettes). They are not rebuilt after changes in formal norms and by the example of some, even very influential, economic actors. If the desired changes still occur, this process takes a lot of time. Still, no country has been able to significantly increase the revenue from excise duty on tobacco products, avoiding the

curtailment of the legal production of these excisable goods, or radically reduce smoking's appeal.

Secondly, the instruments of influence on different levels of the institutional environment are also different. The Parliament can approve laws that increase excise rates. But in order to encourage market participants not to reduce their legal business activities (not to adjust their informal behaviour patterns and business strategies), it is required to at least improve the regulation (a persistent administrative support) and maintain the profitable and legally operating tobacco companies in the market for a certain time. To influence the cultural layers, not even this is sufficient. It is also necessary to convince people that the purchase of cheap products offered by the illegal market reduces government revenues; smoking, especially of combustible tobacco products, increases the risk (exacerbation) of dangerous diseases. An important role in this is given to mass media, which, however, can not quickly change the public opinion²⁷.

Institutions are also not isolated from each other. The rules governing economic processes are closely intertwined. It is impossible to make large-scale changes in one sphere, without revising the consequences in adjacent ones. For example, it is possible to increase sanctions for violation of tax and special legislation, but if you do not improve taxation in general and the supervisory role of the government in the market in particular, it is useless to hope for improvement of tax compliance. The increase of excise rates without introducing measures to prevent misuse is associated with the risk of increasing the illegal turnover of excisable goods with negative consequences for fiscal revenues. In the course of economic (tax) transformations, it is necessary to take into account the principle of institutional complementarity, according to which institutions complement each other and the desired economic (fiscal) effect can only be achieved on the basis of interconnected institutional changes²⁸.

Changes in taxation often involve the reduction of financial resources of some economic agents, which usually perceive it negatively and block the process. The business sector often tries to prevent the adoption of laws to raise tax rates, and if this fails, looks for opportunities not to fully meet the new fiscal obligations. In particular, it can be seen in the relocation of production to the countries with a more favourable tax climate, more active payments of excise duty just before its growth, a higher level of tax evasion by certain market actors. As a result, the government receives less fiscal revenues than due. The expected changes in redistributive processes do not

²⁷ Dialectics of Reforming the Excise Taxation of Tobacco Products in Ukraine: The European Integration Aspect / Ed. by V. I. Korotun. K.: Alerta, 2018. P. 9-10.

²⁸ Amable B. Institutional Complementarity and Diversity of Social System of Innovation and Production. Discussion Paper FS/99-309, 1999. URL: <http://skylla.wz-berlin.de/pdf/1999/i99-309.pdf>.

occur. The economic effect of tax (institutional) transformation is often, completely or partially, offset by the influence of the inertial mass of the entire institutional environment.

Taking into account the above, we consider the following to be institutional requirements for the formation and implementation of the state excise policy, in general, and in the sphere of tobacco products, in particular:

1) *compromise*. It is necessary to balance the interests of the government, the business sector and citizens in such a manner that all these entities are comparably satisfied with the GDP redistribution. It is necessary to accumulate maximum excise duty revenues without suppressing the economic activity; the government expenditures (in particular, at the expense of excise revenues) must ensure an optimal combination of economic and social measures;

2) *complementarity of tax changes*. Excise innovations should be consistent with other legislative norms, anticipate measures to influence the informal level of the institutional environment and be positively perceived by the public. And when advocating changes in excise taxation, it should be stressed that ineffective tax mechanisms are harmful. After all, by slowing down GDP growth, they even turn against those who initially received a profit from them;

3) *rejection of radical tax initiatives* that create a threat of fiscal losses (instead of a positive economic effect and an increase in the government revenue) because of the impossibility of quick response to them by economic actors. A reform of the excise taxation of tobacco products must be predictable, carried out not by the "big jump" method but gradually, simultaneously with changes in the institutional environment;

4) *stability and flexibility*. An excise policy should, on the one hand, be consistent with certain strategic directions of modification of excise taxation, and on the other hand – to respond quickly to changes in the socio-economic and fiscal processes.

In addition to that, an excise policy on alternative products for nicotine consumption should take into account a number of relevant circumstances. Despite the adopted international instruments on smoking control, *products with reduced risk for human health require more tolerant excise taxes than cigarettes*. It is relevant given the following.

Firstly, in terms of increasing excise duty rates for cigarettes, the grey market of cigarettes (namely, the most harmful products often manufactured under unsanitary conditions) and loose tobacco grows²⁹. To prevent this distortion of the regulatory impact of taxation, it is necessary to offer a potentially less harmful

²⁹ This trend is characteristic primarily of post-socialist countries with a high pace of rate growth.

alternative to those who do not quit smoking. An excise duty policy must contribute to a decrease in the number of smokers and the volume of tobacco use or at least a transition to the consumption of less harmful legal products (because it takes time to quit a bad habit).

Secondly, it is no less important that if this approach is used in taxation, the budget will receive more revenue (illegal products are not taxed, so they are much cheaper than legal products; price availability generates demand). It is also necessary to take into account that the curtailment of the legal tobacco business has a negative impact not only on excise duty revenues, but also on VAT, income tax, etc.

Thirdly, one of the basic approaches to determining the excise duty burden on alcoholic beverages is to differentiate the tax rate depending on its strength (negative impact on human health). Therefore, quite possibly, the further spread of novel tobacco products and nicotine-containing products with a potentially lower health risk may lead to a reconsideration of the idea of an optimal level of taxation of these excisable goods, depending on their type. It can be used to implement the global approach of *tobacco harm reduction* used in developed countries to reduce public health risks from this habit³⁰.

The Guidelines for implementation of Article 6 of the WHO Framework Convention on Tobacco Control offer the set of best practices of taxation of tobacco products³¹. One of the key guidelines for countries is to tax tobacco products *in a comparable way*, ensuring that increases in excise duty rates and prices do not trigger the replacement of cigarettes with the consumption of cheaper products. In cases when the products are similar in their level of harm to human health, this strategy is sound. But with the spread of less harmful tobacco products, depending on the level of risk or harm to health, it is advisable to differentiate excise rates according to relative risks. The focus has to be on reducing the demand for more harmful products³².

Fourthly, differentiation of the level of the excise duty burden of alternative products for nicotine consumption and cigarettes can be considered as advisable also because the possibility of high effectiveness in combating smoking by raising excise duty rates is often questioned. In particular, in 2014-2017, in EU Member States,

³⁰ Fruits E. Vapor products, harm reduction, and taxation. Principles, evidence, and a research agenda. International Centre for Law & Economics. 2018. P. 1. URL: <https://laweconcenter.org/wp-content/uploads/2018/10/Harm-Reduction-White-Paper-v9.1-181001.pdf>.

³¹ Guidelines for implementation of Article 6 of the WHO FCTC. Price and tax measures to reduce the demand for tobacco. WHO, 2018. URL: https://www.who.int/fctc/treaty_instruments/Guidelines_Article_6_English.pdf?ua=1.

³² Reducing Social Inequalities in Cancer: Evidence and Priorities for Research. IARC Scientific Publication No. 168. Ed. by Vaccarella S, Lortet-Tieulent J, Saracci R, Conway D. I, Straif K, Wild C. P. 2019. IARC Scientific Publication No. 168. WHO Press, World Health Organization, Switzerland. P. 158. URL: https://publications.iarc.fr/_publications/media/download/5768/2ede2d8620766fd85bf922^8c91ec123274f1.pdf.

despite the excise duty increase, the prevalence of smoking dropped only from 26.2% to 25.9%³³.

There is a consensus in political circles that an increase of excise duties on tobacco products reduces cigarettes consumption. But conclusions that an increase in taxes on cigarettes leads to a small reduction in tobacco products consumption were also made. A significant increase in taxes, for example by 100%, is required to reduce smoking among adults by 5%³⁴. If there are such complications on the way of combating smoking in general, then it makes sense to regulate consumption of tobacco products according to their harm level.

Other researchers' opinion regarding the fact that heated tobacco products and e-cigarettes require a more tolerant excise taxation than cigarettes are generalised in Annex A.

Let us emphasize that e-cigarettes (both novel products for nicotine consumption and those using nicotine-free liquids) can be considered as an item of excise taxation by analogy with traditional tobacco products that contain tobacco. However, the decision on excise taxation of e-cigarettes should be adopted taking into account the size of the national market thereof and the cost of administering such tax. Given the possible trend of increasing consumption of the latter products in the face of rising excise rates for cigarettes and other tobacco products (including heated tobacco products), the relevance of excise duty charges for e-cigarettes will increase. In addition, given the mixed effects of e-cigarettes of illicit origin, it is advisable to apply moderate excise rates for these nicotine-use products in order to prevent the growth of this segment of the grey market.

Equally important in reforming the excise duty of tobacco products and their alternatives in Ukraine is the consideration of European integration objectives and priorities. According to Annex XXVIII to Chapter 4 "Taxation" of Section V "Economic and Sector Cooperation" of the Association Agreement between Ukraine and the EU³⁵, it is necessary to "approximate" the national legislation to the EU law on excise taxation of tobacco products in respect of the following Directives:

- Article 1 of Council Directive 2008/118/EU dated 16 December 2008 concerning the general arrangements for excise duty and repealing Council Directive 92/12/EEC (within two years from the date of entry into force of the Agreement);

³³ Commission staff working document. Evaluation of the Council Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco. February 2020. P. 35. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/10-02-2020-tobacco-taxation-report.pdf?fbclid=IwAR1uqPEEeWpOQsnJmY3ngW1P7uFKPCRi2mWu mz9 GXX9CZWptBEmmO9JJgc.

³⁴ Callison K., Kaestner R. Do Higher Tobacco Taxes Reduce Adult Smoking? New Evidence of the Effect of Recent Cigarette Tax Increases on Adult Smoking. NBER Working Paper No. 18326. Issued in August 2012. URL: <https://www.nber.org/papers/w18326>.

³⁵ The Association Agreement between Ukraine, on the one hand, and the European Union, the European Atomic Energy Community and their Member States, on the other hand, dated 21 March, 27 June 2014. URL: http://www.kmu.gov.ua/control/publish/article?art_id=246581344.

- Council Directive 2011/64/EU dated 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco (codification) within 2 years from the date of entry into force of the Agreement (except for Articles 7(2), 8, 9, 10, 11, 12, 14(1), 14(2), 14(4), 18, 19, the implementation schedule for which will be established by the Association Council later). The exceptions also apply to tax rates.

Council Directive 2011/64/EU dated 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco (codification)³⁶ defines the basic principles for harmonizing the structure and rates of excise duty applied to tobacco products (manufactured tobacco) but does not establish requirements for excise duty applied to heated tobacco products and e-cigarettes. However, despite the absence of EU legislation directly regulating the excise taxation of these alternative products, in 2018, the Report from the European Commission to the EU Council on the specifics of the application of the provisions of the Directive³⁷ formulated the relevant official position of the European Union.

The European Commission, concerned that EU countries will implement different national excise duty systems for *heated tobacco products*, which will hinder the further development of a harmonised approach in this area, recommends that these products be taxed according to the approaches (including the rates) used for the harmonised excisable category "*other smoking tobaccos*"³⁸. Excise duty rates for the latter category are set in a fixed amount determined per unit of weight in kilograms. The European Commission emphasizes the importance of using such an approach, as it is impossible to predict what innovations in the market of heated tobacco products will appear in the future, given that a specific rate for these products is advisable to set per unit of weight³⁹. It should be noted that heated tobacco products with tobacco capsules have already been released to the global market (for example, for Ploom Tech heated systems).

The European Commission also recognizes the right of national governments to introduce non-harmonised excises for *e-cigarettes*, noting that a number of countries have already done so (Italy, Greece, Latvia, Portugal, Romania, Slovenia, Hungary, Finland, and Croatia). However, given the limited information available on these products, including the human health effect of their consumption (the available findings of various medical studies are controversial in confirming the reduced risk of

³⁶ On the structure and rates of excise duty applied to manufactured tobacco (codification): Council Directive of 21 June 2011 (2011/64/EU). URL: <http://www.minjust.gov.ua/45885>.

³⁷ Report from the Commission to the Council on Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. 12.01.2018. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/report_excise_duty_manufactured_tobacco_12012018_en.pdf

³⁸ Report from the Commission to the Council on Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. 12.01.2018. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/report_excise_duty_manufactured_tobacco_12012018_en.pdf

³⁹ Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. Final Report. May 2017. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/study_on_directive-2011_64_main_text_en.pdf.

consumption), this body makes suggestions for caution in forming a harmonised approach to excise taxation thereof. In addition, the Report refers to relatively small fiscal losses from replacing the consumption of regular cigarettes with electronic cigarettes, as well as possible complications in the administration of excise duty.

It is also important to bear in mind that the Directive 2014/40/EU of the European Parliament and of the Council, which entered into force on May 20, 2016, introduced, inter alia, specific requirements for packaging, labelling, safety, monitoring of consumption of e-cigarettes and provision of information thereon. The period of implementation of these provisions of European law is short and therefore no reliable database on these products has been created to develop a harmonised approach to excise taxation thereof. The European Commission therefore refrained from providing clear recommendations on the levying of excise duty on e-cigarettes until the relevant information gap has been filled (publication of the next report on the implementation peculiarities of the provisions of Directive 2011/64/EU)⁴⁰.

As of February 2020, the above recommendations of the European Commission regarding the excise taxation of heated tobacco products and e-cigarettes were not amended⁴¹. The majority of EU countries adhere to them. Respective national approaches are detailed in Chapter 2.1.

1.2. Types and general approaches to the classification of novel tobacco products and nicotine-containing products

As discussed in the previous Chapter, the complication of relevant regulatory rules, continuous excise duty rates growth and promotion of healthy lifestyles drive the transformational processes in the global tobacco products market, including Ukraine. Given this, *novel tobacco products and nicotine-containing products* that offer alternative ways and forms of tobacco and nicotine consumption and replace the need for cigarettes become widespread. Market release of these new products emphasises the need to study their types and physical characteristics. It is important for the development of state regulations of their manufacture and turnover, in general, and taxation thereof, in particular.

According to the terminology of the *WHO Framework Convention on Tobacco Control* (hereinafter referred to as *FCTC*), novel tobacco products and nicotine-containing products cover such categories: e-cigarettes, in particular,

⁴⁰ Report from the Commission to the Council on Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. 12.01.2018. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/report_excise_duty_manufactured_tobacco_12012018_en.pdf.

⁴¹ Commission staff working document. Evaluation of the Council Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco. February 2020. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/10-02-2020-tobacco-taxation-report.pdf?fbclid=IwAR1uqPEEeWpOaQsnJ_mY3ngW1P7uFKPCRi2mWumz9GXX9CZWptBEmm09JJgc.

electronic nicotine delivery systems, electronic non-nicotine delivery systems, and heated tobacco products (Fig. 1.1)^{42;43}.

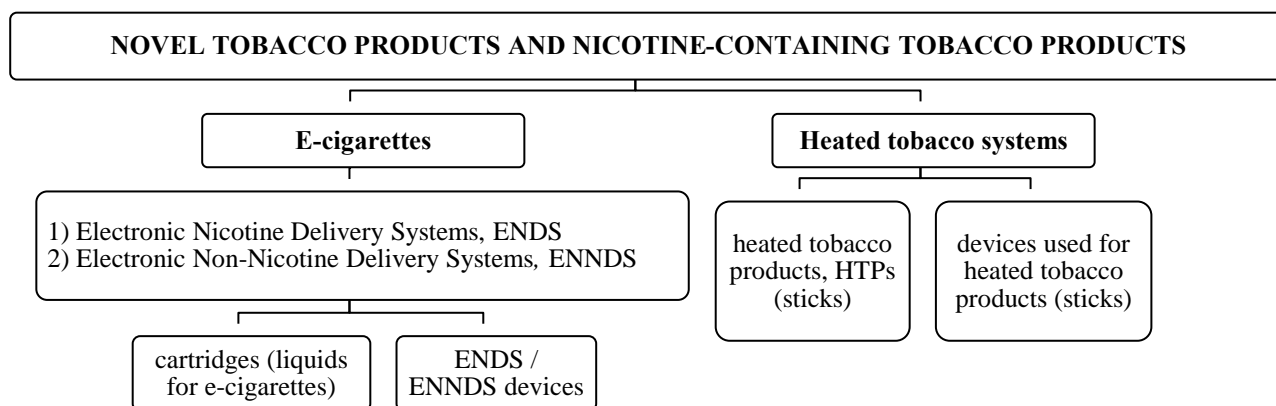


Fig. 1.1. Types of novel tobacco products and nicotine-containing tobacco products

Source: Information Note on classification of novel and emerging tobacco products. Secretariat of the WHO Framework Convention on Tobacco Control. URL: https://untobaccocontrol.org/impldb/wp-content/uploads/Info-Note_Novel-Classification_EN.pdf.

Considering the mentioned WHO approach to the categorization of novel tobacco products and nicotine-containing products, it worth noting that there is a terminological inconsistency in international documents. As illustrated in Fig. 1.1, both types of products consist of two main components that form systems for tobacco and nicotine consumption⁴⁴: apparatus (device) and consumables (tobacco sticks, cartridges, liquid for e-cigarettes⁴⁵). Thus, two systems are considered as novel tobacco products and nicotine-containing products: e-cigarettes (as nicotine delivery or non-nicotine delivery systems) and heated tobacco products.

WHO identifies an electronic nicotine or non-nicotine delivery system, commercially known as an electronic cigarette (e-cigarette, vape, vape pen, electronic hookah, electronic pipe, electronic cigar), as "a device having a cartridge with a heater that vaporizes liquid nicotine (electronic liquid) into an aerosol, which often contains flavours, usually dissolved in propylene glycol/ glycerin"⁴⁶.

⁴² The Convention Secretariat calls Parties to remain vigilant towards novel and emerging nicotine and tobacco products. FCTC. URL: https://www.who.int/fctc/mediacentre/news/2019/remain-vigilant-towards-novel-new-nicotine-tobacco-products/en/?fbclid=IwAR17luxh_orMR40XtA5sqq42jGrZy7BxK_dnbRasVn_0YRQVJq_NN_oA1WEwFE#R1.

⁴³ Information Note on classification of novel and emerging tobacco products. Secretariat of the WHO Framework Convention on Tobacco Control. URL: https://untobaccocontrol.org/impldb/wp-content/uploads/Info-Note_Novel-Classification_EN.pdf.

⁴⁴ E-Cigarettes And Heat-Not-Burn Systems: Technology And Risks For Public Health. Tobacco Tactics. URL: <https://tobaccotactics.tobaccocontrol.org.ua/novi-produkti-tyutyunovoyi-industriyi/novi-produkti-tyutyunovoyi-industriyi-full/>.

⁴⁵ Liquid for e-cigarettes sometimes is called e-liquid, e-juice, vape juice or vape liquid.

⁴⁶ Information Note on classification of novel and emerging tobacco products. Secretariat of the WHO Framework Convention on Tobacco Control. URL: https://untobaccocontrol.org/impldb/wp-content/uploads/Info-Note_Novel-Classification_EN.pdf.

The EU laws, according to the European Parliament and Council Directive 2014/40/EU on the approximation of laws regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EU dated 3 April 2014⁴⁷(Directive 2001/37/EU), an *electronic cigarette* is a product that can be used for the consumption of nicotine vapour via a mouth piece or any component of such product, including a cartridge, a tank and a device without a cartridge or tank. E-cigarettes can be disposable or refillable by means of a refill container and a tank, or rechargeable with single-use cartridges. Directive 2014/40/EU also defines a "refill container" as a receptacle that contains a nicotine-containing liquid that can be used to refill an e-cigarette.

A heated tobacco system consists of a holder, charger and consumables – a heated tobacco product (a stick). However, international regulations contain only the definition of consumables. Accordingly to the WHO terminology, heated tobacco products are "tobacco products that emit aerosols containing nicotine and other chemicals that are inhaled by consumers through the mouth". EU laws contain no definition of heated tobacco products, while such products fall into the category of "*novel tobacco products*", which means "a tobacco product that: a) does not fall into any of the following categories: cigarettes, roll-your-own tobacco, pipe tobacco, waterpipe tobacco, cigar, cigarillos, chewing tobacco, nasal tobacco and tobacco for oral use; and b) is placed on the market after 19 May 2014"⁴⁸.

Basic differences between novel tobacco products and nicotine-containing products are summarized in Table 1.1. It is worth pointing out that the distinction between these types of products is important in determining the approaches to taxation thereof and the specifics of the collection of relevant excise duties.

Table 1.1

Characteristic features of cigarettes, heated tobacco products and e-cigarettes

Characteristic feature	Cigarettes	Heated tobacco products	E-cigarettes
1	2	3	4
<i>Main component (consumables)</i>	Tobacco cut-filler, formed into a cylinder made of cigarette paper	The reconstituted tobacco cast-leaf with water, cellulose fiber, glycerin, and guar gum, formed into a tobacco stick	A solution (e-liquid) with or without nicotine, which contains propylene glycol, vegetable glycerin, water and flavourings
<i>Adding nicotine</i> ⁴⁹	Tobacco used in the product contains nicotine		Nicotine is extracted from tobacco (synthetic) and added to the liquid used in the product (can be nicotine-free)

⁴⁷ On the approximation of laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC. European Parliament and Council Directive dated 3 April 2014 (2014/40/EU). URL: <https://www.kmu.gov.Ua/storage/app/sites/1/55-GOEEI/2014-40-es.pdf>.

⁴⁸ Ibid.

⁴⁹ Nicotine is a natural, non-carcinogenic substance contained in tobacco products and e-cigarette fluids, the consumption of which is addictive. Exceeding the permissible concentration of nicotine can lead to poisoning.

Table 1.1 (cont.)

1	2	3	4
<i>Way of consumption</i>	Combustion of tobacco	Processed tobacco is heated by means of an electronic device to produce an aerosol	Liquid vaporization
<i>Risks for health</i>	Tobacco smoke contains harmful compounds: <i>nicotine and other alkaloids; carcinogenic substances</i> (aromatic hydrocarbons, benzopyrene, phenols, organic compounds, inorganic arsenic and cadmium compounds, radioactive substances); <i>irritant agents</i> (carbon monoxide); <i>poisonous gases</i> (hydrogen sulfide, hydrogen cyanide, etc.); other combustion products	The nicotine-containing aerosol emitted in the process of heating is less toxic than the smoke of regular cigarettes due to the absence of combustion process. But still, these products are not completely safe, as nicotine and volatile organic compounds, polycyclic aromatic hydrocarbons, carbon oxide are emitted during consumption. There is no research data regarding long-term effects of consumption of such novel products on human health	The aerosol emitted by e-cigarettes is less harmful than tobacco smoke. However, consumption of e-liquids causes risks associated with the concentration of nicotine and other harmful substances. These include flavourings, colouring agents, chemicals causing severe lung diseases (diacetyl); volatile organic compounds; heavy metals (nickel, pewter, and lead) ⁵⁰
	Consumption of cigarettes causes an increased risk of cardiovascular and respiratory diseases. Also, there is a higher risk of passive smokers having these diseases		It significantly increases the toxicity of e-cigarette aerosol and can cause diseases

Source: Heated tobacco products: how are they different from, and similar to, e-cigarettes? URL: <https://www.pmi.com/our-science/difference-between-heated-tobacco-products-and-ecigarettes>; WHO Report on the Global Tobacco Epidemic. World Health Organization 2019. URL: <https://apps.who.int/iris/bitstream/handle/10665/326043/9789241516204-eng.pdf?ua=1>; Auer R., Concha-Lozano N., Jacot-Sadowski I. Heat-Not-Burn Tobacco Cigarettes: Smoke by Any Other Name. 2017. URL: <https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2628970>.

A *cigarette* has a filter, fine-cut tobacco formed into a cylinder made of cigarette paper, and other chemical additives and components. Consumption of such products requires a combustion process that generates a cigarette smoke containing nicotine and other harmful components inhaled by a consumer.

Unlike cigarettes, *heated tobacco products* do not burn tobacco but heat it to a certain temperature using devices and generate aerosol for inhalation⁵¹ (Fig. B.1 of Annex B). There is neither combustion nor harmful products like carbon monoxide, ammonia, carcinogenic tars and similar.

Heated tobacco products (sticks) have the following characteristics. Firstly, sticks contain reconstituted tobacco, the production process of which includes

⁵⁰ E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General. Atlanta, GA : U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016. URL: https://www.cdc.gov/tobacco/data_statistics/sgr/e-cigarettes/pdfs/2016_sgr_entire_report_508.pdf.

⁵¹ E-Cigarettes And Heat-Not-Burn Systems: Technology And Risks For Public Health. Tobacco Tactics. URL: <https://tobaccotactics.tobaccocontrol.org.ua/novi-produkti-tyutyunovoyi-industriyi/novi-produkti-tyutyunovoyi-industriyi-full/>.

tobacco shredding and its moisturising with glycerin/propylene glycol⁵². The obtained mixture is shaped into thin plates, dried and then gets shredded again⁵³. Moreover, there is an aluminium foil inside the sticks designed to prevent tobacco combustion. Secondly, a tobacco stick has a significantly less amount of tobacco compared to a cigarette. The weight of a stick tobacco cylinder is approximately 320 mg, while the shredded mixture of a cigarette weights 550-700 mg. Thirdly, a tobacco stick has two independent filters: 1) a biopolymer film to cool the aerosol and 2) an acetate filter to simulate the sensory aspects of a cigarette⁵⁴.

Heated tobacco products are an alternative to cigarettes, which can help to reduce the risk of harmful effects of tobacco smoke on the health of smokers who abandon traditional tobacco products or can not quit smoking. Although sticks look like cigarettes, the aerosol produced as a result of sticks heating contains 90-95% less toxic substances than cigarette smoke. It also generates less odour than smoking cigarettes and produces no ash. However, not only WHO doesn't recognize heated products as safe for health, but it also emphasizes the lack of reliable evidence validating a lower level of harm of these products⁵⁵. The latter point runs counter to conclusions of a number of some reputable toxicology research mentioned in Chapter 1.1.

E-cigarettes are portable devices consisting of a cascade cartridge for liquid, a vaporization chamber and a battery. They are used as a personal inhaler producing aerosol inhaled by a consumer⁵⁶ (Fig. B.1 of Annex B).

E-cigarette heats the chemical solution (nicotine/non-nicotine "e-liquid", glycerin, propylene glycol, flavourings and other ingredients)^{57,58} (Fig. B.2 of Annex B), which is a consumable and by its physical composition fundamentally distinguishes the obtained cigarette smoke and aerosol created by heated tobacco products.

It is worth noting that e-cigarettes belong to the products category that is quickly developing and getting diversified. Since its global market release in 2003, the assortment of these products has been extended to the fourth generation (see Annex C).

⁵² Water, cellulose fibre, glycerol, guar gum and flavourings are added to tobacco to form a tobacco cylinder.

⁵³ Maurice R. Smith, Bruce Clark, Frank Ludicke, Jean-Pierre Schaller, Patrick Vanscheeuwijck, Julia Hoeng, Manuel C. Peitsch. Evaluation of the Tobacco Heating System 2.2. Part 1: Description of the system and the scientific assessment program. URL: <https://www.ncbi.nlm.nih.gov/pubmed/27450400>.

⁵⁴ Ibid.

⁵⁵ Heated tobacco products (HTPs) information sheet. WHO. URL: https://www.who.int/tobacco/publications/prod_regulation/heated-tobacco-products/en/.

⁵⁶ E-Cigarettes (Vaping). URL: <https://www.csbsju.edu/chp/health-promotion/health-resources/e-cigarettes>.

⁵⁷ It should be noted that both propylene glycol and vegetable glycerol are non-toxic organic compounds. They are generally considered to be safe for consumption and used in e-liquids to get aerosols imitating cigarette smoke. These substances are used in the food industry, as well as the production of cosmetic goods and pharmaceutical products.

⁵⁸ Propylene Glycol vs. Vegetable Glycerin E-Liquid - What's the Difference? 2013. URL: <https://vape-ranks.com/propylene-glycol-vs-vegetable-glycerin-e-liquid-whats-the-difference/>

E-cigarettes can be classified⁵⁹ by the following criteria:

- frequency of use: disposable and reusable;
- type of cartridge/container of the vaporizing liquid: opened and closed type;
- type of atomiser: RDA, RTA, RDTA, cartomiser, clearomiser, tank atomiser, genesis;
- type of control: manual or automatic⁶⁰.

Classification of these products by frequency of use and cartridge type for e-liquid is the most important in determining the base of excise duty on electronic cigarettes.

Disposable e-cigarettes need no cartridge replacement or refilling and can either contain nicotine or be nicotine-free. *Reusable e-cigarettes* differ in size, appearance, battery, vaporizing system and liquid content. They also have cartridges that can be refilled (see Annex D).

As it was mentioned earlier, e-cigarettes can have an *open* and *closed type of cartridge/container*. Therefore, liquids for e-cigarettes are available on the market in ready to use cartridges/containers or small glass bottles of various forms and volumes⁶¹. Open type system requires refilling of a reusable container with a liquid by a consumer. Since there is no way for the government to control the content of liquids, the use of devices of such type creates health risks, in particular, poisoning if the permissible concentration of nicotine is exceeded or if poor-quality liquid is used. Closed type systems require the use of replacement cartridges/containers filled with liquid by the producer. They prevent the possibility of adding other ingredients.

It is worth noting that open type systems pose the most significant risks for consumers' health as they allow the possibility to use self-made liquids with added unsafe substances (drugs, alcohol). Also, ingredients that are deemed to be beneficial to health, namely vitamin E, are also widely used in liquids for e-cigarettes. However, this substance is dangerous when inhaled and may cause such symptoms as coughing, asphyxiation, and chest pain.

Unlike open type systems, closed type e-cigarettes are more acceptable for government control of their manufacture and turnover. As mentioned earlier, liquids for e-cigarettes contain substances also used in the food, cosmetics and pharmaceutical industries, in particular, propylene glycol, glycerol, etc. Their turnover is not subject to special government control. This enables misuses and tax

⁵⁹ E-Cigarettes: Assessment Of The Situation And Regulatory Needs In Ukraine. Executive summary. *World Health Organization, Ukraine*, 2018. URL: https://drive.google.com/file/d/1KqQ40IC_wq_2jyACGBNNytPpYbhXxPnUh/view.

⁶⁰ Ibid.

⁶¹ E-Cigarettes And Heat-Not-Burn Systems: Technology And Risks For Public Health. *Tobacco Tactics*. URL: <https://tobaccotactics.tobaccocontrol.org.ua/novi-produkti-tyutyunovoyi-indutriyi/novi-produkti-tyutyunovoyi-industriyi-full/>.

evasion, as well as distortion of statistical information regarding volumes of manufacture, import, export and sales of liquids used for refilling e-cigarettes.

A tax verification system (excise stamps) can be used for e-cigarettes of closed type. It will ensure the verification of goods authenticity and fulfilment of excise duty payment. Moreover, as it was already mentioned, this type of product is safer for consumer's health, as closed type cartridges/containers cannot be opened, counterfeited or mixed with a poor-quality liquid, which is mostly illegal or exceeds the nicotine content. The manufacturer of these products is responsible for the content and quality of the liquid in the cartridge/container, which is produced according to international standards.

WHO underlines that today e-cigarettes are on the stage of assertion in the market. This fact generates both threats to and potential for control over tobacco. There are proofs that these novel products pose fewer risks for health if compared to conventional cigarettes, while they are not safe. It is known that vaping is connected to risks of cardiovascular and respiratory diseases and can also harm pregnant women. Risks of eye and respiratory irritation can be short-term effects of e-cigarettes consumption. Studies of long-term effects are still in process.

Characteristics of main types of novel tobacco products and nicotine-containing products, as well as a potentially lower risk of their consumption for human health compared to cigarettes, are important factors in developing the excise taxation systems for such products. Taking into account such components of novel tobacco products and nicotine-containing products as apparatus (device) and consumables (sticks, e-liquid), and the characteristics of their functioning is essential in determining the basis of excise taxation and the development of measures for government regulation of manufacture and turnover of these goods.

In view of the above, the study of the place of such novel products in the multi-purpose⁶² international nomenclature for coding, description and classification of goods/products – *Harmonized Commodity Description and Coding Systems*, (*Harmonized System*) developed by *World Customs Organization (WCO)* shall be the *high-priority task*. Given the development of the market of novel tobacco products and nicotine-containing products and the necessity to implement measures of state regulation of the latter, we shall elaborate on the customs classification of the Harmonized System for each category – e-cigarettes and heated tobacco systems.

⁶² The purpose of a harmonised system was to facilitate trade and information exchange in international trade. National governments, international organizations and the private sector use it for the following: designing the customs tariffs; collecting foreign trade statistics; domestic taxation purposes; developing trade strategies and programmes; monitoring controlled commodities; determining the rules of goods origin; elaboration of freight tariffs; collecting the transport statistics data; price monitoring; quotas control; making national accounts; and for the purposes of economic analysis and research.

As discussed earlier, novel tobacco products and nicotine-containing products are the alternatives to conventional tobacco products that significantly differ from the latter and from each other in their physical composition and aspects of use. Heated tobacco products contain nicotine, while cartridges/containers of e-cigarettes contain a nicotine or non-nicotine chemical solution. It was the determinant for approving the classification decisions in 2011 at the 46th and 47th sessions of the *Harmonized System Committee of the World Customs Organization*.

Thus, in the current commodity classification of the Harmonized System, the components of novel tobacco products and nicotine-containing products fall into three different categories. Hence, consumables of heated tobacco products fall under Chapter 24 "Tobacco and manufactured tobacco substitutes", while e-cigarette consumables fall under Chapter 38 "Miscellaneous chemical products"; devices fall under Chapter 85 "Electrical machinery..." (see Table 1.2) This decision is detailed in the Information Note on the classification of novel and emerging tobacco products⁶³ of FCTC Secretariat aimed to provide recommendations regarding the introduction of new categories and proper classification of products by national regulators.

Table 1.2

Current classification of systems components of novel tobacco products and nicotine-containing products according to the Harmonized Commodity Description and Coding System

Systems components	Heated tobacco systems	Harmonized System Chapter	E-cigarettes	Harmonized System Chapter
Consumables	Heated tobacco units do not have a specific customs code and fall under the subheading of "other" (2403.99)	Chapter 24 "Tobacco and manufactured tobacco substitutes"	Cartridges (e-liquids) for ENDS do not have a specific customs code and fall under the subheading of "other" in chapter 38, which concerns	Chapter 38 "Miscellaneous chemical products"
Apparatus (device)	Devices used to heat tobacco units (heated tobacco products) do not have a specific customs code and fall under the subheading of "other machines and apparatus" (8543.70)	Chapter 85 "Electrical machinery..."	Devices of ENDS do not have a specific customs code and fall under the subheading of "other machines and apparatus" (8543.70)	Chapter 85 "Electrical machinery..."

Source: Information Note on classification of novel and emerging tobacco products. FCTC. URL: https://untobaccocontrol.org/impldb/wp-content/uploads/Info-Note_Novel-Classification_EN.pdf.

⁶³ Information Note on classification of novel and emerging tobacco products. FCTC. URL: https://untobaccocontrol.org/impldb/wp-content/uploads/Info-Note_Novel-Classification_EN.pdf.

Due to the fact that e-liquids are not tobacco substitutes, they were at once classified under subheading 3824 of chapter "Miscellaneous chemical products", in particular, under subheading 3824.90 "Chemical products and preparations of the chemical or allied industries (including those consisting of mixtures of natural products), not elsewhere specified or included". In October 2017, the Harmonized System Committee of the World Customs Organization approved the decision to classify heated tobacco products in subheading 2403.99 of Chapter 24 "Tobacco and manufactured tobacco substitutes" of the Harmonized System 2017.

In November 2016, EU Member States unilaterally adopted a decision concerning classification of e-liquids as chemical products in *the Combined Nomenclature*. Also, to be more specific, the EU countries decided to single out from the latter two more product subheadings:

- 3824.99.56.00 "Cartridges and refills, filled, for electronic cigarettes; preparations for use in cartridges and refills for electronic cigarettes... containing products from the subheading 2939.79.10.00";
- 3824.99.57.00 "Cartridges and refills, filled, for electronic cigarettes; preparations for use in cartridges and refills for electronic cigarettes".

In the USA, e-liquids are classified under product subheading 3824.99.92.80 "Mixtures of a kind containing nicotine used in personal electric or electronic vaporizing devices"⁶⁴.

Due to the lack of the common position regarding the government regulation and taxation of novel tobacco products and nicotine-containing products, possible amendments to the Harmonized System are discussed to be implemented in 2022 (Harmonized System 2022). In particular, several proposals concerning assignment of new categories or subcategories to heated tobacco products and e-cigarettes (Table 1.3) are under consideration.

The proposal of the Harmonized System Committee of the World Customs Organization published in March 2019 elaborates the creation of a new heading "Products containing tobacco, reconstituted tobacco, nicotine or tobacco or nicotine substitutes, intended for inhalation without combustion; other nicotine containing products intended for the intake of nicotine into the human body" under heading 2404 in the Harmonized System. In other words, it is proposed to move liquids for e-cigarettes from Chapter 38 "Miscellaneous chemical products" to Chapter 24 "Tobacco and manufactured tobacco substitutes" and place them in subheading 2404.11 (liquids containing nicotine) and 2404.12 (non-nicotine liquids), in the same chapter as heated tobacco products. This initiative was proposed with the purpose of

⁶⁴ E-cigarettes to be re-classified as tobacco? 2018. URL: <https://velvetgloveironfist.blogspot.com/2018/05/e-cigarettes-to-be-re-classified-as.html>.

compliance with the recommendations to regulate the turnover of e-cigarettes and other similar goods in accordance with the FCTC. The recommendations are aimed at limiting consumption of such products by minors and non-smoking people, protecting people around from passive inhaling of products emitted by the relevant devices, mitigating potential health risks related to nicotine consumption.

Table 1.3

Positions on making changes to the classification of heated tobacco products and e-liquids in Harmonized System 2022

Positions	Heated tobacco products	E-liquids	
		With nicotine	Without nicotine
WHO / WCO	2404.20	2404.11	2404.12
Confederation of European Community Cigarette Manufacturers	2403.92	3827.10	3827.20
Mali	2403.92	3827.10	3827.20
Moldova	2404.11	2404.12	2404.19

Source: compiled according to the data from The customs classification of tobacco heating product consumables and the chemical preparations used in ends in the WCO's Harmonized System Tariff Nomenclature. CECCM. URL: <https://www.tobacco-europe.eu/wp-content/uploads/2019/09/CECCM-opinion-on-WCO-HSC-RSC-options-23.08.18.pdf>.

We believe that this approach recommended by WHO / Harmonized System Committee of the World Customs Organization cannot be accepted. The point is that heated tobacco products fall under the Chapter "Tobacco and manufactured tobacco substitutes", while chemicals for electronic cigarettes fundamentally differ from such novel tobacco products in their physical composition. E-liquids do not contain tobacco, while nicotine contained therein can be of synthetic origin. So, it is unreasonable to classify chemicals for electronic nicotine delivery systems along with heated tobacco products. Such an approach is incompatible with the basic principle of classification of products for customs purposes, which lies in the compliance of the HS code with the basic physical characteristics of the products.

Adoption of such proposals can become grounds for increasing the import duty and excise on e-cigarettes, as well as harmonization (uniform) government regulation of tobacco-free e-cigarettes and tobacco products. Adoption of the WCO's proposal in the current edition contradicts the conclusions of the FCTC discussion held in October 2018 during COP8⁶⁵. The parties agreed that heated tobacco products are subject to FCTC, while e-cigarettes are not. Thus, it is inappropriate to classify e-cigarettes together with tobacco products in the system of customs classification before reaching agreement on their regulatory regime under FCTC at the global level. Moreover, responding to the attempts of some EU countries to classify e-cigarettes

⁶⁵ WHO FCTC COP8 Decision. Novel and emerging tobacco products. URL: [https://www.who.int/fctc/cop/sessions/cop8/FCTC_COP8\(22\)_RU.pdf?ua=1](https://www.who.int/fctc/cop/sessions/cop8/FCTC_COP8(22)_RU.pdf?ua=1).

with tobacco products, the European Court of Justice, by its rulings dated 2016⁶⁶ and 2018⁶⁷, prohibited such classification because e-cigarettes have different physical characteristics than tobacco products.

Considering the fact that the main task of the Harmonized System is to promote foreign economic activity, the mentioned change in the classification approach may create obstacles for international trade of e-cigarettes and negatively affect the public health. Indeed, there are more and more opinions of independent experts⁶⁸ concerning the fact that e-cigarettes are less harmful to health if compared to conventional cigarettes.

An alternative proposal of the Confederation of European Community Cigarette Manufacturers is that chemicals for e-cigarettes have to fall under Chapter 38 of the Harmonized System, as such novel products contain no tobacco and differ significantly from tobacco products that fall under Chapter 24. Therefore, it would be an innovative approach to add to Chapter 38 a new heading for chemicals with or without nicotine or flavourings in special cartridges/capsules/bottles/other types of packaging that are used with devices designed to heat these substances to get aerosol without combustion.

Nevertheless, for the purpose of unambiguous interpretation, there was a proposal to classify heated tobacco products into an individual subheading within HS heading 2403. Key characteristics of the named products taken into consideration are tobacco properties and the primary purpose of products. In particular, unlike tobacco for conventional cigarettes, heated tobacco products use reconstituted tobacco, while the primary purpose of tobacco sticks is heating, not smoking⁶⁹. If such physical characteristics are the decisive ones than it is unreasonable to classify Heated tobacco products in the same commodity heading as tobacco for smoking. Besides, these alternative products cannot be included in subheading 2401, which covers unprocessed tobacco raw material. Therefore, heated tobacco products can be classified into subheading 2403, which covers tobacco products not intended for smoking.

It should be noted that in order to achieve consensus among WCO parties regarding the harmonised classification of novel tobacco products and nicotine-containing products, it is necessary to follow the main principles and objectives of the Harmonized System to facilitate international trade; collect,

⁶⁶ Judgment Of The Court (Second Chamber). 4 May 2016. URL: <http://curia.europa.eu/juris/document/document.jsf?text=&docid=177723&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=6455726>.

⁶⁷ Judgment Of The Court (First Chamber) 22 November 2018. URL: <http://curia.europa.eu/juris/document/document.jsf?text=&docid=207969&pageIndex=0&doclang=EN&mode=lst&dir=&occ=first&part=1&cid=6473289>.

⁶⁸ E-cigarettes and heated tobacco products: evidence review. Research and analysis. Public Health England. URL: <https://www.gov.uk/government/publications/e-cigarettes-and-heated-tobacco-products-evidence-review>.

⁶⁹Bond Street's heat-not-burn technology aims to overcome some of the limitations associated with reconstituted tobacco. Tobacco Reporter. 2017. URL: <http://fuisz.com/news/joseph-fuisz-in-tobacco-reporter.pdf>.

compare and analyse trade statistics; standardise trade documentation and data transfer. It is also important that the decisions approved by customs authorities do not contradict the approach of other state institutions on both national and international levels.

In Ukraine, the matter of customs classification of novel tobacco products and nicotine-containing products have been unregulated until recently. The lack of a clear customs classification of these products caused not only problems with the international trade, but also difficulties in the assessment of the potential excise base of e-liquids. According to the Guidelines on the classification of particular goods according to Ukrainian Commodity Coding System requirement⁷⁰, e-cigarettes are classified under heading 8543, while replacement cartridges for them are classified as liquids in heading 3824.

Law of Ukraine No. 465⁷¹ solved this problem. It introduced amendments to the Customs Tariff of Ukraine on the introduction of new subheadings in the Ukrainian Commodity Coding System for heated tobacco products and e-liquids. Hence, from 1 January 2021, HS codes 2403.99.90.10 "Heat-not-burn (HNB) tobacco products for electric heating with an electronically controlled heating element" and 3824.90.97.20 "Liquids used in e-cigarettes" will start to be used in the Ukrainian Commodity Coding System.

It is worth noting that the apparatus of novel tobacco products and nicotine-containing products – devices used for heating tobacco products and liquids – have no individual code in the Harmonized System and are classified under subheading 8543.70 "Other electrical machines and apparatus". However, for customs statistics and accounting of these products at the national level in Ukraine, it is advisable to distinguish two subheadings of devices: for electronic cigarettes and for heating tobacco products.

It is worth noting in the conclusion that changes in the classification of novel tobacco products and nicotine-containing products adopted in Ukraine will allow reducing the risk of government over-regulation of their manufacture and turnover, in general, and taxation, in particular. They will also remove obstacles to free international trade. Although, when choosing the structure of relevant national excise duty rates, it is crucial to study Europe's experience, which can both unveil effective practices, and help to avoid mistakes.

⁷⁰ On the Implementation of Guidelines on the Classification of Particular Goods According to Ukrainian Commodity Coding System Requirements: Letter of the Ministry of Revenues and Duties No. 6983/7/99-99-24-02-03-17 dated 26 March 2014. URL: <https://zakon.rada.gov.ua/rada/show/en/v6983810-14/>.

⁷¹ On Amendments to Certain Laws of Ukraine to Improve the Tax Administration, Remove Technical and Logical Contradictions in the Tax Legislation: Law of Ukraine No. 465-IX dated 16 January 2020. URL: <https://zakon.rada.gov.ua/laws/card/465-20>.

2. EUROPE'S EXPERIENCE IN TAX REGULATION OF THE TOBACCO PRODUCTS MARKET DURING ITS TRANSFORMATION

2.1. Excise duty collection from heated tobacco products and e-cigarettes in EU countries in terms of broader distribution of these products on national markets

Since Ukraine has signed the European Union Association Agreement and undertaken to adapt the provisions of the Tax Code on the collection of indirect taxes to the relevant provisions of EU Directives, particular attention should be given to consideration of the relevant experience of the countries of European Community while reforming the national excise duty for tobacco products and nicotine-containing products. It is also important to consider which countries use the best practices of excise taxation in terms of the tobacco market development and individual cases of the introduction of ineffective changes.

As it was stated in Section 1, one of the factors of tobacco products market transformation in general and the transition from conventional tobacco to novel tobacco and nicotine-containing products is, among other things, a high level of the cigarette excise duty (excise yield). The share of the latter in the weighted average retail price for cigarettes in EU countries in 2019 was 63% on average. It was the highest in the UK (75%), Estonia (74%), Finland (71%), Bulgaria (68%), Ireland (67%), Latvia (67%), and France (67%), while it was the lowest in Luxembourg (55%), Sweden (56%), Germany (57%), Hungary (57%) (Fig. 2.1). Besides, in the UK, Estonia, and Finland, the share of total taxes (excise and VAT) in the weighted average retail price of cigarettes was 90% and higher. The highest level of minimum excise duty per one thousand cigarettes in the EU had such countries as the UK, Ireland, France, Finland, while the lowest level was in Bulgaria, Lithuania, Slovakia, and Hungary (less economically developed countries if compared to EU-15 area countries).

We should note that the novel tobacco products and nicotine-containing products currently most widespread in the EU are e-cigarettes. In contrast, heated tobacco products have only started to take on the European market. However, the spread of these types of alternative products is not identical in all countries; in some EU countries, heated tobacco systems are still not available on the national market. Therefore, the comparison of the development of the novel tobacco products and nicotine-containing products market from a perspective of different EU countries is of high interest, as well as finding the place of Ukraine in this frame of reference.

Minimum excise duty according to Directive 2011/64/EU is EUR 90 per 1,000 pcs

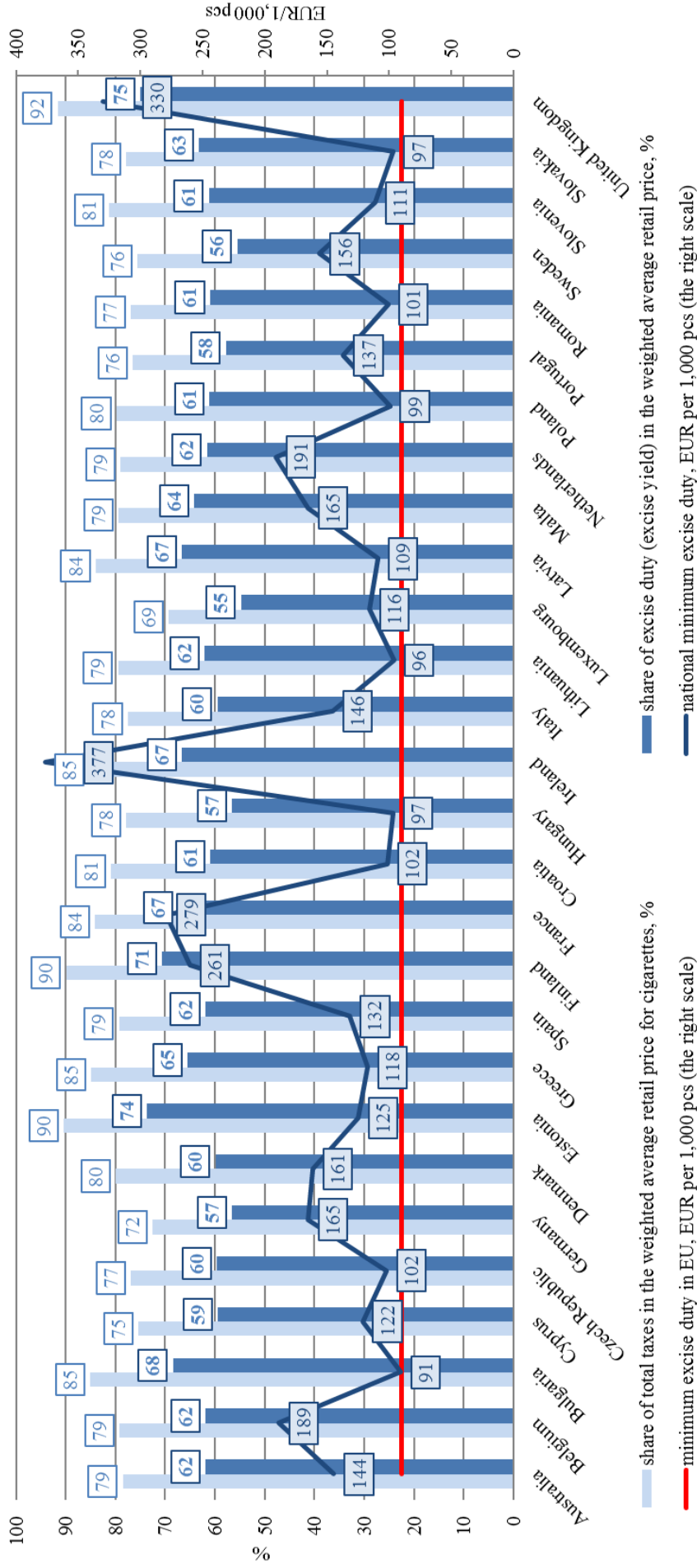
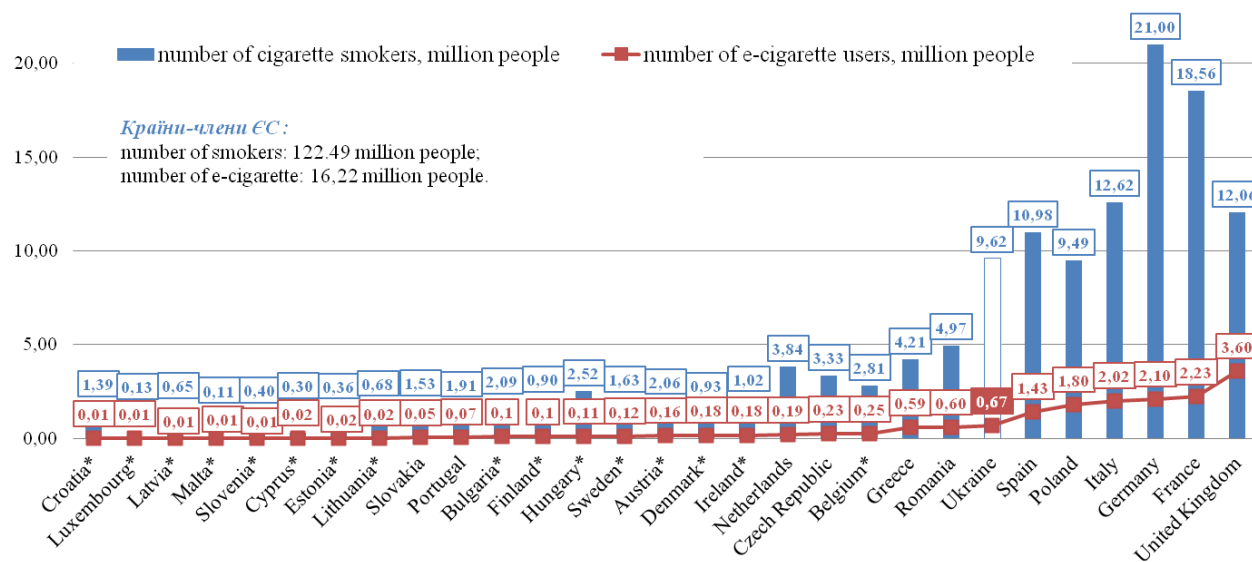


Fig. 2.1. Selected cigarette taxation indicators in the EU countries in 2019, %

Source: calculated according to Excise Duty Tables. Part III - Manufactured Tobacco. European Commission. 2019. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/excise_duties/tobacco_products/rates/excise_duties-part_iii_tobacco_en.pdf

Taking into account the lack of official data on the size of the e-cigarettes market, analytics rely upon the results of consumer surveys. Study of Eurobarometer⁷² and Euromonitor International⁷³ help to calculate the indicator of the prevalence of e-cigarette consumption – the number of people who regularly consume these products. Analysis of data showed that from 2017 to 2020 the number of regular consumers of e-cigarettes in EU countries increased by 32% up to 16.22 million people (to 13.2% of the total number of smokers). The greatest prevalence is observed in the United Kingdom⁷⁴ (3.60 million people, which is 29.8% of the total number of smokers). In France, this figure in absolute and relative terms is 2.23 million people (12.0%), in Germany – 2.10 million (10.0%), in Italy – 2.02 million (16.0%), in Poland – 1.8 million (19.0%), in Spain – 1.43 million (13.0%). For comparison: in Ukraine, the prevalence of e-cigarette consumption in 2020 is roughly 0.67 million people, which makes up 7% of the total number of smokers (Fig. 2.2).



*according to 2019.

Fig. 2.2. Prevalence of consumption of electronic and conventional cigarettes in EU countries, the United Kingdom, and Ukraine in 2020, million people

Source: calculated by the authors according to the data from WHO, Eurobarometer (2017) and Euromonitor International (2020)

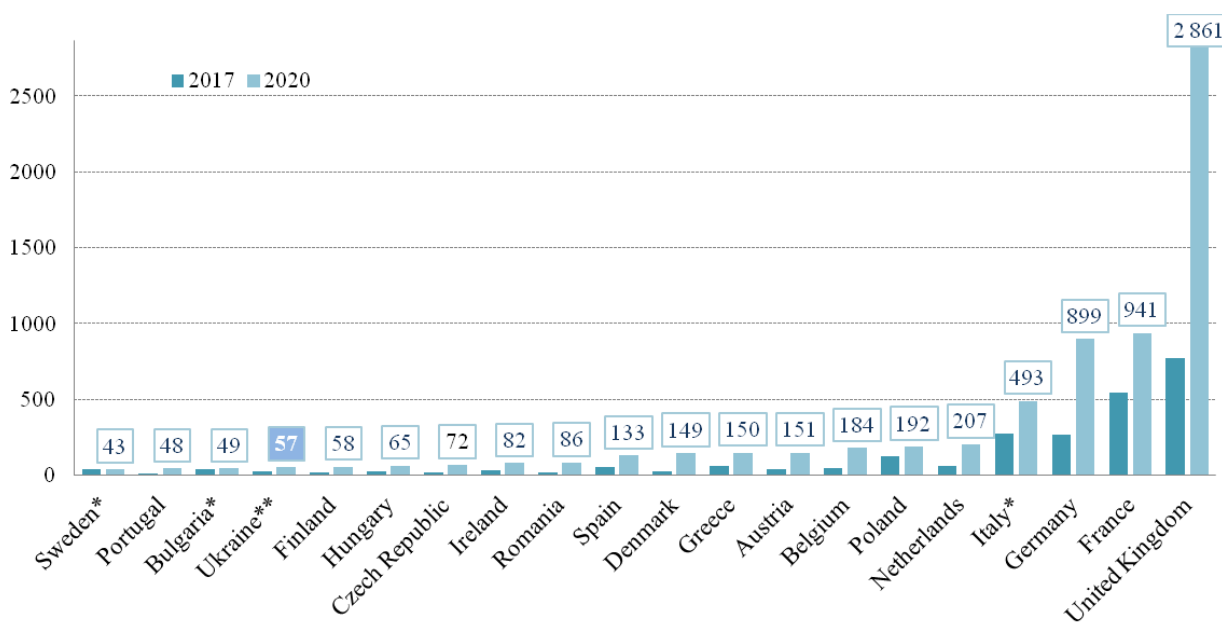
⁷² Attitudes of Europeans towards tobacco and electronic cigarettes. Special Eurobarometer 458. 2017. URL: <https://op.europa.eu/en/publication-detail/-/publication/2f01a3d1-0af2-11e8-966a-01aa75ed71a1>.

⁷³ Exploring the Modern Nicotine Landscape. Euromonitor International. URL: https://go.euromonitor.com/wb-video-2020-exploring-modern-nicotine-landscape.html?utm_campaign=WB_20_03_31_REC_Exploring_Modern_Nicotine_Landscape&utm_medium=Email&utm_source=0_Auto-Response_Email.

⁷⁴ Note that in 2020 the United Kingdom withdrew from the EU Member States.

As can be concluded from the data given in Fig. 2.1 and 2.2, in several EU countries with the highest excise duty component in cigarette price, the share of e-cigarettes users in the number of smokers is one of the highest.

In terms of value, the volume of the EU e-cigarette market in 2020 is approximately EUR 6.9 billion, which is twice higher than in 2017. The most significant sales volumes of these products are common for the United Kingdom (EUR 2.86 billion), France (EUR 941 million), Italy (EUR 493 million), Germany (EUR 899 million), the Netherlands (EUR 207 million), and Poland (EUR 192 million) (Fig. 2.3).



* estimated data;

** estimates according to the customs statistics of Ukraine.

Fig. 2.3. The volume of sales of e-cigarettes in EU countries, the United Kingdom, and Ukraine in 2017 and 2020, million EUR

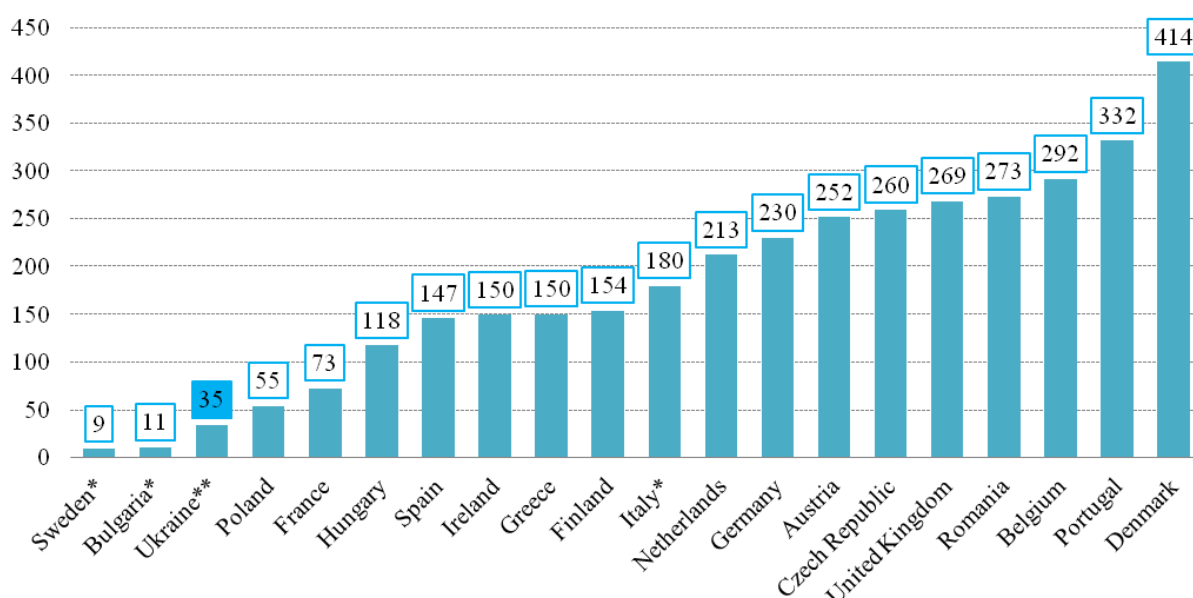
Source: Global Business Data Platform Statista. URL: <https://www.statista.com/outlook/50040000/100/e-cigarettes/worldwide>; Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. European Commission. 2019. URL: <https://op.europa.eu/en/publication-detail/-/publication/8c9dd329-4d4f-11ea-aece-01aa75ed71a1/language-en>.

As for the market structure in terms of value, according to the research data of the European Commission, the share of consumables (liquids and cartridges for e-cigarettes) is on average 55% and can vary considerably from country to country, from 30% to 75%⁷⁵. For example, in Germany, the share of devices in the volume of sale is higher than the share of consumables as the e-cigarettes market only recently emerged there, unlike the United Kingdom, France, and Italy. According to our calculations, in Ukraine, this share is 59%. The factors that influence the market

⁷⁵ Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. European Commission. 2019. URL: <https://op.europa.eu/en/publication-detail/-/publication/8c9dd329-4d4f-11ea-aece-01aa75ed71a1/language-en>.

structure include the consumer purchasing power; consumer preferences (cheap or premium devices – the prices range from EUR10 to over EUR100); wear rate; power capacity of e-cigarette devices that vaporize the liquids faster; frequency of use of self-made devices and self-mixed liquids. It should be noted that these factors are interconnected, as higher expenses on more powerful devices can cause a higher consumption of liquids that, in its turn, can encourage vapers to save money by mixing liquids themselves.

The EU e-cigarettes market demonstrates an increasing trend, with e-cigarettes gradually replacing conventional cigarettes. The highest growth rates of sales volumes of these alternative products in 2017-2020 are observed in Denmark (414%), Portugal (332%), Belgium (292%), Romania (273%), the United Kingdom (269%), and Czech Republic (260%). For comparison, in Ukraine this indicator was 35% (Fig. 2.4).



* estimated data;

** estimates according to the customs statistics of Ukraine.

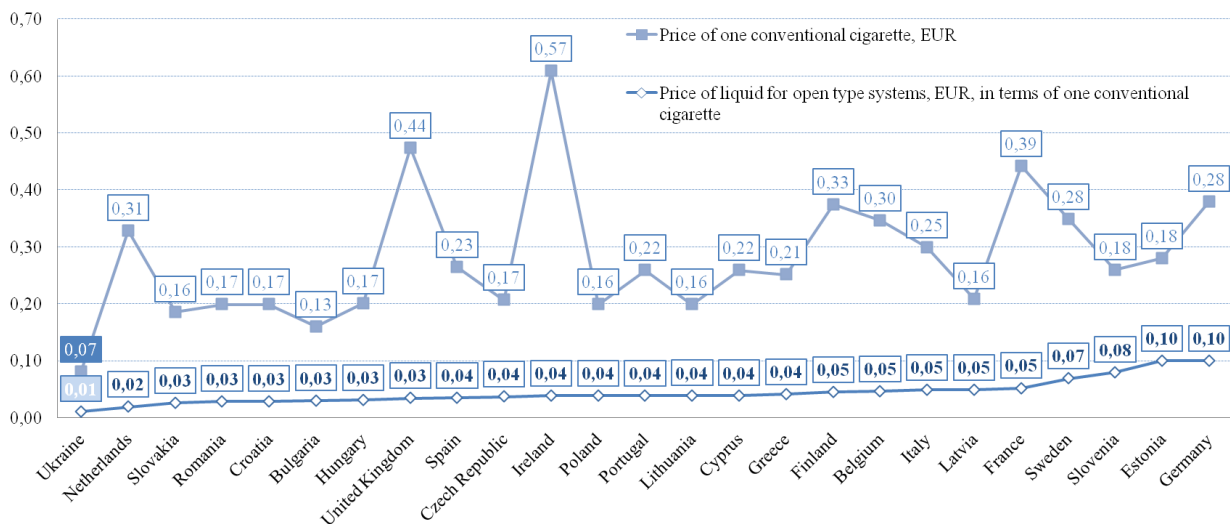
Fig. 2.4. The growth rate of sales volumes of e-cigarettes in EU countries, the United Kingdom, and Ukraine in 2017-2020, %

Source: Global Business Data Platform Statista. URL: <https://www.statista.com/outlook/50040000/100/e-cigarettes/worldwide>.

The price level of e-cigarettes influences the prevalence of these products and the demand shift to this market segment. Based on the analysis of data received from the most popular online stores in the EU countries, the United Kingdom, and Ukraine, it was found that in April-May 2020 the average price of liquids for open type e-cigarettes was approximately EUR 0.42 per 1 ml, while for the closed type systems EUR 4.42 per 1 ml. In 2017-2020, due to wider turnover of innovations, the

average (in all analysed countries) level of prices for e-liquids dropped by 11.57% (see Annex E).

Today, average prices for e-liquids are in the following range: for open type systems – from EUR 0.19 per 1 ml in the Netherlands up to EUR 1 per 1 ml in Germany; for closed type systems – from EUR 1 per 1 ml in Greece to EUR 8.76 per 1 ml in Romania. Still, prices for conventional cigarettes do not correlate with prices for these liquids, which is, in our opinion, caused by the differentiation in the pricing due to different health harm from their consumption. For example, liquids for open type e-cigarettes are more expensive in countries with an average 42% excise duty component in the price. These countries include Estonia – EUR 0.97 per 1 ml, Slovenia – EUR 0.83 per 1 ml, Sweden – EUR 0.69 per 1 ml, Latvia and Italy – EUR 0.49 per 1 ml and others (Fig. 2.5). Thus, the excise has a significant impact on the pricing processes in the e-cigarette market. Later we will return to discussing the approaches to excise collection in the EU countries.



Note: in terms of one conventional cigarette by ratio of 1 ml of liquid = 10 conventional cigarettes; in Ukraine, the excise duty to be introduced from 1 January 2021.

Fig. 2.5. Prices of liquids for open types e-cigarettes and conventional cigarettes in the EU countries, the United Kingdom, and Ukraine as of May 2020.

Source: compiled by the authors based on the data from the most popular online stores in the respective countries and Excise Duty Tables. Part III - Manufactured Tobacco. European Commission. URL: https://ec.europa.eu/taxation-customs/sites/taxation/files/resources/documents/taxation/excise_duties/tobacco_products/rates/excise_duties-part_iii_tobacco_en.pdf.

The market of heated tobacco products in the EU countries is significantly smaller than the market of e-cigarettes, and is represented mainly by one type of products. However, lately, more and more advanced heated tobacco systems appear, and the market of these alternative products develops rapidly in many countries of the world.

Prevalence of consumption of heated tobacco products in EU countries and the UK in 2020 is in the range between 0.06 million people in the Netherlands and 1.02 million people in Italy. Such high figures are also observed in Poland – 0.75 million people, which constitutes 7.9% of the total number of smokers, in Germany – 0.74 million and 3.5%, in Spain – 0.46 million and 4.2%, respectively. A similar increasing trend for heated tobacco products is also typical for Ukraine: approximately 0.38 million people use these products, which constitutes 3.9% of the total number of smokers (Fig. 2.6).

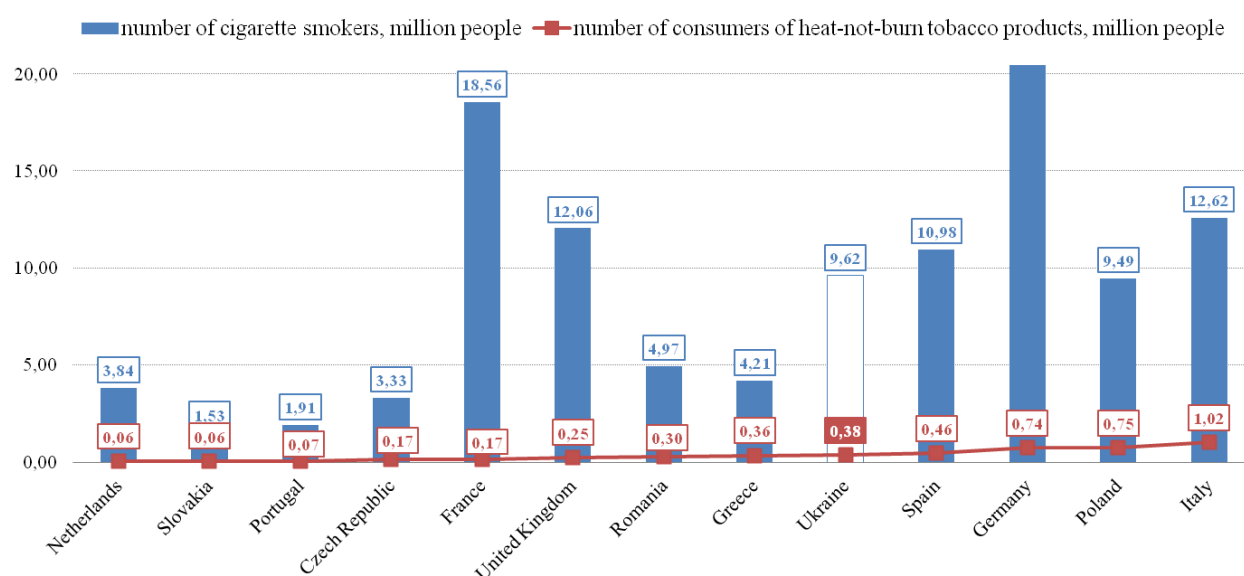


Fig. 2.6. The prevalence of heated tobacco products in some EU countries, the United Kingdom, and Ukraine in 2020, million people

Source: calculated on the basis of data from the WHO, Euromonitor International.

The volume of sales of heated tobacco products in the EU countries in 2017 was approximately 1.9 billion pieces, which is EUR 432 million in terms of value⁷⁶. Unfortunately, no data for 2018-2019 were published.

Given the crucial role of differentiated excise taxation of tobacco products in implementing the global approach to reducing the harm of smoking, many European and other countries, after the release of *heated tobacco products* to the national markets, refer heated tobacco products to the harmonised category "*Other smoking tobaccos*", when placing these products in existing types of *traditional smoking* and *smokeless tobacco products*. The "*other smoking tobaccos*" category has the lowest

⁷⁶ Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. European Commission. 2019. URL: <https://op.europa.eu/en/publication-detail/-/publication/8c9dd329-4d4f-11ea-aece-01aa75ed71a1/language-en>.

excise rates among all tobacco products. However, as the use of these alternative products becomes more widespread and their appeal among consumers grows, many law-makers are inclined to create a separate excisable category for them⁷⁷. Denmark can be an example of a country where before the introduction of the new excisable category for heated tobacco products (in July 2019), they were legally classified as "other smoking tobaccos"⁷⁸. And it didn't affect the excise rate.

It should be noted that at the beginning of 2018 only 18 EU countries collected excise duty from heated tobacco products. The reports of the European Commission⁷⁹ refer to three approaches to the classification of and choosing the tax treatment for these alternative products:

1. within the "other smoking tobaccos" category. Ten EU countries used this approach in 2018, in particular, the United Kingdom, Denmark, Spain, Lithuania, the Netherlands, Germany, and France, where heated tobacco products were marketed, and Belgium, Estonia, and Sweden, where such products were only set up for the market release. This made it possible to cover heated tobacco products by the European Excise Movement and Control System (EMCS).

2. Based on a specialised non-harmonised excisable category. Thirteen countries of the European Community chose this approach claiming that, considering the physical characteristics of heated tobacco products, they do not fall under any category of harmonised excisable goods. This group of countries had additional differences in taxation treatment. For example, Italy used a special excise duty calculation methodology based on the comparison of the consumption time of heating sticks and cigarettes smoking time under the same inhaling conditions with a 50% reduction factor. Slovenia and Italy allowed using the EMCS to control the movement of heated tobacco products despite the fact that these products were not among harmonised excisable categories.

3. Without applying the relevant legal regulations. In particular, it concerns Ireland, Luxembourg, Malta, Finland, where heated tobacco products were not released to the national market.

Despite the difficulties related to the introduction of a new excisable category described in more detail in the work of P. Gambaccini⁸⁰, the number of countries that resort to such a measure gradually grows. The overwhelming majority of them are EU countries. As of 2019, governments of 23 countries of the world acknowledged

⁷⁷ Denmark adopts new tax category for heated tobacco. July 26, 2018. URL: <https://vaporproductstax.com/denmark-adopts-new-tax-category-for-heated-tobacco/>.

⁷⁸ Ibid.

⁷⁹ Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. Final report. Volume 1 - Study. Luxembourg: Publications Office of the European Union, 2020. URL: <https://op.europa.eu/en/publication-detail/-/publication/8c9dd329-4d4f-11ea-aece-01aa75ed71a1/language-en>.

⁸⁰ Taxing Heated Tobacco in Europe and Beyond. / By P. Gambaccini. *Tax Notes International*. 2018. Volume 92. No. 5. P. 508-509. URL: <https://vaporproductstax.com/wp-content/uploads/2018/11/2018tni45-11-Gambac-cini.pdf>.

that heated tobacco products differ from other tobacco products, and created a separate excisable category for taxation thereof or announced their intention to do so⁸¹. The number of such countries continues to grow. In particular, in Q1 2020 such countries as Ecuador and Egypt formalised in legislation the new excisable category for heated tobacco products⁸².

The studies on excise taxation of heated tobacco products note that even in the absence of legislative requirements for harmonisation of their taxation in the EU, there is a clear tendency to use similar approaches to defining the basis of excise taxation of these products. The same applies to methods used for establishing the tax level in comparison with conventional tobacco products, primarily cigarettes⁸³. The most commonly used practice in Europe is to maintain a distinct difference between the tax levels of heated tobacco products and cigarettes. "As of 2018, the average excise duty on heated tobacco products is approximately 30% of the excise duty on conventional cigarettes, while in the new EU Member States this difference is higher," the report of the Institute of Market Economy (Bulgaria) reads⁸⁴.

In 2019, the majority of the European Union countries used a uniform excise rate for heated tobacco product as for "other smoking tobaccos" (Table 2.1). This approach to setting tax rates is similar to the one used by Ukraine in 2020. However, *in all EU countries, the tax burden on these products was lower than on cigarettes*.

Given, on the one hand, the mixed excise duty rates applied to cigarettes (the specific rate per one thousand of pieces and the ad valorem rate as a percentage of the retail selling price) and, on the other hand, the specific excise rate set by the EU countries for a unit of weight in kilogrammes (the majority of Member States) or the rate per one thousand pieces (Italy and Hungary) or mixed rates (Germany, Portugal, and France) or only the ad valorem rate (Spain) for heated tobacco products, calculations used to determine the differentiation level of excise burden on these two types of tobacco products are complicated. The European Commission has not even performed these calculations, only relevant conclusions have been given in some research works. In particular, as for the situation in 2019, they mentioned that in

⁸¹ Written Submission for the Pre-Budget Consultations in Advance of the 2019 Budget. / By: Rothmans, Benson, & Hedges Inc. P. 6. URL: <https://www.ourcommons.ca/Content/Committee/421/FINA/Brief/BR10007461/brexternal/RothmansBensonAndHedgesInc-e.pdf>.

⁸² More Taxes on Vapor Products in Q1 2020. March 31, 2020. URL: <https://vaporproductstax.com/more-taxes-on-vapor-products-in-q1-2020/>.

⁸³ Taxing Heated Tobacco in Europe and Beyond. / By P. Gambaccini. *Tax Notes International*. 2018. Volume 92. No. 5. P. 511. URL: <https://vaporproductstax.com/wp-content/uploads/2018/11/2018tni45-11-Gambaccini.pdf>.

⁸⁴ Policy Note on Tobacco Excise Taxation and the Illegal Market. Institute for Market Economics, May 2019. P.10. URL: https://ime.bg/var/images/IME_policy_note_tobacco_2019_EN.pdf.

Bulgaria the excise duty for heated tobacco products was roughly 40% of the cigarette excise tax⁸⁵.

Table 2.1

Approaches to excise taxation of heated tobacco products in EU countries in 2019

Countries	Excise duty rates for heated tobacco products	Excise duty rates for cigarettes	Excise duty rates for other smoking tobaccos
1	2	3	4
Austria	EUR 110 per kg	37.5 % EUR 58 per 1,000 pcs MED*: EUR 144.34 per 1,000 pcs	34%
Bulgaria	BGN 233 per kg	25% BGN 109 per 1,000 pcs MED: BGN 177 per 1,000 pcs	BGN 233 per kg
Croatia	HRK 600 per kg	34% HRK 335 per 1,000 pcs MED: HRK 755 per 1,000 pcs	HRK 600 per kg
Cyprus	EUR 150 per kg	34% EUR 55 per 1,000 pcs MED: EUR 121.5 per 1,000 pcs	EUR 150 per kg
Czech Republic	CZK 2,236 per kg	27% CZK 1,460 per 1,000 pcs MED: EUR 102.07 per 1,000 pcs	CZK 2,236 per kg
Denmark	DKK 738.5 per kg	15% DKK 1,182.5 per 1,000 pcs	DKK 738.5 per kg
France	49% EUR 23.4 per kg MED: EUR 108 per kg	51.7% EUR 61.1 per 1,000 pcs MED: EUR 279 per 1,000 pcs	49% EUR 23.4 per kg MED: EUR 108 per kg
Germany	13.13% EUR 15.66 per kg MED: EUR 22 per kg	21.69% EUR 98.2 per 1,000 pcs MED: EUR 207.87 per 1,000 pcs	13.13% EUR 15.66 per kg MED: EUR 22 per kg
Greece	EUR 156.7 per kg	26% EUR 82.5 per 1,000 pcs MED: EUR 117.5 per 1,000 pcs	EUR 156.7 per kg
Hungary	HUF 10,000 per 1,000 pcs	24% HUF 18,200 per 1,000 pcs MED: HUF 31,200 per 1,000 pcs	HUF 18,560 per kg
Italy	25% of the cigarette excise duty calculated based on the weighted average retail price for the previous year multiplied by the conversion factor (e.g. EUR 36.33 per 1,000 pcs for 2019)	50.97% EUR 20.9 per 1,000 pcs MED: EUR 180.88 per 1,000 pcs	56%
Latvia	EUR 70 per kg	20% EUR 74.6 per 1,000 pcs MED: EUR 109.2 per 1,000 pcs	EUR 70 per kg

⁸⁵ Policy Note on Tobacco Excise Taxation and the Illegal Market. Institute for Market Economics, May 2019. P. 10. URL: https://ime.bg/var/images/IME_policy_note_tobacco_2019_EN.pdf.

Table 2.1 (cont.)

1	2	3	4
Lithuania	EUR 68.6 per kg	25% EUR 62.25 per 1,000 pcs MED: EUR 102 per 1,000 pcs	EUR 60.24 per kg
Netherlands	EUR 108.94 per kg	5% EUR 175.2 per 1,000 pcs MED: EUR 191.28 per 1,000 pcs	EUR 108.94 per kg
Portugal	15% EUR 81 per kg MED: EUR 174 per kg	15% EUR 81 per 1,000 pcs MED: EUR 174 per 1,000 pcs	15% EUR 81 per kg MED: EUR 174 per kg
Romania	RON 396.1 per kg	14% RON 366.15 per 1,000 pcs MED: RON 469.23 per 1,000 pcs	RON 429.83 per kg
Slovakia	EUR 76.7 per kg	23% EUR 64.1 per 1,000 pcs MED: EUR 100.1 per 1,000 pcs	EUR 73.9 per kg
Slovenia	EUR 88 per kg	22.61% EUR 71.32 per 1,000 pcs MED: EUR 111 per 1,000 pcs	EUR 42 per kg
Spain	28.4% MED: EUR 22 per kg	51% EUR 24.7 per 1,000 pcs MED: EUR 131.5 per 1,000 pcs	28.4% MED: EUR 22 per kg
Sweden	SEK 1,922 per kg	1% SEK 1,580 per 1,000 pcs	SEK 1,922 per kg
United Kingdom	GBP 234.65 per kg	16.5% GBP 228.29 per 1,000 pcs MED: EUR 293.95 per 1,000 pcs	GBP 125.5 per kg

* MED – minimum excise duty

Source: compiled according to the data from the EU tax authorities.

Our calculation of the mentioned differentiation level of excise burden in EU countries is based on the comparison of the excise rate for heated tobacco products converted from a measurement unit into kg per one thousand product units and the excise duty for one thousand cigarettes in a weighted average retail sale price thereof (excise yield) published by the European Commission. However, as it is necessary to consider the retail price of heated tobacco products subject to the mixed or the ad valorem excise rate to determine the excise burden thereof, no comparison was given for Spain, Germany, Portugal and France⁸⁶. Results of calculations for other EU countries are given in Table 2.2.

⁸⁶ It is improper to use the minimum excise duty indicator in these calculations, as tobacco heating sticks are rather expensive, therefore taxation thereof most certainly has an ad valorem component.

Differentiation level of excise burden of heated tobacco products in EU countries* in 2019

Countries	Excise duty for heated tobacco products per kg, EUR	Excise duty for heated tobacco products per 1,000 pcs**, EUR	Excise duty in the weighted average retail price of 1,000 cigarettes, EUR	Differentiation level of excise duty for heated tobacco products and cigarettes	
				ratio, %	difference, %
Austria	110	33.55	147.29	22.78	77.22
Bulgaria	119.13	36.33	87.82	41.37	58.63
Croatia	80.72	24.62	101.98	24.14	75.86
Cyprus	150	45.75	128.61	35.57	64.43
Czech Republic	86.78	26.47	103.68	25.53	74.47
Denmark	99.05	30.21	161.30	18.73	81.27
Greece	156.7	47.79	136.86	34.92	65.08
Hungary	-	30.86	97.90	31.52	68.48
Italy	-	36.33	145.78	24.92	75.08
Latvia	70	21.35	106.60	20.02	79.98
Lithuania	68.6	20.92	98.75	21.19	78.81
Netherlands	108.94	33.25	190.67	17.44	82.56
Romania	84.99	25.92	103.80	24.97	75.03
Slovakia	76.7	23.39	99.00	23.63	76.37
Slovenia	88	26.84	111	24.18	75.82
Sweden	186.06	56.74	155.76	36.42	63.58
United Kingdom	263.42	80.35	328.61	24.45	75.55
On average	116.61	35.33	135.61	26.58	73.42

* In countries where heated tobacco products are available on the national market and have only the specific excise duty rare.

** The calculations are given on the basis of HEETS heated tobacco products (tobacco weight in twenty sticks of the pack is 6.1 g).

Source: compiled according to the data from the EU tax authorities and Excise Duty Tables Part III - Manufactured Tobacco. European Commission. 2019. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/excise_duties/tobacco_products/rates/excise_duties-part_iii_tobacco_en.pdf.

Thus, in seventeen countries of the European Union, where heated tobacco products were released to the market in 2019 and were subject only to the specific excise duty, the excise burden ratio of these products and cigarettes ranged from 17.44% in the Netherlands to 41.37% in Bulgaria (where the cigarette excise is the lowest in the EU). The average EU excise duty amount for the alternative tobacco products was roughly 26.58% of the cigarette excise duty. It means that *in EU countries the excise burden of heated tobacco products was almost four times lower than that of cigarettes*, while the difference between the excise duty amount in the price of a tobacco stick pack and a cigarette pack was 73.42% on average ($100 - 26.58 = 73.42$).

It is worth emphasising that in 2020, among all EU countries, a slight increase in excise duty for heated tobacco products occurred only in Denmark (from DKK 738.45 to DKK 740.43 per kg), Portugal (the specific rate was increased from EUR 81 to EUR 83.5 per kg, while the minimum excise duty increased from

EUR 174 to EUR 180 per kg), Latvia (from EUR 70 to EUR 75 per kg), Romania (from RON 396.1 to RON 411.14 per kg)⁸⁷.

In February 2020, the European Commission published another document on the application of the provisions of the Directive 2011/64/EU⁸⁸ with a conclusion that the differences in approaches to the classification and excise taxation of heated tobacco products in EU countries *create obstacles for the functioning of the internal market*. This can distort competition and lead to disputes in administration of law. Moreover, *administrative barriers arise when these products are moved across borders* through countries that apply different approaches to the EMCS cover of these alternative products. In each case, special administrative arrangements had to be made to obtain permission for the movement of heated tobacco products between Member States⁸⁹. This situation highlights the need to develop a harmonised approach to the taxation of these alternative products (most EU countries support the idea of introducing a relevant Europe-wide category of excisable goods).

However, the European Commission named Italy and Hungary first among the European "excise harmony" violators. These EU countries ignored the recommendations noted in Chapter 1.1 and set the excise rate for heated tobacco products in measurement units per one thousand pieces⁹⁰. It means that, most likely, amendments will be introduced soon to the Directive that will establish Europe-wide legislative requirements for excise taxation of heated tobacco products (in particular, application of tax rate per unit of weight in kilogrammes). Accordingly, Italy and Hungary will be forced to comply with new requirements.

However, the probability that uniform excise rates for heated tobacco products and cigarettes will be set soon on the level of the Directive 2011/64/EU is negligible. Meanwhile, none EU country has announced its intention to increase the excise rate for heated tobacco products by at least three times at once (especially when the lower risk of consumption thereof for human health is not officially disproved), not to mention the possibility of adopting a relevant unanimous decision by all EU countries.

⁸⁷ According to the data from the EU tax authorities.

⁸⁸ Commission staff working document. Evaluation of the Council Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco. February 2020. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/10-02-2020-tobacco-taxation-report.pdf?fbclid=IwAR1uqPEEeWpOAOQsnJmY3ngW1P7uFKPCri2mWumz9GXX9CZWptBEmmO9JJgc.

⁸⁹ Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. Final report. Volume 1 - Study. Luxembourg: Publications Office of the European Union, 2020. URL: <https://op.europa.eu/en/publication-detail/-/publication/8c9dd329-4d4f-11ea-aece-01aa75ed71a1/language-en>.

⁹⁰ Commission staff working document. Evaluation of the Council Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco. February 2020. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/10-02-2020-tobacco-taxation-report.pdf?fbclid=IwAR1uqPEEeWpOAOQsnJmY3ngW1P7uFKPCri2mWumz9GXX9CZWptBEmmO9JJgc.

Moving on to the review of EU practices of applying excise duty on *e-cigarettes*, it should be noted that these products entered the market after the adoption of Directive/2011/64/EU and, as mentioned in Chapter 1.1, excise taxation thereof is still unregulated at the EU level. Italy (since 2013) and Portugal (since 2014) were the first ones to introduce a non-harmonised excise duty on e-cigarettes, and Romania, Slovenia, and Latvia joined them later. In 2017, the countries that introduced excise taxation of e-cigarettes used different approaches to establish this tax base. In particular, Greece, Italy, Hungary, and Finland taxed all liquids used in e-cigarettes with excise duty, while Slovenia and Portugal tax only taxed nicotine-containing liquids. Latvia applied mixed rates of excise taxation set for the liquid volume and nicotine content (weight in mg). Similar to conventional tobacco products, the post-socialist countries introduced lower e-cigarette excise rates than the developed EU-15 area countries⁹¹.

Currently, excise duty on e-liquids is introduced in fourteen EU countries. Approaches to collection of this tax still differ – liquids with and without nicotine are taxed. Latvia additionally taxes the nicotine content in the liquid at the rate of EUR 0.005 per mg; Italy applies a differentiated excise rate (depending on whether the liquid contains nicotine), which is calculated based on the weighted average retail price of conventional cigarettes. In Croatia, e-cigarettes are classified as excisable goods but with a zero tax rate (Table 2.3).

Table 2.3

Approaches to Excise Taxation of E-Cigarettes in EU Countries in 2020*

Country	Excise rate in local currency / ml	Excise rate in EUR / ml	Tax base	Effective date	Notes
1	2	3	4	5	6
Greece	0.10	0.10	Liquid volume	1 January 2017	-
Estonia	0.20	0.20	Liquid volume	1 January 2018	-
Italy	0.08	0.08	Nicotine-containing liquid volume	24 December 2014	From 1 January 2013, the ad valorem excise duty rate 58.5% of the e-cigarettes retail price was introduced, which was later declared unconstitutional. From 24 December 2014, the specific excise duty rate was set based on the weighted average retail price of conventional cigarettes
	0.04	0.04	Non-nicotine liquid volume		
Cyprus	0.12	0.12	Liquid volume	22 September 2017	-
Latvia	0.01	0.01	Liquid volume	July 2016	-
	0.005	0.005	Nicotine content by weight		
Lithuania	0.12	0.12	Liquid volume	1 March 2019	-

⁹¹ Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco.

Table 2.3 (cont.)

1	2	3	4	5	6
Poland	0.5	0.11	Liquid volume	1 July 2020	-
Portugal	0.30	0.30	Liquid volume	1 January 2014	In 2014, the excise rate was set on the level of EUR 0.60 per ml of the nicotine-containing liquid, but in 2017 the rate was reduced considering the lower risk of consumption compared to conventional cigarettes
Romania	0.52	0.108	Nicotine-containing liquid volume	1 January 2016	A rate reset mechanism was set taking into account the annual indexation for the last twelve months calculated in September of the year preceding the application
Slovenia	0.18	0.18	Liquid volume	1 July 2016	-
Hungary	20	0.056	Liquid volume	1 January 2016	From 1 January 2020, the excise rate was reduced to align the tax level with the rate applied in the neighbouring countries
Croatia	0	0	Liquid volume	1 January 2017	Manufacturers of e-liquids in Croatia must be registered as excise duty payers
Finland	0.30	0.30	Liquid volume	1 January 2017	-
Sweden	2	0.184	Nicotine-containing liquid volume	1 July 2018	-

* As of May 2020

Source: E-Cigarettes: Use and Taxation. WBG Global Tobacco Control Program Team. URL: <http://documents.worldbank.org/curated/en/356561555100066200/pdf/E-Cigarettes-Use-and-Taxation.pdf>.

It should be noted that *during the timeframe of e-cigarette excise duty collection, the rate was reduced considerably in three EU countries*. In particular, in *Italy*, the regulatory guidelines for these products were changed several times. The negotiations between industry associations, market operators and the government resulted in the decision to reduce the excise rate since 2019 by 90% for nicotine-containing liquids (to EUR 0.08 per ml) and by 95% for non-nicotine liquids (to EUR 0.04 per ml). Also, taking into account the cross-border e-commerce, which caused the loss of tax revenues and income of Italian operators, the online sales of e-liquids by economic entities that have the tax warehouse status in the country were legalised.

In *Portugal*, the e-cigarette excise duty was reduced by half from EUR 0.6 to EUR 0.3 per ml in 2017, taking into account the published research findings on less harm to health if compared to conventional cigarettes. It was a determining factor in setting the level of national excise rates on liquids for e-cigarettes in the majority of EU countries.

Hungary also acknowledged the ineffectiveness of its excise policy in the area of e-cigarette taxation. In 2020, the country reduced the excise rate on e-liquids from

HUF 55 to HUF 20 (EUR 0.056) per ml. This innovation resulted from the spread of e-cigarettes smuggling to Hungary from neighbouring countries where the excise rate was significantly lower (Romania – EUR 0.108 per ml, Serbia – EUR 0.037 per ml (converted from the local currency into EUR)), or the excise duty was at zero rate (Croatia)⁹². It is yet another example of how the intent to additionally pump up the budget revenues by setting high tax rates translates into a fiscal failure in practice.

In February 2020, the European Commission concluded that different approaches to the excise taxation of e-liquids create obstacles for the functioning of the internal market and complications for both economic operators and public authorities. The following arguments were given to ground this position⁹³:

1. Obstacles for the functioning of the internal market. High excise rates on e-liquids set in some EU countries resulted in an increase in prices for these consumables and the consumers switching to cheaper products. The monitoring of e-liquid prices in the most popular EU online stores showed that there are many cross-border e-commerce websites that sell products by prices without the excise tax, which is much lower than those set by national operators. Foreign traders that sell products in certain countries must apply the same tax scheme as the national operators, but the lack of effective mechanisms of cross-border sales control and the considerable prevalence of e-commerce allow avoiding taxation in these countries. Bona fide taxpayers also bear transaction costs related to the registration with the tax authorities, licensing, establishing tax warehouses, payment of import fees, ordering excise duty stamps, etc. As a result, national market operators have unequal competitive conditions with illegal sellers. Thus, different tax schemes and lack of effective measures regulating turnover of these products create obstacles for the functioning of the internal market.

2. Lack of tools helping to control the product turnover. Since the EU excise taxation system does not cover e-cigarettes, Member States lack tools they use to control the movement of harmonised tobacco products effectively. Given the physical characteristics of e-liquids, it is much easier to move them across customs borders than conventional tobacco products, while customs authorities have limited technical means of control of small shipments sent via conventional courier delivery services and testing the composition of the liquid. Increasing the effectiveness of e-liquid turnover control requires considerable financing. Most EU countries are not ready to go for it, as resources need to be partially diverted from the counter-smuggling

⁹² Hungary lowers its excise tax on e-cigarettes. URL: <https://vaporproductstax.com/hungary-lowers-its-excise-tax-on-e-cigarettes/>.

⁹³ Commission staff working document. Evaluation of the Council Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco. February 2020. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/10-02-2020-tobacco-taxation-report.pdf?fbclid=IwAR1uqPEEeWpOAOQsnJmY3ngW1P7uFKPCRI2mWumz9GXX9CZWptBEmmO9JJgc.

operations in the segment of harmonised tobacco products. This hinders the implementation of the principle of the inevitability of punishment for the offence committed.

3. *Losses of tax revenues.* The above difficulties of tax treatment in the absence of a harmonised excise duty on e-liquids cause significant losses in budget revenues. According to the EU tax authorities⁹⁴, reduced demand driven by the price increase lowers the volume of tax revenues.

4. *Legal uncertainty.* The lack of a clear tax classification of e-cigarettes on the EU level leads to differentiated approaches to legal regulation and taxation thereof among the Member States, which hinders the harmonisation processes. This situation is complicated by the heterogeneity of products and their significant differences from conventional cigarettes, which does not allow for classifying them as tobacco products as defined by Council Directive 2011/64/EU. The rapid evolution triggered the fast transformation of the first generation e-cigarettes, whose appearance is similar to conventional cigarettes, into the vaping system, which is completely different from tobacco products. Moreover, not all liquids consumed with e-cigarettes contain nicotine, and not all nicotine for them is produced from tobacco (a synthetic substance is increasingly used). In addition, technological development rapidly changes the characteristics and ways of consumption of these products defying the attempts to establish the equivalence of e-cigarettes consumption and smoking of tobacco products. The last point is worth noting that 1) the capacity and efficiency of new devices that allow the consumption of liquids are increasing, which accelerates the delivery of nicotine, thereby allowing for using liquids with much lower concentration of nicotine; 2) new bases for e-cigarette consumables are increasingly introduced (for example, nicotine salts, gels, etc.), which makes the classification and identification of these excisable goods more complicated; and 3) market release of e-liquids containing cannabinoids is aggravating the problems that go beyond excise duty.

There are also differences in how the EU countries see the necessity to harmonise approaches to excise taxation caused by the following reasons: firstly, the unwanted consequences of harmonisation that entail the establishment of taxes in countries where the e-cigarette market is small or non-existent; secondly, concerns about possible non-compliance with tax laws, as liquids (especially pure nicotine) can be easily moved across the border, avoiding control.

⁹⁴ Study on Council Directive 2011/64/EU on the structure and rates of excise duty applied to manufactured tobacco. European Commission. 2019. URL: <https://op.europa.eu/en/publication-detail/-/publication/8c9dd329-4d4f-11ea-aece-01aa75ed71a1/language-en>.

5. *Obstacles for achieving healthcare goals.* Given that the majority of vapers are former smokers or dual consumers, it is important to consider the risk that the decline in demand for e-cigarettes due to the tax burden will slow down smoking cessation. It should be noted that more and more healthcare experts acknowledge the potential of e-cigarettes as a means that helps to quit smoking. Nevertheless, there are research findings that prove that e-cigarettes can pose a threat to young people, as a harmful habit by itself and as a habit that leads to nicotine and tobacco addiction⁹⁵.

As in the case of heated tobacco products, the European Commission after all recommended increasing efforts to develop a harmonised approach to excise taxation of e-cigarettes.

And finally, EU countries are working on a set of measures required to overcome the negative economic consequences of the coronavirus infection spread. These are incentive measures. However, as of 25 May 2020, neither EU country announced its intention to perform an unscheduled increase of tobacco products excise tax⁹⁶. After all, under conditions of a noticeable reduction in the direct tax base, tobacco companies that provide relatively stable indirect tax revenues from legally sold products will become important budget contributors. Moreover, recently the USA provided an opportunity to defer the payment of excise duty on all excisable goods up to 90 days to help businesses become more flexible in the fight against the coronavirus infection⁹⁷.

2.2. Retrospective review of approaches to excise taxation of tobacco products in Moldova and Georgia

When reforming the excise taxation of novel tobacco products and nicotine-containing products in Ukraine, it is important to take into account variable international practices. On the one hand, as it was mentioned in Chapter 2.1, EU countries chose the policy of relatively low excise duty burden on heated tobacco products. This approach is used by Ukraine in 2020. On the other hand, in Moldova and Georgia, legislative provisions came into force, similar to regulations of the Law of Ukraine "On Amendments to the Tax Code of Ukraine Regarding the Improvement of Tax Administration, Elimination of Technical and Logical Inconsistencies in Tax Legislation" No. 466-IX dated 16 January 2020, effective

⁹⁵ Commission staff working document. Evaluation of the Council Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco. February 2020. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/10-02-2020-tobacco-taxation-report.pdf?fbclid=IwAR1uqPEEeWpOAOQsnJmY3ngW1P7uFKPCRI2mWumz9GXX9CZWptBEmmO9JJgc.

⁹⁶ Tracking Economic Relief Plans Around the World during the Coronavirus Outbreak. URL: <https://tax-foundation.org/coronavirus-country-by-country-responses/>.

⁹⁷ U.S. Treasury delays tax payments on alcohol, tobacco due to coronavirus. URL: <https://www.reuters.com/article/health-coronavirus-tax-alcohol/u-s-treasury-delays-tax-payments-on-alcohol-tobacco-due-to-coronavirus-idUSW1N2AE01D?fbclid=IwAR29FUPO4dBy34VZFLwAEs6LS2RcqhLcfQBPRQ FPP A7Dvw9wmdSNIMHkL8>.

from 2021, and equating alternative tobacco products to cigarettes for excise revenue purposes. To evaluate such innovations of the former Soviet Union countries, we will analyse them in the context of the entire excise policy of tobacco products in Moldova and Georgia, as well as fiscal and regulatory consequences of its implementation.

Excise Policy and Transformation of the Moldovan Tobacco Market

Moldova is one of the few European countries where the reform of tobacco products excise duty was not driven by science-based approaches to changes in taxation and the corresponding European experience, but mostly by finding unique national solutions by a rule of thumb. Therefore, we proved that it should be considered not as an example to follow but as an example of adopting ambiguous measures to avoid fiscally harmful decisions.

Dynamics of the Moldovan tobacco products market has been declining over the last years. If in the 1990s it counted 6.5-7 billion cigarettes⁹⁸, in 2017 the volume of consumption thereof only just reached 4.5 billion pcs. In 2018, the decrease in cigarette consumption was over 0.5 billion pcs, while the import was only 3.3 billion pcs. In terms of money, the volume of cigarette sales in the country roughly accounted for MDL 3.5 billion, but this level was achieved with the excise rates increase and not as a result of sales growth. In 2019, the downward dynamics of the recent years persisted. The decline of the Moldovan cigarette market in 2019 was on the level of 11-12% (to 3.8 billion pcs). There are several reasons for such dynamics. Among the key ones, we should name the following: population decrease, growth of the share of illegal cigarettes turnover under influence of increase of excise duties and, as a result, retail prices⁹⁹. The latter was essentially the result of the increased tax burden on tobacco products. According to the forecast, cigarette consumption in Moldova in 2020 had to shrink to 3.3 billion pcs¹⁰⁰, and by 2025 – to 3 billion pcs per year¹⁰¹.

According to the information from Retail Zoom Marketing Research, six companies represent the Moldovan market for tobacco products: Philip Morris, with its products covering 35% of the market, Japan Tobacco International with a 26% share, British American Tobacco with a 16% share, Imperial Tobacco with a 12%

⁹⁸ Tobacco "Surprise" in 2020 Budget Bill? 02.12.2019 InfoMarket agency comment URL: http://infomarket.md/ru/marketpuls/tabachnyiy_syurpriz_v_zakonoproekte_o_byudjete_2020_goda.

⁹⁹ The Steep Dive of the Tobacco Market. No. 44 (1306). 29 November 2019. Logos-Press Economic Review. URL: http://logos.press.md/1306_12_1/.

¹⁰⁰ Tobacco "Surprise" in 2020 Budget Bill? 02.12.2019 InfoMarket agency comment URL: http://infomarket.md/ru/marketpuls/tabachnyiy_syurpriz_v_zakonoproekte_o_byudjete_2020_goda.

¹⁰¹ Michalis Alexandrakis: "We Refuse Cigarettes" No. 27 (1289). 19 July 2019. Logos-Press Economic Review. URL: http://logos.press.md/1289_13_1/.

share, International Tobacco (Orhei) with a 7% share, and Tutun CTC (Chişinău) with a 5% share¹⁰². The main competition in the market takes place in the lowest price segment. And, unlike EU countries and even modern Ukraine, the share of non-filter cigarettes of the Moldovan market for tobacco products has been growing rapidly until recently and reached 25% due to more attractive prices¹⁰³. The latter was to a considerable degree the consequence of the state policy in excise taxation of tobacco products.

We should note that, in the last decade, Moldova used different approaches to the excise taxation of tobacco products. In this matter, one may say that the country went from one extreme to the other. Thus, in 2009, the excise duty on cigarettes in Moldova was the lowest not only in Europe but in the whole world. Due to low prices (MDL 2 per pack), the smuggling was booming, cigarettes from Moldova were shipped to other countries in extremely large batches¹⁰⁴. In 2009-2013, the ad valorem excise rate witnessed a significant increase – from 3% to 30%. But later, upon the recommendation of the WHO, the specific excise rate was boosted from MDL 30 in 2013 to MDL 300 in 2016. It led to the growth of excise duty amount in the price of a cigarette pack from MDL 0.9 to MDL 5.7 (in 2016 – up to MDL 8) and, respectively, the price of a cigarette pack grew from MDL 6.3 in 2010 to MDL 13.9 in 2015. Still, in the cheap cigarettes category (MDL 4-15), the excise duty was from 15% to 53% of the total price. In the price of expensive cigarettes (MDL 20-40), the excise share was in the range 12-27%.

According to the calculations of the country's Ministry of Finance, in 2011, one could buy 350 cigarette packs with an average monthly salary in Moldova, while in 2015 – only 268. The increased excise rates drove the reduction in consumption of cigarettes supplied by legal channels. The excise rates growth ensured the increase in budget revenues from tobacco products. The share of excise duties on tobacco products in the structure of excise duty revenues grew from 9% to 30% in 2009-2015. In 2015, excise revenues from tobacco products amounted to roughly 5% of the state budget revenues (vs 1% in 2009)¹⁰⁵.

The new stage of reforming the excise taxation of tobacco products in Moldova started in 2016 after the introduction of anti-tobacco laws, the most strict ones in Europe¹⁰⁶. The Parliament approved the annual increase of excise rates on filter and

¹⁰² Michalis Alexandrakis: "We Refuse Cigarettes" No. 27 (1289). 19 July 2019. Logos-Press Economic Review. URL: http://logos.press.md/1289_13_1/.

¹⁰³ Lawmakers in Moldova Want to Regulate the Tobacco Market Differently Than In the EU. 25 June 2019. URL: <https://point.md/ru/novosti/obschestvo/moldavskie-zakonodateli-khotiat-regulirovat-rynok-tabaka-ne-tak-kak-v-es>.

¹⁰⁴ L. Cheban. Rates Rise: Life or Excise Taxes? 16 January 2019. URL: <https://noi.md/ru/mysli-vsluh/stavki-povyshayutsya-zhizni-ili-akcizy>.

¹⁰⁵ Excise Duty On Cigarettes To Increase In Moldova. 2016. URL: <https://monitorul.fisc.md/editorial/v-moldove-vyrastet-akciz-na-sigarety.html>.

¹⁰⁶ World No Tobacco Day: How the Government Can Help Reduce the Harm of Smoking. 29 May 2019. URL:

non-filter cigarettes, cigarillos, and cigars over three years. In 2016, excise rates on filter cigarettes were MDL 300 per 1,000 pcs and 12% of the price, but not less than MDL 400 per 1,000 pcs, and with time these rates grew gradually and were fixed at the level of MDL 460 and 12%, but not less than MDL 610, respectively, in 2019.

Meanwhile, a more dynamic growth of excise duty was envisaged for non-filter cigarettes. The excise rate for the latter effective in 2016 (MDL 60 per 1,000 pcs) grew to MDL 120 per 1,000 pcs in 2017¹⁰⁷. However, despite such growth of excise rate for non-filter cigarettes, this rate was still three times lower than that for filter cigarettes. It triggered a significant increase in the non-filter cigarettes share on the Moldovan market of tobacco products. And, interestingly, the fact that non-filter cigarettes are a social product (of the national cigarette manufacturer, Tutun-CTC)¹⁰⁸ was the ground for the differentiation of excise rates for filter and non-filter cigarettes (contradicting paragraph 2 of Article 7 of Council Directive 2011/64/EU dated 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco (codification)¹⁰⁹).

However, the market segment of non-filter cigarettes started to increase rapidly not only due to their manufacture in Moldova, but mostly due to the large-scale import growth. It provoked the reduction of the filter cigarette volume of sales and led to significant losses in budget revenues. If in 2014 the share of non-filter cigarettes (imported and produced) was 21%, in 2016 it amounted to almost 30%. However, it didn't significantly affect the amount of excise revenues to the budget, and the same as earlier, over 94% of excise revenues were received from filter cigarettes¹¹⁰.

It became the basis for the decision not only to increase the excise burden on non-filter cigarettes significantly but also change the approach to excise duty assessment for these products with the introduction of the ad valorem rate. In 2018, the excise duty on non-filter cigarettes was increased to MDL 260 per 1,000 pcs and 3% of the retail price, and in 2019, these rates grew to MDL 360 and 6% respectively¹¹¹. Moreover, it was envisaged that in the next three years the excise duty

http://www.infotag.md/m9_populis/276113/.

¹⁰⁷ Excise Duty On Cigarettes To Increase In Moldova. 2016. URL: <https://monitorul.fisc.md/editorial/v-moldove-vyrastet-akciz-na-sigarety.html>.

¹⁰⁸ MoldStreet: How Many Smuggled Cigarettes Are Sold In Moldova? In Floresti, 27% Of Cigarettes Are Smuggled. 9 December, 2019. URL: <https://nokta.md/longridy/moldstreet-skolko-kontrabandnyh-sigaret-prodaetsya-v-moldove-vo-floresht-27-sigaret-sostavlyayet/>.

¹⁰⁹ On the structure and rates of excise duty applied to manufactured tobacco (codification): Council Directive of 21 June 2011 (2011/64/EU). URL: <http://www.minjust.gov.ua/45885>.

¹¹⁰ The New Excise Structure for Non-Filter Cigarettes Will Entail Changes to the Tax Code. 30 June 2017. URL: <https://monitorul.fisc.md/editorial/novaya-struktura-akciza-na-sigarety-bez-filtra-povlechit-izmeneniya-v-nalogovyy-kodeks.html>.

¹¹¹ What Does Filip's Government Smoke? Why Is The Moldovan Market Flooded With Non-Filter Cigarettes? 4 July

on cigars and cigarillos will grow only by 1% and make 41% of the price¹¹². In other words, the Moldovan lawmakers did not consider the significant increase in the differentiation level of the excise burden between different categories of tobacco products that threatened to replace cigarettes with cheaper alternatives.

The increase in excise on cigarettes was explained by the "scheduled gradual scaling of the excise rate up to the level of the regional countries" related, among other things, to the implementation of a provision of the Moldova–European Union Association and Free Trade Agreement. It is worth noting that in accordance with obligations undertaken by Moldova (under Annex VI to Chapter 8 (Taxation) of the Association Agreement), the minimum excise duty on cigarettes has to grow extremely fast and be not less than EUR 90 per 1,000 psc (roughly MDL 1,800) by 2025¹¹³. Meanwhile, the average price of a pack of cigarettes will grow by 270% up to MDL 62.2¹¹⁴, and by other estimates – up to MDL 90-100 (EUR 5)¹¹⁵. Considering the fact that in 2009 this price was MDL 2 per pack, there is nothing "gradual" in this fiscally oriented excise duty reform in Moldova.

Another goal the Moldovan authorities pursue when increasing the excise duty on tobacco products is the attempt to make the majority of smokers give up this harmful habit. But such a radical approach to solving the smoking problem is often criticised. In particular, the Head of the Centre for Strategic Studies and Reforms of Moldova, G. Şelari, stated that the excise duty increase is one of the ways to fight smoking. But the problem is in the fact that bans cannot eradicate harmful habits. In this situation, especially in the context of Moldova, there is always a risk of transition to the shadow economic activity. Therefore, in the best-case scenario, the increase of cigarettes prices will only impact the family budgets of smokers so they will smoke less or quit tobacco products altogether, but in the worst-case scenario, smokers will switch to cheaper and lower quality cigarettes that will harm their health even more, while the result expected by the government will not be fully achieved.

Statistics show that despite strict measures taken by the government in the area of regulating the tobacco products consumption, the reduction of smoking prevalence among the population turned out to be insignificant. In particular, according to the WHO data, 48.5% of men and 8.2% of women smoke in Moldova. The share of

2017. URL: <https://www.mold-street.com/?go=news&n=6138>.

¹¹² Excise Duty On Cigarettes To Increase In Moldova. 2016. URL: <https://monitorul.fisc.md/editorial/v-moldove-vrastet-akciz-na-sigarety.html>.

¹¹³ Tobacco taxation policy in the Republic of Moldova. World Health Organization, 2016. - P. 17.

¹¹⁴ Sales of Non-Filter Cigarettes Doubled. What happens next? 30 September 2018 URL: <https://mybusiness.md/ru/categories/analitika-i-rassledovaniya/item/9118-prodazhi-sigaret-bez-filtra-vyrosli-v-2-raza-cto-budet-dalshe>.

¹¹⁵ Roman Kirke: Technologies Reducing Harm from Nicotine Addiction Should Be Granted A Preferential Tax Regime. 28 May 2019. URL: http://www.infomarket.md/ru/interviews/roman_kirke_tehnologii_umenshayuschie_vred_ot_nikotinovoy_zavisimosti_doljniy_imet_schadyashee_nalogooblojenie/.

teenage smokers grows as well¹¹⁶. The share of smokers in the total population of Moldova is 27%¹¹⁷.

If in 2016, excise revenues from cigarettes amounted to MDL 1.73 billion, in 2018, they already exceeded MDL 2.5 billion¹¹⁸. The share of all taxes the state budget receives from the tobacco market is roughly 2-3%. However, it was not only the growth of excise duty rates that drove the budget revenues to increase. A significant increase of excise revenues also took place due to the introduction of minimum retail prices for cigarettes on the level of MDL 16 per pack of filter cigarettes and MDL 7 per pack of non-filter cigarettes in 2017, with further gradual increase thereof. In 2019, the minimum retail price for filter cigarettes was on the level of MDL 25 per pack, while for non-filter cigarettes – MDL 19¹¹⁹.

Cigarettes of a questionable quality sold on the market by such low prices (lower than the cost price) as MDL 7-9 per pack, while only the minimum excise was MDL 8 per pack, determined the need to introduce a minimum retail price. However, we should note that this legislative provision contradicts Article 15 of Council Directive 2011/64/EU, which stipulates that nothing should hinder the manufacturers from setting maximum retail prices for cigarettes independently. As we can see on the example of minimum retail prices and different excise rates for filter and non-filter cigarettes, in Moldova, the policy of alignment of the excise taxation of tobacco products with the European standards has been implemented quite selectively.

Nevertheless, the significant excise rates increase in 2016-2019 and the introduction of minimum retail prices for cigarettes with a further gradual increase led to changes in consumer priorities and sales volumes of filter and non-filter cigarettes. Reduction of the share of non-filter cigarettes on the market was the peculiarity of 2019. A share of smokers switched to fine-cut tobacco used for roll-ups as its price was lower than the price for non-filter cigarettes. The world leader of fine-cut tobacco market released these tobacco products to the Moldovan market¹²⁰. For a long time, excise rates for these products were low, on the level of MDL 174 per kg (which is about MDL 160-170 per 1,000 pcs), while the excise duty for

¹¹⁶ Cheban L. Rates Rise: Life or Excise Taxes? 16 January 2019. URL: <https://noi.md/ru/mysli-vsluh/stavki-povyshayutsya-zhizni-ili-akcizy>.

¹¹⁷ The Tobacco Control Law Looked Good from the Start but Degraded. 30 May 2018. URL: <https://point.md/ru/novosti/obschestvo/zakon-o-kontrole-nad-tabakom-vygliadel-khorosho-iznachalno-no-degradiroval>.

¹¹⁸ Cheban L. Rates Rise: Life or Excise Taxes? 16 January 2019. URL: <https://noi.md/ru/mysli-vsluh/stavki-povyshayutsya-zhizni-ili-akcizy>.

¹¹⁹ Tobacco "Surprise" in 2020 Budget Bill? 02.12.2019 InfoMarket agency comment URL: http://infomarket.md/ru/marketpuls/tabachnyiy_syrpriz_v_zakonoproekte_o_byudjete_2020_goda.

¹²⁰ ESTA: Why the State Budget of Moldova Keeps Losing Revenue. 16 March 2020. URL: <https://point.md/ru/novosti/business/esta-pochemu-gosbiudzhet-moldovy-prodolzhaet-teriat-dokhody-r>.

cigarettes was on average MDL 400-500. It caused the extreme popularity of roll-ups and cigarette rolling machines in the first half of 2019¹²¹.

This trend in the growth of demand for fine-cut tobacco in Moldova had a logical explanation and was typical for other European countries as well. According to the Eurobarometer research, consumers of these tobacco products are from vulnerable social groups that have fewer employment opportunities, often experience financial distress and are vulnerable to price movements. Fine-cut tobacco is considered to be a legal alternative to counterfeit and smuggled cigarettes¹²².

However, Moldova adopted radical legislative changes, and the excise duty for fine-cut tobacco increased to MDL 1,000 per kg at once from mid-2019, and to MDL 1,200 in 2020¹²³. These changes became effective right after the Parliament voted for them. That is, already in summer 2019, the excise rate was increased by almost 700%, and as a result, the price of a fine-cut tobacco pack weighing 30 g grew from MDL 19 to MDL 54. Its price became one and a half times higher than that of legal cigarettes. This is a surprising and rather unusual excise innovation for EU practices, as the ingredients for a roll-up began to cost more than the final product. As a result, already in September, loose tobacco for a roll-up became uncompetitive in terms of price, and the demand for it started to fall¹²⁴.

And expectedly, Moldovan smokers with a low income switched to another affordable alternative – cigarillos – after the price of fine-cut tobacco hiked. This type of tobacco products had only the ad valorem excise rate in the amount of 41% of the price. And the law didn't specify of what price – the selling or the retail one, which allowed suppliers to vary, providing price advantage for goods. If in 2019, the minimum retail price for filter cigarettes was MDL 25 per pack and MDL 19 for non-filter cigarettes, the price for cigarillos was about MDL 18. The MDL 1 price gap became decisive for the consumers.

Several operators supply cigarillos to the Moldovan market, but International Tobacco (Orhei) has the largest sales volume. This operator has been actively developing the non-filter group, and in 2019 doubled its market share up to 12%. It should be noted that there are concerns whether cigarettes of International Tobacco can be deemed cigarillos as their composition is significantly different from that of cigarillos (they remind usual non-filter cigarettes). Despite this fact, the manufacturer

¹²¹ The Steep Dive of the Tobacco Market. No. 44 (1306). 29 November 2019. Logos-Press Economic Review. URL: http://logos.press.md/1306_12_1/.

¹²² ESTA: Why the State Budget of Moldova Keeps Losing Revenue. 16 March 2020. URL: <https://point.md/ru/novosti/business/esta-pochemu-gosbiudzhet-moldovy-prodolzhaet-teriat-dokhody-r>.

¹²³ The Steep Dive of the Tobacco Market. No. 44 (1306). 29 November 2019. Logos-Press Economic Review. URL: http://logos.press.md/1306_12_1/.

¹²⁴ ESTA: Why the State Budget of Moldova Keeps Losing Revenue. 16 March 2020. URL: <https://point.md/ru/novosti/business/esta-pochemu-gosbiudzhet-moldovy-prodolzhaet-teriat-dokhody-r>.

pays the excise duty by a low rate. In some tobacco chains, the turnover of its products is close to 10%.

If the current rates for excise taxation of cigarillos in Moldova are maintained, their volume of sales will continue to grow. The probability of such growth is rather high, considering the fact that in 2020, there was an excise duty increase and a uniform rate was set for both filter and non-filter cigarettes (as required for the implementation of paragraph 2 of Article 7 of Council Directive 2011/64/EU)¹²⁵. The cigarette prices grew again. Taking into account the high price elasticity of tobacco products in Moldova, consumers will give preference to cheaper products, even more harmful to health.

The above conclusion should also be considered in view of another transformation in taxation. Taking into account the recent changes in the excise policy of Moldova concerning the setting of excise duty rates for heated tobacco products, which are potentially less harmful, their alternative, *de facto* a social product – non-conventional cigarillos – became affordable for consumers with low income.

It should be noted that the Tax Code of Moldova only regulates the excise taxation of sticks for heated tobacco systems. E-cigarettes are not considered excisable goods in Moldova, therefore they do not are not listed in the customs statistics¹²⁶.

Only one heated system that uses HEETS sticks was released to the market of Moldova in July 2018 – IQOS. In the first year of the sale, over 20 thousand legal-age smokers from Moldova quitted smoking cigarettes and other conventional tobacco products and switched to heated tobacco products¹²⁷.

According to calculations, in 2018, import of HEETS sticks to Moldova was less than 1% of all tobacco products legally shipped to the country¹²⁸. Roughly 15 million psc of sticks were imported to Moldova over nine months of 2019. It was projected that in 2019 the share of heated tobacco products would be roughly 2% on the country's tobacco market¹²⁹. From the moment of delivery of heated tobacco products, 22.3 thousand kg of sticks and 35.2 thousand of IQOS devices were

¹²⁵ The Steep Dive of the Tobacco Market. No. 44 (1306). 29 November 2019. Logos-Press Economic Review.URL: http://logos.press.md/1306_12_1/.

¹²⁶ Ibid.

¹²⁷ Over Twenty Thousand Smokers Use Tobacco Heating Systems in Moldova. 17 July 2019. URL: <https://point.md/ru/novosti/obschestvo/sistemoi-nagrevaniiia-tabaka-v-moldove-polzuiutsia-bolee-20-tysiach-kurilshchikov>.

¹²⁸ World No Tobacco Day: How the Government Can Help Reduce the Harm of Smoking. 29 May 2019. URL: http://www.infotag.md/m9_populis/276113/.

¹²⁹ The Steep Dive of the Tobacco Market. No. 44 (1306). 29 November 2019. Logos-Press Economic Review.URL: http://logos.press.md/1306_12_1/.

imported to Moldova¹³⁰. However, compared to other countries, the share of these tobacco products in Moldova is low. In neighbouring Romania the share of heated tobacco products is over 2.7% of the total national tobacco market¹³¹.

At first, in Moldova, heated tobacco products were classified as "Other manufactured tobacco and industrial tobacco substitutes, "homogenised" or "reconstituted" tobacco; tobacco extracts and essences", like in the majority of EU countries¹³². The excise duty for these sticks in the price of a pack was MDL 0.87, which is 11 times lower than the excise in the price of a cigarette pack (MDL 9.6). For comparison, at that time the excise duty on a pack of HEETS sticks in Ukraine was equal to MDL 3.5, which was four times higher than in Moldova¹³³.

However, on 24 June 2019, a bill was introduced in Moldova; its main idea was to apply the same approaches to excise taxation of heated tobacco products as to cigarettes. The main arguments supporting the increase in excise rates were the following: the high death rate of the country's population due to tobacco consumption and exposure to tobacco smoke; the intent to increase budget revenues from tobacco products¹³⁴. Amendments adopted in July 2019 equated tobacco heating sticks to cigarettes and introduced the excise duty on these sticks in the amount of MDL 610 per 1,000 pcs in 2019 (the legislative provision became effective as soon as on 16 July 2019) and MDL 700 per 1,000 pcs – in 2020. Therefore, the excise duty on sticks was equated to the minimum excise duty on filter and non-filter cigarettes¹³⁵.

The above innovations in the taxation of heated tobacco products indicate that the Moldovan government does not take into consideration the potentially lower harm of consumption thereof if compared to cigarettes and is driven only by fiscal interests (ignoring science-based approaches to tax reform and EU practices). Under such conditions, there is a risk that a considerable amount of Moldovan consumers of heated tobacco products will return to smoking cigarettes or other cheaper types of tobacco. Or, with changes in the correlation of prices for tobacco heating sticks in Moldova and neighbouring countries, there may be a spread of smuggled goods on the Moldovan market. Manufacturers cannot establish low prices for their products at a loss¹³⁶.

¹³⁰ Michalis Alexandrakis: "We Refuse Cigarettes" No. 27 (1289). 19 July 2019. Logos-Press Economic Review. URL: http://logos.press.md/1289_13_1/.

¹³¹ Philip Morris Offers Moldovan Smoker A Smoke-Free Future. // Economic Review. No. 24 (1238). 29 June 2018. URL: http://logos.press.md/1238_18_1/.

¹³² World No Tobacco Day: How the Government Can Help Reduce the Harm of Smoking. 29 May 2019. URL: http://www.infotag.md/m9_populis/276113/.

¹³³ Heat-Not-Burn: It Will Get Hotter. 25 June 2019. URL: <https://monitorul.fisc.md/editorial/heat-not-burn-stanet-goryachee.html>.

¹³⁴ Lawmakers in Moldova Want to Regulate the Tobacco Market Differently Than In the EU. 25 June 2019. URL: <https://point.md/ru/novosti/obschestvo/moldavskie-zakonodateli-khotiat-regulirovat-rynok-tabaka-ne-tak-kak-v-es>.

¹³⁵ Law No. 97 dated 26 July 2019 On Amendments to Certain Legislative Acts. URL: https://www.legis.md/cautare/getResults?doc_id=119764&lang=ru#.

¹³⁶ The Steep Dive of the Tobacco Market. No. 44 (1306). 29 November 2019. Logos-Press Economic Review. URL: https://logos.press.md/1306_44_1/.

We should note that the rapid growth of the tobacco products excise duty rates in Moldova in recent years led to the reduction in the legal market for tobacco products and triggered the development of illegal trade. According to the research of the Moldovan market of illegal cigarettes performed in 2019, the share of smuggled cigarettes or counterfeit products reaches 5.3% of the national market. The main channels for buying counterfeit cigarettes are grocery stores – 61%, kiosks – 16%, and duty-free stores – 10%¹³⁷.

However, the relatively low share of the illegal tobacco market in Moldova is explained by lower rates of excise duty and prices for tobacco products than in other European countries. In 2019, taking into account all the increases, the minimum excise duty on cigarettes in Moldova was raised to about EUR 35¹³⁸. According to the country's obligations, in 2025 this figure should be EUR 90 per 1,000 pcs. This could lead to a significant reduction in the legal market of tobacco products and budget revenues.

As we can see, in recent years Moldova has pursued a radical tax policy in the field of excise taxation of tobacco products, and the reforms in certain products have been ambiguous in the context of ensuring compliance with EU standards and achieving the declared goals. Legislative changes were often the result of hasty and ill-considered decisions, with insufficient attention paid to assessing their consequences. In addition, the practical implementation of a number of innovations next month, immediately after their approval, contrasts with the accepted global practices of the legislative process. The government also restricts the smokers' ability to switch to potentially less harmful heated tobacco products.

While until 2020, Moldova was the only country in Europe with different rates of excise duty on filter and non-filter cigarettes, since 2020 it is the only country where excise duties on heated tobacco products were set at the level of the minimum excise duty for cigarettes, and the excise on fine-cut tobacco is more than 160% of the excise duty on cigarettes. This excise burden on the latter products is one of the largest in the world.

The cancellation of the minimum retail price in 2020 will be an additional advantage for cigarette manufacturers in the market competition. This may even lead to the return to the market of abnormally cheap cigarettes, which may attract new

http://logos.press.md/1306_12_1/.

¹³⁷ MoldStreet: How Many Smuggled Cigarettes Are Sold In Moldova? In Floresti, 27% Of Cigarettes Are Smuggled. 9 December, 2019. URL: <https://nokta.md/longridy/moldstreet-skolko-kontrabandnyh-sigaret-prodaetsya-v-moldove-vo-floresht-27-sigaret-sostavlyaet/>.

¹³⁸ Ibid.

consumers of cheap products. As a result, a significant reduction in excise and VAT revenues is possible. However, the cancellation of the minimum retail price is necessary to ensure that Moldovan tax legislation complies with Council Directive 2011/64/EU.

However, the rapid growth of excise duties in the country did not affect cigars and cigarillos, the excise rate of which in 2020 remained at 41% of the price, as well as smoking tobacco, other manufactured tobacco and industrial tobacco substitutes, "homogenised" or "reconstituted" tobacco; tobacco extracts and essences, the excise duty rate on which in 2020 increased by only 5% and is MDL 150.33 per kg¹³⁹. That is, despite the declared general fiscal vector of the excise reform, Moldova still has opportunities to increase sales of certain tobacco products, which will be in demand among smokers because they will be cheap, while paying excise duty in relatively small amounts.

Thus, we emphasize once again that the experience of Moldova cannot be considered as a positive example in the field of reforming the excise duty on tobacco products in the context of the transformation of the tobacco market.

Transformations of Excise Duty on Tobacco Products in Georgia

Reforms of excise taxation of tobacco products, which were carried out in Georgia in 1997-2019, had pronounced national characteristics, and in some years differed significantly from the corresponding practice of most European countries and, in particular, Ukraine. It should be noted at once that the Georgian excise policy on regulating the development of the tobacco market was implemented through "large jumps, reverse steps and stops".

Back in 1991-1996, tobacco products in Georgia were not subject to excise duty at all, and since late 1997, locally produced cigarettes have been taxed at much lower rates than imported counterparts. In particular, on imported cigarettes, the excise and customs taxes in the amount of GEL 0.25 (USD 0.19) were levied on a pack of filter cigarettes, and GEL 0.19 (USD 0.15) for a pack of non-filter cigarettes¹⁴⁰. Instead, excise duty on Georgian cigarettes was paid at 100% of production costs. In 1998, the approach to the taxation of locally produced cigarettes changed with the introduction of an excise duty of GEL 0.15 per pack of filter cigarettes and GEL 0.05 per pack of non-filter cigarettes. This differentiation of the excise burden was due to Georgia's attempts to curb the rapid decline of the national tobacco industry – to support the Georgian companies Tbilisi Tobacco and Omega

¹³⁹ Since 1 January 2020, Excise Duties On Filter And Non-Filter Cigarettes And Tobacco Sticks Increase In Moldova. 3 January 2020. URL: <https://mybusiness.md/ru/novosti-biznesa/item/12946-s-1-yanvarya-2020-g-v-moldove-vyrosli-aktsizy-na-sigarety-s-filtrom-i-bez-filtra-i-tabachnye-stiki>.

¹⁴⁰ Bakhturidze G. Tobacco control policy development and progress in Georgia. *Journal of Health Inequalities*. 2018. Volume 4. Issue 2, June. p. 1-4. — p. 1. URL: <https://www.researchgate.net/publication/332456799>

Group Tobacco. The main market participants Georgia's tobacco products were three international tobacco companies – Philip Morris, British American Tobacco and Japan Tobacco International¹⁴¹.

Until 2005, excise duty rates on cigarettes remained virtually unchanged, and the decision to significantly increase them was made by the new Georgian government, which came to power in 2004. In 2005, the excise duty was more than doubled on imported filter cigarettes (up to GEL 0.9 per pack) and more than tripled on locally produced filter cigarettes (up to GEL 0.7)¹⁴². As a result, the share of this tax in the retail price of imported cigarettes increased from 36% to 54%, and in the price of local cigarettes – from 25% to 43%. The rates of excise duty on non-filter cigarettes (GEL 0.25 for imported cigarettes and GEL 0.15 for locally produced cigarettes) remained at about 25% of their value for filter cigarettes¹⁴³. The tobacco companies reacted to such drastic steps by purchasing excise stamps in advance. This led to an increase in cigarette excise revenues to the budget in 2004 and their significant reduction in early 2005.

In addition, the abrupt increase in excise duty rates on cigarettes led to an increase in their illicit turnover from 10% in 2003 to 65% in 2005, which posed a serious threat to ensuring sufficient budget revenues. In view of this, a reverse decision was made to reduce excise rates by 30-40% in 2006, while maintaining the differentiation in taxation of both imported and domestic cigarettes, and filter and non-filter cigarettes (such inconsistency of national approaches to excise taxation with EU standards remained unnoticed by the reformers for quite some time). With the growth of excise rates on cigarettes, their revenues in 2004-2005 were only 47% (and not more than twice) higher than in 2002-2003.

In the following years, excise duty rates on cigarettes in Georgia increased, but due to fears of a new spread of smuggling, they reached the level set in 2005 only 10 years later¹⁴⁴. In 2010, excise rates on imported and domestically produced cigarettes were finally levelled by raising rates on the latter (up to GEL 0.6 for a pack of filter cigarettes and GEL 0.15 for a pack of non-filter cigarettes).

This state policy on taxation of tobacco products was accompanied by such

¹⁴¹ A Global Review of Country Experiences. Georgia: Confronting Illicit Tobacco Trade. /Technical reports of the World Bank Group. Global Tobacco Control Program. H. Ross and G. Bakhturidze. p. 93-118. — p. 96. URL: <https://www.worldbank.org/en/topic/tobacco/publication/confronting-illicit-tobacco-trade-a-global-review-of-country-experiences>

¹⁴² Bakhturidze G. Tobacco control policy development and progress in Georgia. *Journal of Health Inequalities*. 2018. Volume 4. Issue 2, June. P. 1-4. — P. 1. URL: <https://www.researchgate.net/publication/332456799>

¹⁴³ A Global Review of Country Experiences. Georgia: Confronting Illicit Tobacco Trade. /Technical reports of the World Bank Group. Global Tobacco Control Program. H. Ross and G. Bakhturidze. P. 93-118, P. 96. URL: <https://www.worldbank.org/en/topic/tobacco/publication/confronting-illicit-tobacco-trade-a-global-review-of-country-experiences>.

¹⁴⁴ Little M., Ross H., Bakhturidze G., Kachachishvili I. Illicit tobacco trade in Georgia: prevalence and perceptions. *Tobacco Control* 2019;0:1-7. - P. 1. URL: <http://dx.doi.org/10.1136/tobaccocontrol-2018-054839>.

negative trends as the spread of consumption of these products among men from 53.3% in 2001 to 59.8% in 2008, and from 6.3% to 14.9% among women¹⁴⁵. Differentiation of excise rates on filter and non-filter cigarettes has led to low-income consumers switching to cheaper but more harmful non-filter cigarettes, instead of giving up the smoking habit altogether.

Significant changes in the excise taxation of tobacco products in Georgia took place after 2013. This was due to several circumstances. In particular, in 2013 the Georgian government approved the National Tobacco Control Strategy. Another important event was the adoption in June 2013 of the Association Agreement between Georgia and the EU, a significant part of the provisions of which entered into force in September 2014. In accordance with the country's commitments in the field of taxation of tobacco products, since 2013 excise duty rates on these products have been increased in order to bring them closer to the level set by the provisions of Council Directive 2011/64/EU¹⁴⁶.

Thus, from 1 September 2013, the excise duty rate on a pack of filter cigarettes was increased by 25% to GEL 0.75 (about \$0.45), and by 33.3% to GEL 0.2 (about \$0.12) for non-filter cigarettes¹⁴⁷. In 2015, a mixed system of taxation of these tobacco products was adopted by introducing the ad valorem excise rate of 5%. The basis for calculating the ad valorem component of the tax was determined by retail prices, which are set annually by order of the Ministry of Finance of Georgia¹⁴⁸. Note that the latter contradicts paragraph 1 of Article 7 of Council Directive 2011/64/EU, which regulates the application of the ad valorem rate to the maximum retail price of cigarettes set by the manufacturer or importer. In January 2015, the specific rate of excise duty for filter cigarettes increased by 20%, and for non-filter cigarettes by 25%, and in July of that year the ad valorem rate of excise duty was increased to 10%¹⁴⁹. In 2016-2017, the specific rate of excise duty for a pack of filter cigarettes increased to GEL 1.70 (\$0.7), and up to GEL 0.60 (\$0.25) for a pack of non-filter cigarettes¹⁵⁰. That is, the differentiation between these rates remained at the 2.83 times level. In 2017, the excise duty for loose tobacco products (other than cigarettes,

¹⁴⁵ Bakhturidze G. Tobacco control policy development and progress in Georgia. *Journal of Health Inequalities*. 2018. Volume 4, Issue 2, June. - P. 1. URL: <https://www.researchgate.net/publication/332456799>.

¹⁴⁶ Ibid. P. 2-3.

¹⁴⁷ Georgia Abolishes Import Duties On Tobacco. 30.12.2013. URL: <https://ubr.ua/business-practice/laws-and-business/gruziia-otmenila-importnye-poshliny-na-tabak-272648>.

¹⁴⁸ Bakhturidze G. Tobacco control policy development and progress in Georgia. *Journal of Health Inequalities*. 2018. Volume 4, Issue 2, June. P. 1-4. — P. 2. URL: <https://www.researchgate.net/publication/332456799>.

¹⁴⁹ A Global Review of Country Experiences. Georgia: Confronting Illicit Tobacco Trade. /Technical reports of the World Bank Group. Global Tobacco Control Program. H. Ross and G. Bakhturidze. P. 97-98. URL: <https://www.worldbank.org/en/topic/tobacco/publication/confronting-illicit-tobacco-trade-a-global-review-of-country-experiences>.

¹⁵⁰ Terrible Statistics: WHO On Smoking-Related Mortality In Georgia. 12.12.2018. URL: <https://sputnik-georgia.ru/society/20181212/243436358/iz-za-kurenija-v-gruzii-kazhdyj-god-umiraet-bolshe-11-tysyach-chelovek-h> mL

cigars and cigarillos) was also increased from GEL 25 to GEL 35 (\$14.5) per kilogramme¹⁵¹.

In 5 years, from 2013 to 2017, the specific rate of excise duty on filter cigarettes in Georgia was increased 2.27 times, and three times on non-filter cigarettes. This excise policy ensured an increase in tax revenues. However, in 2013 and 2017, tobacco companies, in response to the biggest "jumps" in increasing the excise burden, purchased excise duty stamps in advance¹⁵², which led to the loss of part of the revenues (if tax rates were increasing slower, this could have been avoided).

An increase in excise duties on tobacco products was also supposed to help reduce the appeal of smoking. However, as of February 2018, the number of smokers among the population of Georgia was 33% (60% of men and 15% of women continued to smoke; these figures remained at the level of 2008)¹⁵³, which was higher than average both in the world (23%) and in Europe (29%)¹⁵⁴. Besides, in Georgia, about 16.5% of boys and 7.8% of girls aged 13-15 used tobacco products¹⁵⁵. The increase in excise duty rates on cigarettes did not actually encourage smokers to give up this bad habit.

However, despite the reluctance of smokers to stop consuming tobacco products, even in the face of a significant rise in cigarette prices, the legal novel nicotine products, which are potentially less harmful to human health, did not enter the Georgian market. This is especially true for heated tobacco products, as the country's approach to excise taxation of such products stands in stark contrast with the relevant practice of the European Union. Since August 2017, Georgia has introduced excise duties on: 1) liquid with or without nicotine, intended for use in e-cigarettes, in the amount of GEL 0.2 (\$0.08) for 1 mg of liquid; 2) heated tobacco sticks at the specific rate of GEL 1.7 (\$0.7) for a pack, capsules and similar products for heating tobacco in the amount of GEL 1.7 per piece, and the ad valorem rate of excise duty on these products at 10% of their retail price set by the Ministry of

¹⁵¹ Bakhturidze G. Tobacco control policy development and progress in Georgia. *Journal of Health Inequalities*. 2018. Volume 4. Issue 2, June. P. 1-4. — P. 2. URL: <https://www.researchgate.net/publication/332456799>.

¹⁵² A Global Review of Country Experiences. Georgia: Confronting Illicit Tobacco Trade. /Technical reports of the World Bank Group. Global Tobacco Control Program. H. Ross and G. Bakhturidze. P. 97-98. URL: <https://www.worldbank.org/en/topic/tobacco/publication/confronting-illicit-tobacco-trade-a-global-review-of-coun-try-experiences>.

¹⁵³ Has the Volume of the Black Market of Cigarettes in Georgia Grown after Their Rise in Price? 28 April 2018. URL: <https://sputnik-georgia.ru/reviews/20180428/240249812/Obem-chernogo-rynka-sigaret-v-Gruzii-vyros-posle-ih-podorozhan-ija.html>.

¹⁵⁴ Bakhturidze G. Tobacco control policy development and progress in Georgia. *Journal of Health Inequalities*. 2018. Volume 4. Issue 2, June. - p. 1. URL: <https://www.researchgate.net/publication/332456799>.

¹⁵⁵ A Global Review of Country Experiences. Georgia: Confronting Illicit Tobacco Trade. /Technical reports of the World Bank Group. Global Tobacco Control Program. H. Ross and G. Bakhturidze. P. 103. URL: <https://www.worldbank.org/en/topic/tobacco/publication/confronting-illicit-tobacco-trade-a-global-review-of-coun-try-experiences>.

Finance of Georgia¹⁵⁶. That is, despite the recommendations of the European Commission, excise duty rates on heated tobacco products were set at the same level as for filter cigarettes.

It is noteworthy that the high excise duty on heated tobacco sticks were introduced before the launch of their official sale in Georgia, and therefore manufacturers of heated tobacco systems did not enter the national market.

In 2018, excise rates on cigarettes did not increase in Georgia. In January 2019, the ad valorem excise rate on filter cigarettes was increased from 10% to 30% of the price, while the corresponding rate for non-filter cigarettes remained at 10%. The excise duty on cigarettes in Georgia in 2019 amounted to GEL 85 per thousand pcs (EUR 26.6)¹⁵⁷, i.e. was more than three times lower than the minimum excise duty on these products regulated by EU law. The increase of the ad valorem rate of excise duty on non-filter cigarettes to 30% was envisaged by the amendments to the Tax Code of Georgia dated 16 October 2019, which entered into force on the 30th day after publication. Only then the difference between the national tax legislation and paragraph 2 of Article 7 of Council Directive 2011/64/EU was resolved in the country (in 2019, the specific rate of excise duty for filter and non-filter cigarettes was equalised by raising the rate for the latter).

At the same time, the ad valorem excise rate for heated tobacco products was increased to 30% from 1 January 2019, simultaneously with the increase of this rate for filter cigarettes¹⁵⁸ (in the absence of these legal products with potentially less health harm from its consumption in the market, and therefore with no receipts of the relevant excise duty).

Another increase in excise duties has led to higher cigarette prices. In 2018-2019, cigarettes in Georgia rose in price by almost two and a half times. Only in 2019, prices rose twice, on the average by GEL 1 (about \$0.3). The average price of a pack of cigarettes was GEL 4-6¹⁵⁹. That is, Georgia's excise policy has shifted demand from cigarettes to other types of cheaper traditional tobacco products. As a result of rising excise duty rates, cigarettes in Georgia became twice as expensive as in Armenia. This increased the risks of their smuggling. Also, sales of finely chopped tobacco for rolling cigarettes increased in Georgia¹⁶⁰.

If we evaluate the country's cigarette market on the basis of excise stamps sold,

¹⁵⁶ Georgian Tax Code. Tbilisi, 2018. URL: <https://matsne.gov.ge/ka/document/view/1043717?publication=142>.

¹⁵⁷ Cigarette Prices will Rise Gradually Until 2025. 8 July 2019. URL: <https://kommersant.ru/post/ceni-na-sigareti-budut-poetapno-rasti-do-2025-goda>

¹⁵⁸ Tax Code of Georgia. Reference text as of 10.12.2019 N 5444. URL: <https://matsne.gov.ge/ru/document/view/1043717?publication=153>.

¹⁵⁹ The Minister of Finance of Georgia Complained About Problems With Electronic Cigarettes. 20.02.2020. URL: <https://sputnik-georgia.ru/economy/20200220/247785298/Glava-Minfina-Gruzii-pozhalovalsya-na-problemy-s-elektronnymi-sigaretami.html>.

¹⁶⁰ Illegal Market In Ukraine. What To Do And How To Deal With It. URL: <https://knpartners.com.ua/nelegalnyiy-ryinok-sigaret-v-ukraine-chto-delat-i-kak-s-nim-borotsya>.

we can say that it has decreased from 9,898.4 million pcs in 2013 to 7,943.3 million pcs in 2017, i.e. by 19.8%¹⁶¹. The reduction of the legal market continued later.

Remarkably, the phenomenon of importing cigarettes for re-export to third countries became very widespread in Georgia. Re-export of these tobacco products increased from 27.4 million pcs in 2013 to 2,764.2 million pcs in 2017. If we take into account the fact that in 2015 about 8 billion cigarettes were imported into the country, and in 2018 over 16.8 billion, i.e. twice as many, we can make assumptions about the growth of re-export of these products in the coming years¹⁶². And it is impossible to be sure that all cigarettes imported to Georgia for re-export were later shipped to other countries.

A feature of the development of the Georgian tobacco market was that in 2015, local manufacturers began to produce non-filter cigarettes with an elongated hollow tip, suitable for installing filters. Filters were offered to buyers of cigarettes separately at the point of sale, free of charge. This allowed the company to optimise the payment of excise duty and encouraged the replacement of filter cigarettes, which increased the availability of cigarettes and their consumption by the public. As a result of the application of this tax optimisation scheme, sales of non-filter cigarettes in 2017 doubled, and the volume of purchases of excise stamps for such Georgian cigarettes increased proportionally¹⁶³.

That is, in Georgia there was a transition of the population to the consumption of cheaper and low-quality non-filter cigarettes and roll-ups made of loose tobacco. As the excise duty on loose tobacco was lower than that on cigarettes, it was more affordable for consumers, many of which switched to roll-ups. While in 2018, about 2% of smokers in the country smoked roll-ups, in 2019 the number of roll-up consumers increased to almost 21 %¹⁶⁴. As a result of replacing filter cigarettes with these alternatives, excise revenues decreased. It is estimated that for nine months of 2019, the budget suffered a loss of almost GEL 175 million from tobacco products¹⁶⁵.

In response to such disastrous processes for the state treasury, on 21 November 2019, Georgia banned the sale and delivery of bulk tobacco products of any kind, including bulk tobacco raw materials, pipe tobacco, roll-up tobacco and hookah

¹⁶¹ Deaths and Prices VS Bad Habit – How is the Fight Against Tobacco in Georgia Going? 27 September 2019. URL: <https://sputnik-georgia.ru/reviews/20190927/246611504/Opravdala-li-sebya-antitabachnaya-politika-v-Gruzii.html>.

¹⁶² Deaths and Prices VS Bad Habit – How is the Fight Against Tobacco in Georgia Going? 27 September 2019. URL: <https://sputnik-georgia.ru/reviews/20190927/246611504/Opravdala-li-sebya-antitabachnaya-politika-v-Gruzii.html>.

¹⁶³ A Global Review of Country Experiences. Georgia: Confronting Illicit Tobacco Trade /Technical reports of the World Bank Group. Global Tobacco Control Program. H. Ross and G. Bakhturidze. p. 107-108. URL: <https://www.worldbank.org/en/topic/tobacco/publication/confronting-illicit-tobacco-trade-a-global-review-of-country-experiences>.

¹⁶⁴ Deaths and Prices VS Bad Habit – How is the Fight Against Tobacco in Georgia Going? 27 September 2019. URL: <https://sputnik-georgia.ru/reviews/20190927/246611504/Opravdala-li-sebya-antitabachnaya-politika-v-Gruzii.html>.

¹⁶⁵ Increased Excise Duty On Bulk Tobacco Entered Into Force. 22 November 2019. URL: <http://jnews.ge/?p=42151>.

tobacco. The sale of these products was allowed only if packaged by net weight in 50 g or 100 g original packages. Tobacco packaged in this way must have an excise stamp¹⁶⁶. Apparently, such innovations were supposed to lead to a rise in the price of bulk tobacco, and this, according to government officials, should lead to an increase in cigarette consumption¹⁶⁷.

However, for many smokers, this ban could lead to a shift to much cheaper smuggled cigarettes and other tobacco. The increase in smuggling is possible because cigarettes cost almost twice less in neighbouring countries than in Georgia¹⁶⁸. We should note that in early 2020, the employees of tax authorities of Georgia withdrew about 201.7 kg of excise-free tobacco in several districts of Tbilisi¹⁶⁹.

Even taking into account all the sharp increases in rates and provided that the chosen growth rate of excise duty on cigarettes will continue, the inconsistency and radicalism of tobacco excise duty reforms in Georgia will not allow the country to meet its obligations under the Association Agreement with the EU in time. This refers to increasing the excise duty on cigarettes to EUR 90 for thousand pieces. Initially, the term of fulfilment of this obligation for Georgia expired in 2022. But, given a number of factors, including the regional context and the risk of illegal trade growing, negotiations were held with the EU in 2018, and it was agreed that the deadline would be postponed to 2026. However, it was not initiated to increase excise duty rates on cigarettes in the country in 2020-2021¹⁷⁰, and the average excise burden on these products in 2019 was less than EUR 30 per thousand units. Also, the compliance with the renewed deadline for achieving this EU standard may provoke a significant increase in the illicit turnover of tobacco products, which has been observed in recent years.

According to the Ministry of Finance, in 2017, cigarette smuggling in Georgia increased three times compared to 2016. In 2017, 494,320 packs of illegal cigarettes were seized at the border, while in 2016 28,357 packs¹⁷¹. In 2019, more than 1,500 cases of storage of non-excised cigarettes were established and 470,000 packs of these products were seized¹⁷². The largest supplies of smuggled cigarettes to Georgia

¹⁶⁶ The Minister of Finance of Georgia Complained About Problems With Electronic Cigarettes. 20.02.2020. URL: <https://sputnik-georgia.ru/economy/20200220/247785298/Glava-Minfina-Gruzii-pozhalovalsya-na-problemy-s-elektronnymi-sigaretami.html>.

¹⁶⁷ Tax Policy On Tobacco Products Encourages Smuggling. 25 November 2019. URL: <http://bizzone.info/business/2019/1574714195.php>.

¹⁶⁸ Increased Excise Duty On Bulk Tobacco Entered Into Force. 22 November 2019. URL: <http://jnews.ge/?p=42151>.

¹⁶⁹ Over Two Quintals Of Counterfeit Tobacco Seized In Tbilisi. 13 February 2020. URL: <https://sputnik-georgia.ru/incidents/20200213/247724115/V-Tbilisi-izyali-bolee-dvukh-tonn-kontrfaktnogo-tabaka.html>.

¹⁷⁰ Will Cigarettes Become More Expensive In Georgia? The Ministry of Finance of Georgia Spoke About Excise Prices. 22.02.2020. URL: <https://sputnik-georgia.ru/economy/20200222/247800681/Sigarety-v-Gruzii-podorozhayut-Minfin-Gruzii-.html>.

¹⁷¹ Cigarette Smuggling Accounts for 3% of Total Consumption in Georgia. 19.10.2017. URL: <https://commercant.ge/ru/post/kontrabanda-sigaret-sostavliaet-3-ot-obshego-potrebleniia-v-gruzii>.

¹⁷² Will Cigarettes Become More Expensive In Georgia? The Ministry of Finance of Georgia Spoke About Excise Prices. 22.02.2020. URL: <https://sputnik-georgia.ru/economy/20200222/247800681/Sigarety-v-Gruzii-podorozhayut-Minfin-Gruzii-.html>.

come from the Georgian territories of Abkhazia and South Ossetia, which are controlled by Russia and Armenia¹⁷³. Smuggled cigarettes are most common in the border regions and Tbilisi. In 2019, there were twice as many attempts to import tobacco smuggling into the regions of Georgia bordering the uncontrolled territories than in 2018¹⁷⁴.

Another problem mentioned by the Georgian Customs Service is the transit of illegal cigarettes (from Russia, Armenia, Azerbaijan or Ukraine) through Georgia to third countries (most often to Turkey), which can be partially sold in the Georgian market¹⁷⁵.

The introduction of very high rates of excise duty on heated tobacco products prior to their official launch in Georgia has resulted in the smuggling of these products, due to which the budget loses tax revenues, and consumers are deprived of the possibility of legal consumption of potentially less harmful tobacco products. In particular, in the summer of 2018, the Investigative Service of the Ministry of Finance of Georgia in Tbilisi and officials in the regions of Shida Kartli and Kvemo Kartli revealed five cases of storage and transportation of non-excised HEETS sticks and Parliament for electronic cigarettes and seized 4,290 packs of the sticks without excise stamps for the total amount of GEL 23,000 (more than \$9,400)¹⁷⁶.

In early 2019, the above-mentioned controlling body in Tbilisi and Rustavi seized more than 1.8 thousand packs of smuggled HEETS sticks¹⁷⁷. In May 2019, in Tbilisi, the Autonomous Republic of Adjara and the Kvemo Kartli region, over 7,000 packs of HEETS heated tobacco products worth GEL 42,000 (more than \$15,000) were confiscated¹⁷⁸. In the summer of 2019, the Georgian Investigative Service seized more than 2,200 packs of HEETS sticks for IQOS heated tobacco systems without excise stamps, the total market value of which is GEL 13,000 (about \$4,400)¹⁷⁹. That

¹⁷³ A Global Review of Country Experiences. Georgia: Confronting Illicit Tobacco Trade. /Technical reports of the World Bank Group. Global Tobacco Control Program. H. Ross and G. Bakhturidze. P. 107. URL: <https://www.worldbank.org/en/topic/tobacco/publication/confronting-illicit-tobacco-trade-a-global-review-of-coun-try-experiences>.

¹⁷⁴ Deaths and Prices VS Bad Habit – How is the Fight Against Tobacco in Georgia Going? 27 September 2019. URL: <https://sputnik-georgia.ru/reviews/20190927/246611504/Opravdala-li-sebya-antitabachnaya-politika-v-Gruzii.html>.

¹⁷⁵ A Global Review of Country Experiences. Georgia: Confronting Illicit Tobacco Trade. /Technical reports of the World Bank Group. Global Tobacco Control Program. H. Ross and G. Bakhturidze. P. 93-118. - P. 107. URL: <https://www.worldbank.org/en/topic/tobacco/publication/confronting-illicit-tobacco-trade-a-global-review-of-country-experiences>.

¹⁷⁶ Smuggled Tobacco Sticks Worth \$9,500 Seized In Georgia. 6 July 2018. URL: <https://www.newsgeorgia.ge/v-gruzii-izyali-kontrabandnye-tabachnye-stiki-na-9-5-tys-dollarov/>.

¹⁷⁷ Thousands of Counterfeit Cigarettes Seized In Georgia. 7 February 2019. URL: <https://sputnik-georgia.ru/incidents/20190207/244241115/V-Gruzii-izyali-tysyachi-kontrabandykh-sigaret.html>.

¹⁷⁸ Smuggled Cigarettes Of The Same Brand Seized In Different Parts Of Georgia. 23 May 2019. URL: <https://sputnik-georgia.ru/incidents/20190523/245332403/V-raznykh-chastyakh-Gruzii-izyali-kontrabandnye-sigarety-odnogo-renda.html>.

¹⁷⁹ Hundreds of Packs Of Counterfeit Cigarettes Seized In Tbilisi. 30 August 2019. URL: <https://sputnik-georgia.ru/incidents/20190830/246362515/V-Tbilisi-izyali-sotni-pachek-sigaret-bez-aktsiza.html>.

is, the illegal market for heated tobacco products in Georgia is showing a growing trend.

Thus, the policy in the field of excise taxation of tobacco products implemented in Georgia was quite contradictory in terms of ensuring compliance with EU standards, while a sharp increase in excise rates on cigarettes in a short period of time led to enhanced consumption of loose tobacco and Georgian "substitutes" for filter cigarettes, as well as the development of the illegal tobacco market. This entailed fiscal losses and did not permit to achieve the declared reduction in smoking prevalence. Due to the establishment of equal excise duty rates for heated tobacco products and cigarettes, the country's budget did not receive revenues from these alternative products, and demand for them among the consumers willing to smoke potentially less harmful tobacco products generates smuggling of the sticks. Therefore, the reforms of excise taxation of tobacco products in Georgia provide an example of how preference for unique national approaches to the introduction of tax innovations, rather than for the proven European practices, can lead to ambiguous fiscal implications and regulatory effects.

3. SUBSTANTIATION FOR RECOMMENDATIONS REGARDING EXCISE DUTY COLLECTION FROM NOVEL TOBACCO PRODUCTS AND NICOTINE-CONTAINING PRODUCTS IN UKRAINE TAKING INTO ACCOUNT THE EUROPEAN TRENDS

3.1. Current transformation of the domestic tobacco products market due to the high excise duty burden carried by these products

The modern world market of tobacco products is developing under the influence of transformation processes, which are caused, in particular, by the specific features of the supply and demand for tobacco products and their alternatives, and by raising of excise duty rates. The production of new types of such products is growing: electronic cigarettes, heated tobacco products and other novel nicotine-containing products. This is significantly affecting the tobacco market in Ukraine, which is one of the largest markets in Europe. Due to the low purchasing power of the population, besides the innovative products, illegal cigarettes and roll-ups are also becoming widespread in the Ukrainian market. The latter causes great damage to the country's economy in the form of unpaid taxes.

The structure of the market of tobacco products and their alternatives is dominated by legal cigarettes; their share by quantity (volume) of product units is 80.67%; other products account for 19.33%, in particular, illegal cigarettes – 6.37%, e-cigarettes – 4.45%, heated tobacco products – 4.19%, roll-ups – 2.31%, cigars and cigarillos – 2% (Fig. 3.1).

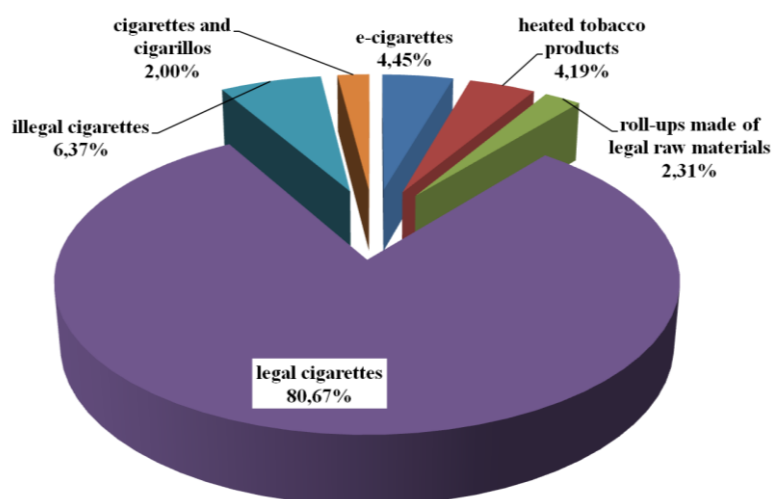


Figure 3.1. The structure of the market of tobacco products and their alternatives in Ukraine in 2019

Source: compiled by the authors according to the data from WHO, the State Statistics Service of Ukraine, the State Tax and Customs Service of Ukraine, Euromonitor International, Kantar TNS (Wave 6), estimates by market experts and online stores.

Cigarettes in Ukraine are manufactured and sold mainly by several tobacco companies owned by large taxpayers. They provide an average of 8.5% of tax revenues to the consolidated budget. According to the results of 2019, the top 100 largest taxpayers included four cigarette-producing companies: B.A.T.-Pryluky PJSC, Philip Morris Ukraine PJSC, JT International Ukraine JSC, Imperial Tobacco Production Ukraine JSC.

The cigarette market in Ukraine is highly concentrated and oligopolistic; in 2015 – Q1 2020, the Herfindahl-Hirschman index (HHI) was 0.23 on average. As of 2019, a total of 24 tobacco manufacturers were registered; however, the largest shares belong to Philip Morris Ukraine (31.56%), B.A.T.–Pryluky (25.41%), and JT International Ukraine (18.68%) (Fig. 3.2).

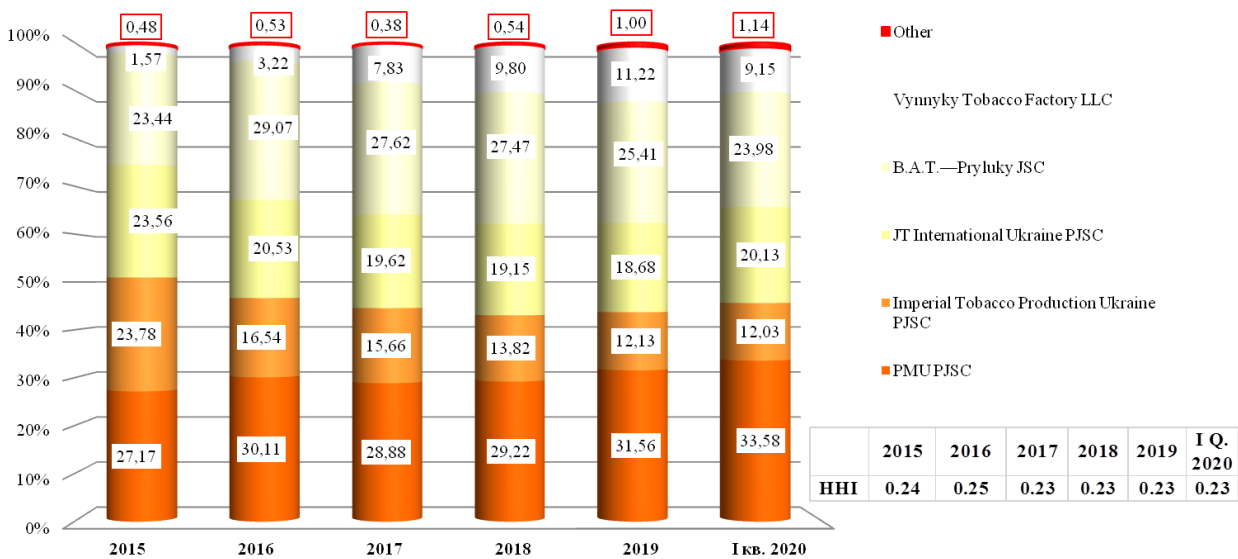


Figure 3.2. HHI in Ukraine in 2015-2020

Source: calculated on the basis of data from the SFS of Ukraine.

The dynamics of the cigarette market is declining. In 2015-2019, cigarette manufacture decreased from 92.9 to 68.6 billion pcs, and imports ranged between 4.4 and 1.2 billion pcs and decreased to 1.4 billion pcs in 2019. Meanwhile, the volume of exports of these tobacco products increased from 24.2 billion pcs in 2015 to 25.9 billion pcs in 2019 (Fig. 3.3). In 2019, most cigarettes were exported to Japan (26%), Georgia (18%), Moldova (10%), Armenia (8%), Azerbaijan (6%).

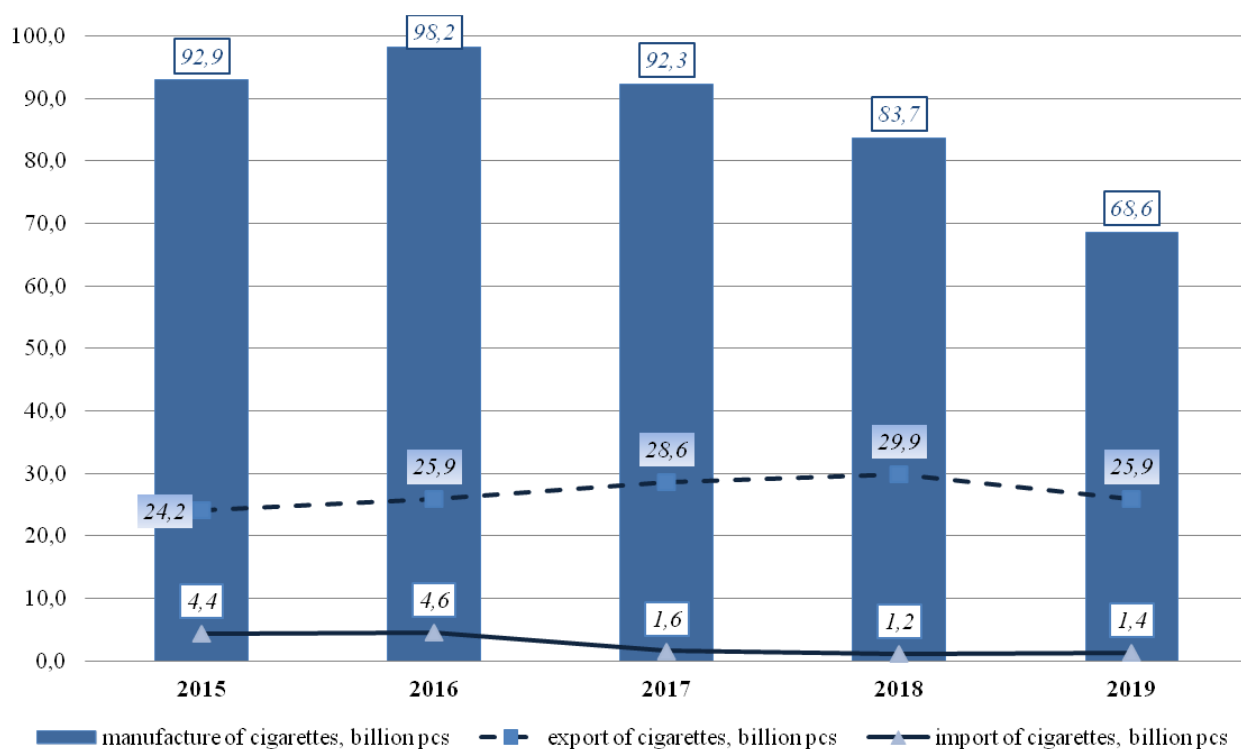


Figure 3.3. Manufacture, export and import of cigarettes in Ukraine in 2015-2019

Source: prepared according to the data of the State Statistics Service of Ukraine.

The sales of cigarettes in the Ukrainian market during the analysed period decreased from 73.1 to 44.3 billion pcs, or by 39.4% (Fig. 3.4). The largest reduction in sales of such products on the domestic market (excluding imports) was observed in 2019. This, among other factors, was influenced by the uncertainty with the introduction of trade margin regulation during the sale of tobacco products¹⁸⁰, as a result of which tobacco companies reduced manufacture in October and November compared to September by 33% and 34%, respectively, and withdrew the paid excise duty in the amount of UAH 855 million.

¹⁸⁰ Amendment No. 8 to the draft law on the introduction of a single account for payment of taxes, concerning a fixed margin of return for wholesalers and retailers of tobacco products (7% and 13%, respectively).

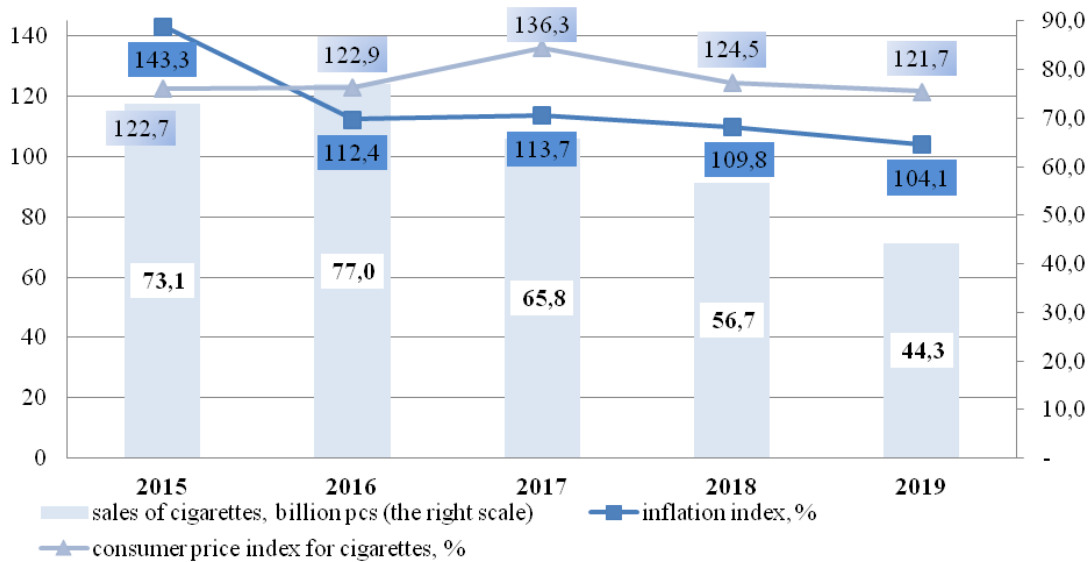


Figure 3.4 Dynamics of sales of cigarettes in the domestic market, inflation indices and consumer prices in 2015-2019

Source: prepared according to the data of the State Statistics Service of Ukraine and the State Fiscal Service of Ukraine.

In 2015-2019, the principal economic factor in the transformation of the domestic cigarette market was the increase in the level of their prices, which increased by an average of 21.4% at an inflation rate of 13.6%. The average retail price of cigarettes increased almost 3 times: from UAH 13.12 to UAH 38.78 per pack (Fig. 3.5), which was primarily due to a significant increase in excise rates.



Figure 3.5. Dynamics of average consumer prices for cigarettes in Ukraine in 2015-2019, UAH per pack (20 pcs)

Source: prepared according to the data of the State Statistics Service of Ukraine.

During the analysed period, the share of indirect taxes in the price of a pack of medium-class cigarettes in Ukraine increased from 55.68% to 68.45%, which is owing to the effect of the increased specific excise rate. In 2019, the share of this tax in the price of cigarettes was 51.8% (Fig. 3.6). Despite the low purchasing power of the population, Ukraine is one of the countries with a fairly high share of taxes in the price of cigarettes.

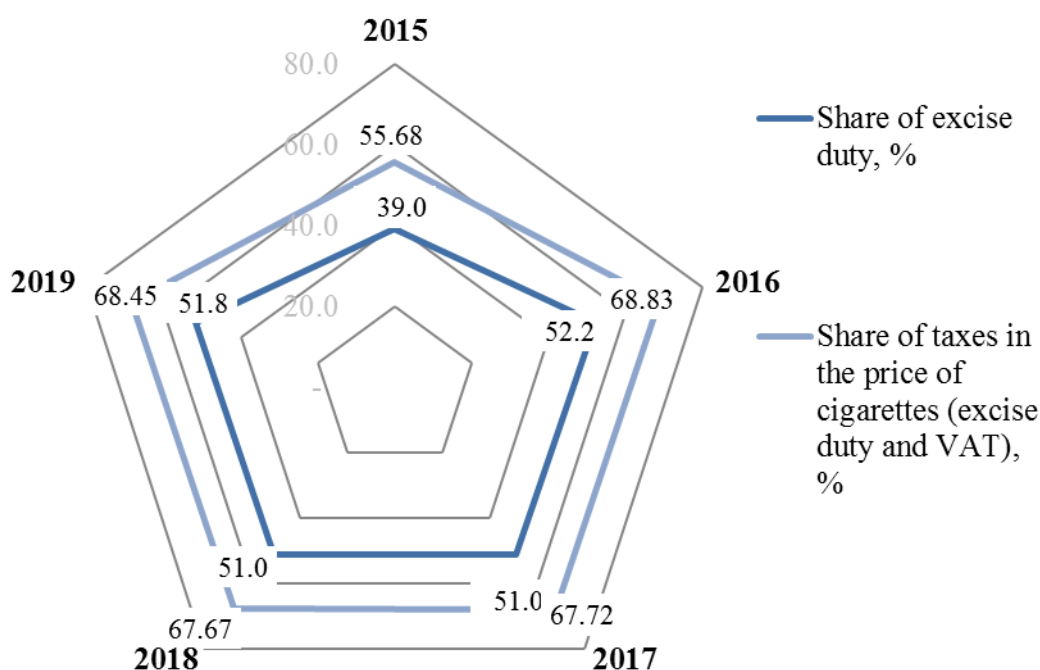


Figure 3.6. The share of indirect taxes in the price of a pack of medium-class cigarettes in Ukraine in 2015-2019, %

Source: calculated by the authors based on the data of the State Statistics Service of Ukraine and the Tax Code of Ukraine.

Since 2017, the increase in the specific rate of excise duty on cigarettes was not accompanied by an increase in excise duty revenues from tobacco products. In 2019, the growth rate of this tax rate lagged behind the corresponding growth rate of revenues by 29.5% (Fig. 3.7). However, the planned targets of excise duty revenues were not met by 23.5%.

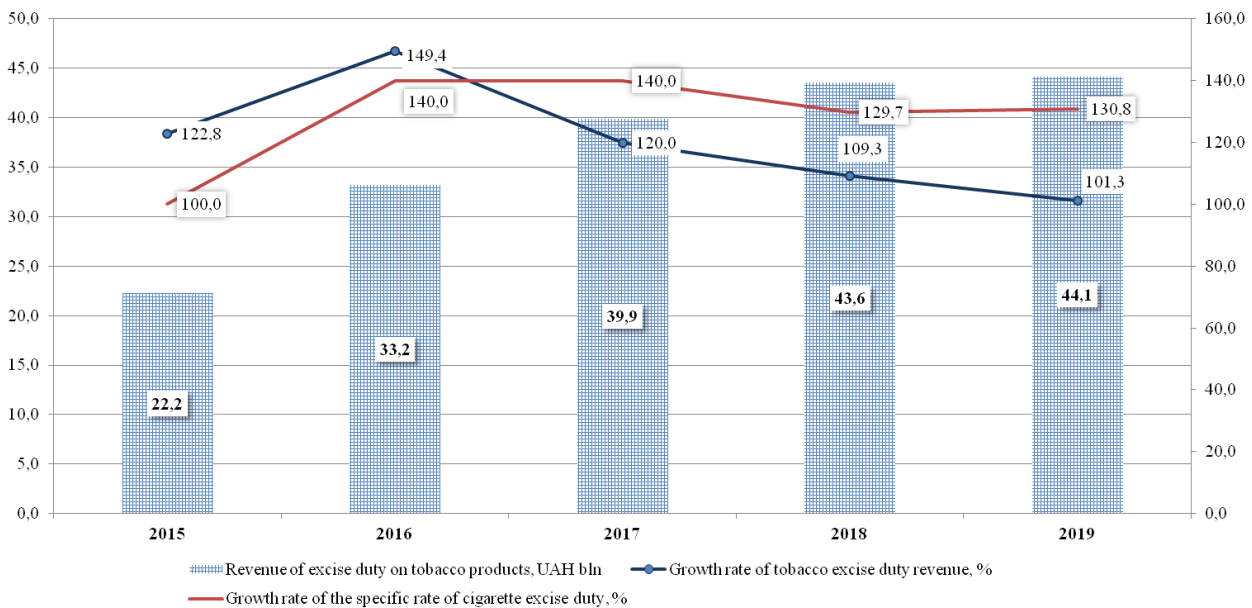


Figure 3.7. Dynamics and rates of growth of tobacco products tax revenue and rates in Ukraine during 2015-2019

Source: prepared according to the data of the State Treasury Service of Ukraine and the Tax Code of Ukraine.

Cigarette consumption in Ukraine is declining. If in 2015 the prevalence of smoking was 27.8%, in 2020, it decreased to the level of 25.8%. According to the WHO forecast, in 2025¹⁸¹ this figure will fall to 24.0% (Fig. 3.8). Comparing the 2017¹⁸² and 2019¹⁸³ data, it can be concluded that the average number of cigarettes smoked during the day by daily smokers decreased by 11%, from 17.1 (18.2 among men and 12.6 among women) to 15.7 (16.7 among men and 12.1 among women). These figures should be taken into account when developing the policy measures in the field of excise taxation of tobacco products in Ukraine.

¹⁸¹ WHO global report on trends in prevalence of tobacco smoking 2000-2025 – Second edition. URL: <https://www.who.int/tobacco/publications/surveillance/trends-tobacco-smoking-second-edition/en/>.

¹⁸² Global Adult Tobacco Survey – GATS. Kyiv, 2017. 240 p. URL: http://www.kiis.com.ua/materials/pr/20170904_GATS/UKR_GATS_2017_ES_UA_web.pdf.

¹⁸³ Sociologists Have Found Out How Many Cigarettes Ukrainian Smokers Smoke Per Day. *Zaxid.Net*. 2019. URL: https://zaxid.net/sotsiologi_zyasuvali_silki_sigaret_na_den_vikuryuyut_ukrayinski_kurtsi_n1479477.

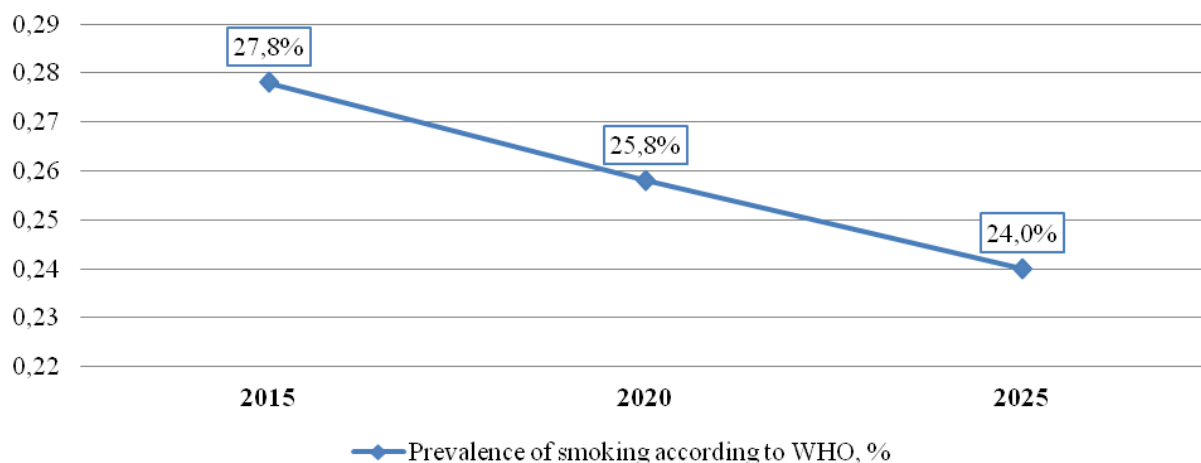


Figure 3.8. Prevalence of tobacco smoking in Ukraine among people aged ≥ 15 years, 2015-2025

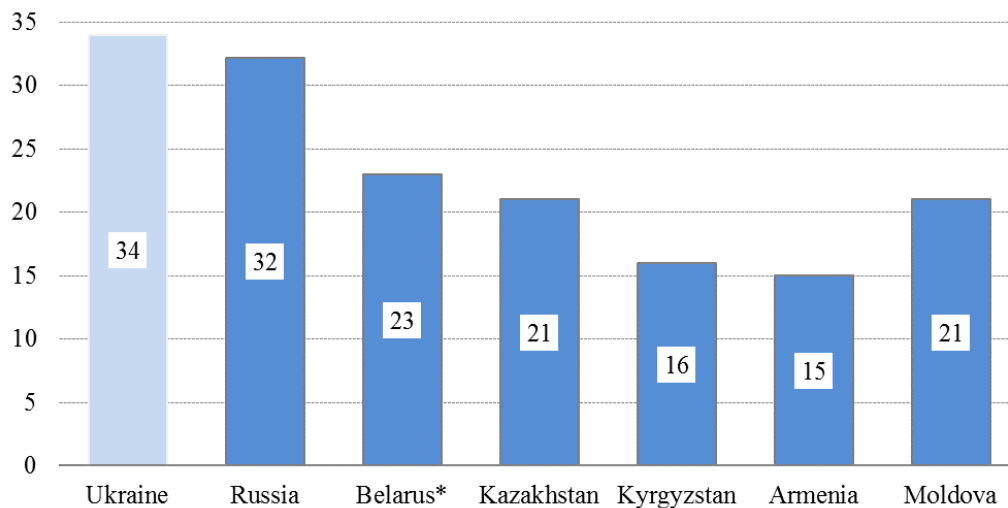
Source: prepared according to the data of WHO global report on trends in prevalence of tobacco smoking 2000-2025 – Second edition. URL: <https://www.who.int/tobacco/publications/surveillance/trends-tobacco-smoking-second-edition/en/>

Alongside with the positive consequences of reducing the prevalence of smoking, the significant increase in the tax burden on cigarettes in Ukraine also determined other processes that led to a decrease in excise revenues. These are the reorientation of flows of "cheap whites"¹⁸⁴ from Ukraine to the neighbouring countries, the spread of illegal products, and the transition of consumers to a less expensive alternative to cigarettes.

For many years, Ukraine has been one of the largest suppliers of "cheap whites" to the European Union¹⁸⁵. According to the data of KPMG's Stella report, the growth rate of such cigarettes in 2016 was at the level of 52%, but in 2019, there was a reverse process: the decline made up 43%. Due to the significant growth in excise duty rates, it became more profitable to import "cheap whites" from Russia and Belarus in transit through Ukraine into the EU market than locally produced cigarettes. As illustrated in Fig. 3.9, the excise duty in the neighbouring countries is lower, which was the main reason for the reorientation of the "cheap whites" flows.

¹⁸⁴ "Cheap whites" are brands manufactured legitimately in one market, either taxed for local consumption or untaxed for export, and sold knowingly to traders who transport them to another country where the products are sold illegally without domestic duty paid. (European Parliament. Answer given by Mr Šemeta on behalf of the Commission. OJ C 279 E, 23/09/2011 ed, 2011. <http://www.europarl.europa.eu/sides/getAllAnswers.do?reference=E-2010-011191&language=EN>).

¹⁸⁵ Modernisation of the Control System of Production and Turnover of Tobacco Products / N.V. Novytska, I.I. Khlebnikova, V. I. Korotun, T.V. Koshchuk, et al. / Ed. by N.V. Novytska. Irpin – Khmelnytsky, 2020. P. 26.



* from EUR 3 to EUR 23 depending on the price category of cigarettes

Note. Excise duty rates are converted into EUR at the rate of national central banks.

Figure 3.9. Excise duty rates in the neighbouring countries of Ukraine, including members of the Eurasian Economic Union, in 2019, EUR per thousand pcs.

Source: Dubravitskaya O. What Will Result From The Alignment Of Excise Taxes On Cigarettes In The EAEU Countries. 2019. URL: <https://www.rbc.ru/business/21/01/2019/5c41aa049a79473aa31c597a>.

The problem of illegal cigarette trade has gained public resonance and causes significant problems for law enforcement agencies of both Ukraine and partner countries. The presence of illegal products in the market, which are much cheaper than legal ones, increases the availability of the mentioned harmful products, thus creating obstacles to the implementation of the state tobacco control policy. According to Kantar TNS, during four years, the illegal trade of cigarettes increased by 6 times: from 1.1% in 2016 to 6.6% (3.5 billion pcs) in 2019 (Fig. 3.10). The losses of the budget of Ukraine due to non-receipt of the excise duty on tobacco products in 2019 amounted to about UAH 4.7 billion. The most widespread illegal cigarettes are products with the duty free label, which account for 66% of the cigarette smuggling structure.

High excise duty rates make illegal sale of cigarettes highly profitable and attractive to dishonest entrepreneurs. The principal sellers for such cigarettes are street vendors, shops, open markets and kiosks. The price of illegal cigarettes in Ukraine is much lower than the price of legal ones (on average by 52%).

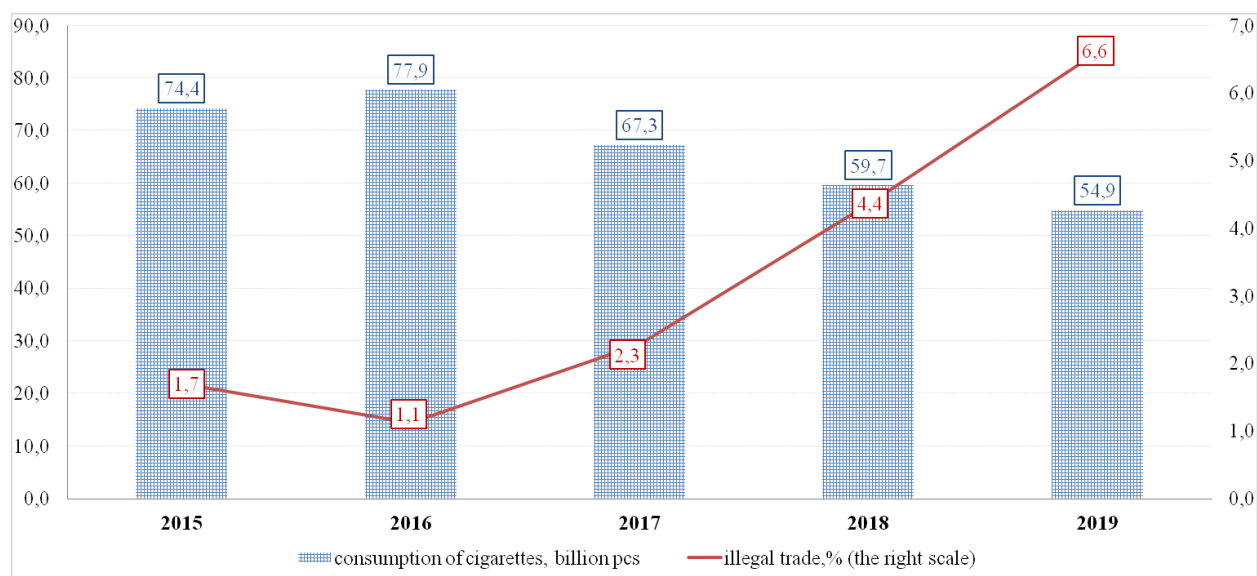


Figure 3.10. Dynamics of cigarette consumption and the share of their illicit turnover in Ukraine in 2015-2019

Source: calculated by the authors according to the data of the State Statistics Service of Ukraine and Kantar.

In order to study the extent to which an increase in the price of legal cigarettes causes an increase in their illicit turnover, we shall use the econometric modelling tools. The initial data set is presented in Fig. 3.11. The monthly sales volumes of illegal cigarettes, calculated according to Kantar TNS and the State Tax Service of Ukraine, and the price of medium-class cigarettes according to the State Statistics Service of Ukraine were taken as variables.

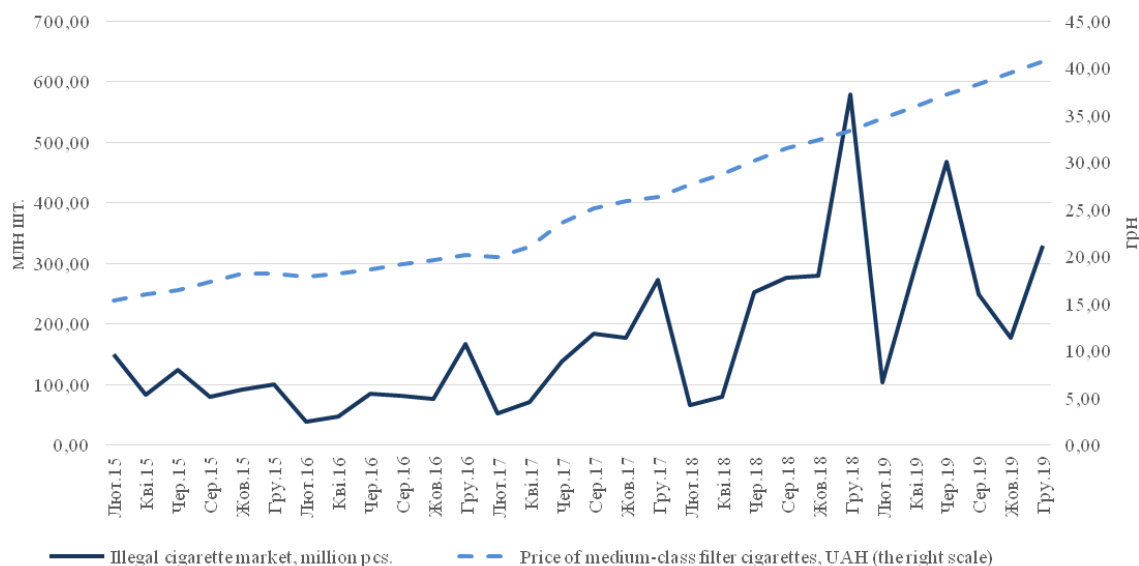


Figure 3.11. Dynamics of illicit turnover volumes and prices of medium-class cigarettes in Ukraine

Source: according to data of Kantar TNS, the SFS of Ukraine and the State Statistics Service of Ukraine.

To specify the model, the experience of foreign experts and the initial data for the study were analysed, based on which it was decided to choose the linear specification. Based on the Akaike and Schwartz information criteria, the feasibility of this specification was confirmed. The regression equation with monthly data discreteness looks as follows:

$$\begin{aligned} \text{Illegal}_t = & -209.4 + 21.059\text{Price}_t + \varepsilon_t \\ & t \quad (-3.7) *** \quad (10.1) ***, \\ R^2 = 0.7843, \bar{R}^2 = 0.7766, F_{1,28} = 101.8 \end{aligned} \quad (3.1)$$

*** Parameter estimates are significant with a probability of 99.999%.

where Illegal_t – is the volume of illegal turnover of cigarettes in the current period; Price_t is the price of medium-class cigarettes in the current period; ε_t – is the random component.

The values of the model parameters are statistically significant, the regression equation is generally adequate, and the values of the coefficients of determination are high. Thus, the volume of illegal turnover of cigarettes is 78.43% contingent on the increase in their price. The model was also diagnosed for autocorrelation of residues and heteroscedasticity, and their absence was confirmed.

The coefficient of elasticity in the econometric model is 1.64, which allows us to conclude that the *increase in the price of cigarettes by 1% causes an increase in their illegal turnover by 1.64%*. In other words, the increase in excise duty rates and, as a consequence, cigarette prices in Ukraine has a very big impact on the development of the grey market of tobacco products.

Besides, significant losses of excise duty revenues in Ukraine occur due to tax avoidance, one form of which is *forestalling* – the accumulation of cigarettes with excise stamps purchased before the increase in tax rates in the manufacturers' warehouses, in order to minimise the payment of taxes in future periods.

A stable schedule of excise rate increases¹⁸⁶ and an advance form of excise payment¹⁸⁷, wherein the tax is paid when purchasing stamps, normally before the start of production¹⁸⁸, create favourable conditions for the development of plans for the manufacture of cigarettes, taking into account the need to accumulate stock. Cigarette manufacturers resort to forestalling in the second half of the year. During this period, the volume of manufacture of these excisable products significantly increases in order

¹⁸⁶ The Law of Ukraine № 2245-VIII dated 07.12.2017 provided for the increase in excise duty rates on cigarettes in 2018 by a total of 29.7% (including indexation) and thereafter by 2025 – by 20% annually, until the minimum level of EU excise duty is reached.

¹⁸⁷ Since 2013.

¹⁸⁸ In this case, the amount of tax can be adjusted when changing the excise duty rate (based on the rate applicable on the date of filing the tax declaration).

to accumulate stock for their sale next year. According to our calculations, the loss of excise duty on tobacco products due to forestalling in 2019 amounted to 1.4% of its revenues¹⁸⁹.

The transformations in the domestic tobacco market are also associated with the transition of smokers to cigarette alternatives, in particular, the novel tobacco products and nicotine-containing products – heated tobacco products and e-cigarettes, roll-ups, nicotine pouches, etc. (Fig. 3.12).



Figure 3.12. Some types of alternatives to cigarettes in the Ukrainian market

Source: according to data from online stores.

Due to the rapid growth of excise duty, cigarette consumers are increasingly switching to less expensive alternatives, including illegal ones, which are becoming widespread in Ukraine. One of the largest shares in the commodity structure of the entire (legal and illegal) market of tobacco products and alternatives is occupied by *novel tobacco products and nicotine-containing products*. The share of the latter in the market is almost 9%, 4.45% whereof are electronic cigarettes and 4.19% – heated tobacco products (Fig. 3.1).

¹⁸⁹ The calculations were made on the basis of data from the State Statistics Service of Ukraine on the volume of cigarette manufacture and import, and budget execution reports published on the website of the State Treasury Service of Ukraine.

The *domestic market of heated tobacco products* has been developing since 2015. It is clearly structured and transparent. It is represented by sticks of two brands, HEETS and NEO, which are imported by Philip Morris Sales and Distribution LLC and British American Tobacco Sales and Marketing Ukraine LLC from Italy, South Korea and Romania.

According to the most popular online stores, prices for stick consumption devices fluctuate in the range of UAH 600–3,000, and the prices of sticks – UAH 50–53 per pack. Given the potentially reduced risk of their use for human health and the ease of consumption, such products have become popular among smokers. According to Euromonitor International, the number of consumers of heated tobacco products in Ukraine is 380 thousand people (about 3.9% of the total number of smokers)¹⁹⁰.

In view of the successful launch in the Ukrainian market of IQOS heated system, a number of cheaper Japanese and Chinese alternatives to devices for using HEETS sticks have appeared. They are represented in Ukraine by about 10 brands. Other tobacco companies – JT International PJSC and Imperial Tobacco Production Ukraine PJSC – plan to sell similar devices on the domestic market – Ploom Tech and Pulze, respectively.

According to estimates, the volume of sales of tobacco sticks in Ukraine is approximately 2.3 billion pcs¹⁹¹, which in monetary terms is equal to UAH 6.2 billion. The spread of heated tobacco products does not create risks of loss of excise duty revenues, as tobacco contained in the sticks is subject to excise taxation. As in most EU countries, such products are subject to excise duty at the rate for "other smoking tobacco" set per unit of weight in kg. The share of excise on heated tobacco sticks in the structure of revenues of excise duty on imported tobacco products is about 79%.

The e-cigarette market in Ukraine is one of the largest in the world¹⁹², along with the UK, France, Germany, Canada, Spain, Italy, Russia, and South Korea. These products have become widespread in our country since 2012 and have managed to "win back" a significant market share from conventional cigarettes. According to Euromonitor International, in 2020, 7% of smokers in Ukraine are consumers of e-cigarettes; they are mainly city dwellers aged 15-24.

¹⁹⁰ Holmes Lisa, MacGuill Shane. Nicotine Survey: Exploring the Modern Nicotine Landscape. 2020. Euromonitor International. 34 p.

¹⁹¹ Director of Imperial Tobacco in Ukraine, Rastislav Chernak: "UAH 460 Mln AMCU Fine is Unreasonable." / Interfax-Ukraine. URL: <https://interfax.com.ua/news/interview/641807.html>.

¹⁹² Except for the United States and China.

Unlike the market of cigarettes and heated tobacco products, where the lion's share belongs to large tobacco companies, the domestic market of electronic cigarettes is less structured and represented by many types of products.

In Ukraine, as in the rest of the world, the share of open-type e-cigarettes, which are much cheaper to use compared to closed-type systems, predominates in sales. In terms of one conventional cigarette, consumables for open-type electronic cigarettes are 7 times cheaper than cigarettes, and consumables for closed type electronic cigarettes are almost 7 times more expensive. According to the data from domestic online stores, the price range for open-type systems is UAH 100 to UAH 2,300, and the one for closed-type is UAH 150 to UAH 1,740. Most types of liquid for open-type electronic cigarettes are represented in Ukraine by domestic manufacturers with the share of 77% of the total amount of types, while the ones for closed-type e-cigarettes are mostly Chinese (76.4%). Other countries with the largest share of e-liquids for open-type systems are USA (11%), France (5%), China (2%) and Poland (2%), and the largest share of e-liquids for closed-type systems is represented by the United States (22%), Switzerland (1.4%), and Poland (0.3%) (Fig. 3.13).

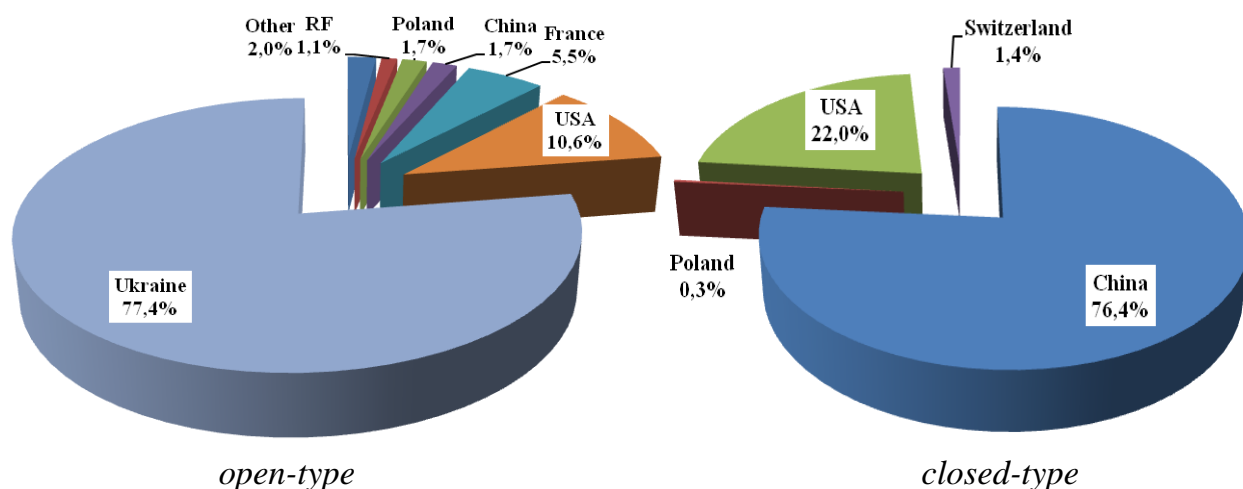


Figure 3.13. The geographical structure of types of liquids for electronic cigarettes of the open and closed types marketed in Ukraine

Source: the results of monitoring of the most popular online stores as of April-June 2020.

It is very difficult to estimate the scope of the e-cigarette market because the customs statistics is blurred, as until 2021, the components of these products (devices and consumables) have no separate subheadings in UKTZED (Ukrainian Commodity Coding System). According to our estimates, which are based on the indices of e-cigarette consumption spread presented by Euromonitor International, WHO data,

and the weighted average price of e-cigarettes in the most popular online stores, in 2019, this market accounted for UAH 9.22 billion, or 2.3 billion pcs in terms of cigarettes. Market operators publish information on lower sales of electronic cigarettes¹⁹³.

The domestic market of e-cigarettes has been developing for eight years, but until recently it was not regulated by the government in general, and the excise duty on these products, in particular, was not collected. This led to a shift in demand from taxable products to the non-taxable ones and to the corresponding reduction of excise duty revenues. Besides, according to the State Tax Service of Ukraine, a significant amount of e-liquids are of illegal origin, which is also typical of EU countries. The lack of effective mechanisms to control the turnover of such products leads to the fact that illegal goods come to the customs territory of Ukraine in international mail and hand luggage concealed from customs control. Then, such liquids are sold through online stores and retail for cash without reflecting these transactions in bookkeeping and tax accounting.

Another alternative to cigarettes is homemade tobacco products, the so-called *roll-ups*, which have been replacing the demand for cigarettes for a long time. Consumers buy the components for making such products, namely, the filter, cigarette cases, paper, filling device and tobacco itself, separately in specialty stores or even online. According to the monitoring data of the most popular websites, the market offers a wide range of tobacco, both legal and illegal. Certainly, unlicensed producers have competitive advantages due to the absence of excise. According to our calculations, a roll-up made of illegal tobacco is twice cheaper than a legal medium-class cigarette, the share of excise duty in the price of which is almost 60% (Table 3.1).

Due to the cost competitiveness of roll-ups made of illegal raw materials, they are becoming widespread. It is rather difficult to estimate the volume of such products on the market, because with the development of e-commerce and delivery services, they are freely sold through the Internet on unofficial websites.

The market volume of roll-ups made of tobacco of legal origin is about 1.08–1.27 billion pcs in terms of cigarettes. The losses of excise revenues from the shift of demand due to the difference in rates are about UAH 94.4 million¹⁹⁴.

¹⁹³ JTI Launches A New Product On The Ukrainian Market. Information Agency Interfax-Ukraine. URL: <https://interfax.com.ua/news/economic/627405.html>.

¹⁹⁴ According to the Tax Code of Ukraine and the State Statistics Service of Ukraine on the volume of imports of loose tobacco.

Table 3.1

Comparison of the price of cigarettes and the estimated cost of illegal roll-ups in Ukraine per 1 piece*

Indicators	Price of components per unit, UAH / pc.
Components of the cost of one roll-up	
Average tobacco price (Winston variety)	0.3
Cost of the cigarette case	0.4
Cost of the device for refuelling	0.02
Cost of filter	0.4
Cost of one roll-up	1.1
Price of one medium-class filter cigarette	
Minimum excise duty for filter cigarettes	1.2
Share of excise duty in cigarette price, %	57%
Price of one filter cigarette, UAH/pc	2.1

* according to the website monitoring results as of April-May 2020

Source: calculated by the authors.



Продам / купить [стоицеазмислишно](#)
Широкий ассортимент
фабричных табаков: CAMEL,
Marlboro, Winston, Captain
Black, Днепр
Цена 225 грн.
Регион: вся Украина, Днепропетровская о
Днепр (Днепр)
Обновлено: Сегодня, 11:30

📷 Все фото - 4 шт.

📷 Все фото в большом размере

Качественные аналоги классической линейки табаков собственного производства.

В КАЖДУЮ посылку от 0,5 кг табака кладем ГИЛЬЗЫ 100 шт В ПОДАРОК

* MARLBORO (Средняя крепость) :

200 грамм = 105 гривен

500 грамм = 225 гривен

1 кг = 400 гривен

Since January 2020, a *new type of nicotine-containing product in the form of VELO pouches* is marketed in Ukraine. The pouches do not contain tobacco, but their principle of consumption is similar to that of snus. Pouches are classified under UKTZED code 2106.90.92.00, similarly to nicotine replacement products. According to the State Tax Service, the volume of imports of pouches for 2019–May 2020 in terms of cigarettes is 2.63 million pieces, which is less than 1% of the market for tobacco products and alternatives. The turnover of such products today is not subject to state regulation, in general, and taxation, in particular. One should note that the market for nicotine-containing pouches has been formed in the EU for several years, but its development is still not regulated at the Europe-wide level. Nicotine-containing pouches as an alternative to cigarettes should be taxed in the future. It is advisable to set the rate of excise duty based on the product weight and taking into account the potentially reduced health risk of their use.

In the structure of the market of tobacco products and alternatives in Ukraine, *cigars and cigarillos* occupy a small share by their physical volume – 2%, and the volume of their sales is 1.1 billion pieces. According to the State Tax Service and the State Statistics Service, the home market offers domestic products with a 97.9% share. Cigars and cigarillos for the Ukrainian market are produced by three companies, which in 2019 held the following market shares: VTF LLC (15.2%),

Marvel International Tobacco Group LLC (79.2%), United Tobacco LLC (5.5%) (Fig. 3.14).

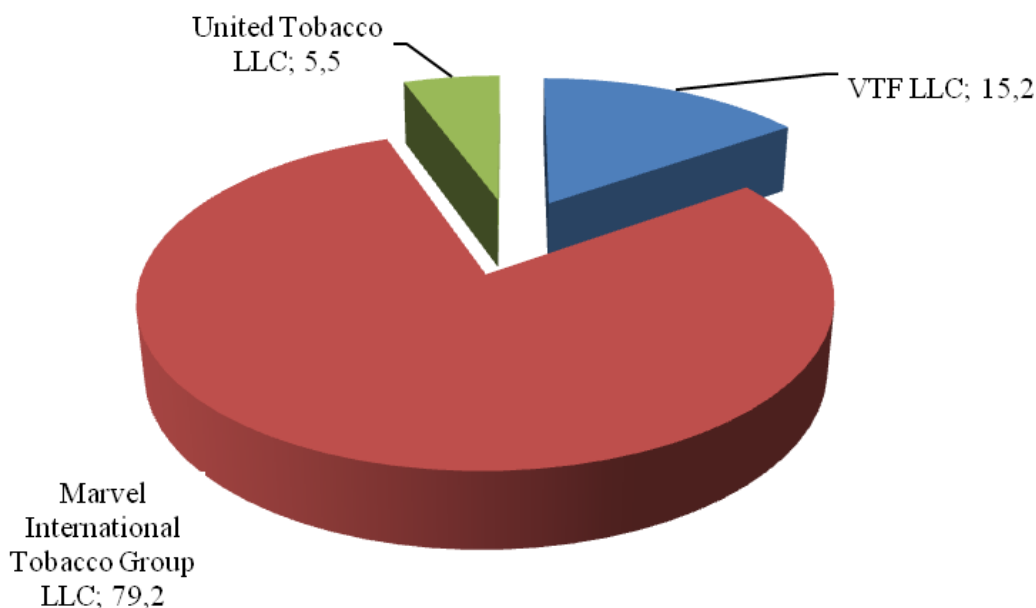


Figure 3.14. The structure of the volume of manufacture of cigars and cigarillos for the domestic market of Ukraine in terms of manufacturers in 2019

Source: according to the SFS data.

Thus, the study of modern transformations of the domestic market of tobacco products revealed that they occur under the influence of a significant increase in the excise burden on such products and the launch of alternative products with a potentially lower health risk of consumption. The increase in excise duty rates has led to undesirable structural deformations of this market, which manifested themselves in the gradual replacement of cigarettes with products that are either not taxed or taxed at lower rates: illegal cigarettes, roll-ups, etc. In 2019, these products accounted for 9-10% of the market for tobacco products and alternatives.

Another factor that has led to structural changes in the tobacco market has been the global healthy lifestyle trend. The prevalence of smoking is gradually declining, as is the average number of cigarettes consumed by smokers. Increasingly, consumers are choosing a potentially less harmful alternative to cigarettes – heated tobacco products and e-cigarettes; their share in the domestic market (legal and illegal tobacco products and alternatives) is already about 9%. Such trends were also facilitated by the fact that the consumption of open-type e-cigarettes is less expensive compared to cigarettes due to the lack of excise taxation of consumables, among other reasons.

The analysis of the market of conventional cigarettes showed that it is highly concentrated and oligopolistic, dominated by large international companies, whose

share in 2019 was 87.8%. Market dynamics is declining, and manufacture and sales in the home market are gradually decreasing, which accordingly leads to a reduction in excise duty revenues. In recent years, the largest decline in sales of cigarettes in the domestic market was observed in 2019 (21.9%), which, among other factors, was significantly affected by the uncertainty regarding the introduction of a fixed price margin for wholesale and retail sales of tobacco products.

Cigarette prices grew faster than inflation due to a significant increase in the excise component, which in 2019 amounted to 51.8%. The use of econometric modelling tools led to the conclusion that the increase in cigarette prices by 1% entailed a corresponding increase in their illegal turnover by 1.64%. As a result of price advantages, illegal cigarettes "won back" a significant share of the market of tobacco products and alternatives (6.37%), which led to losses of excise duty and VAT revenues in the amount of UAH 4.7 billion.

Due to the low purchasing power of the population, consumers, in addition to illegal cigarettes, began to switch to other types of tobacco products – roll-ups, which are made of legal and illegal raw materials. Due to the higher excise burden on cigarettes compared to the neighbouring countries, in 2019, the growth rate of "cheap whites" decreased by 43%. Despite the negative consequences of the movement of such products for the EU countries, in Ukraine it has led to a decrease in excise revenues to the state budget, because "cheap whites" are legally produced and taxed, but illegally supplied to countries where cigarette prices are much higher. All the above factors, along with tax avoidance schemes (forestalling, in the first place), negatively affected the dynamics of excise duty revenues from tobacco products.

The market for novel tobacco products and nicotine-containing products in Ukraine is rapidly developing and diversifying. Heated tobacco products are represented by several brands, and the range of electronic cigarettes is wider. While the spread of heated tobacco products does not create risks of loss of tax revenues, because such products are subject to excise duty, the transition of consumers to e-cigarettes has led to a shortfall in this tax. The introduction of taxation of consumables for e-cigarettes from 2021 should be accompanied by effective control measures, as large amounts of such potential items of taxation enter Ukraine illegally through cross-border channels of Internet trade, which is also typical for the EU countries.

3.2. Improvement of excise taxation of heated tobacco products and e-cigarettes in Ukraine as a tool to pump up the budget and regulate the tobacco market development

Ukraine, defining its approaches to excise taxation of heated tobacco products and e-cigarettes in the conditions of transformation of the domestic tobacco market, should take into account the relevant theoretical basis and European practice, as well as domestic institutional realities, the situation with budget revenues and the experience of previous reforms of excise taxation of tobacco products. In particular, the trend described in Chapter 3.1 towards the growth of the illegal market of tobacco products amid dynamic growth of excise rates for cigarettes indicates that Ukraine has certain distortions of the fiscal and regulatory impact of increasing excise duty rates. Accordingly, radical reforming of alternative nicotine consumption products is also highly disadvantageous due to the high risk of further shadowing of the domestic tobacco market (especially in the conditions of the declining purchasing power of smokers caused by the deteriorating economic situation due to the spread of coronavirus infection).

As mentioned in previous chapters, in 2020, in Ukraine, heated tobacco products are taxed in the same way as other tobacco products (at a rate set per unit of weight in kilogrammes), which is in line with the recommendations of the European Commission and the practice of most EU countries; the excise duty on electronic cigarettes in Ukraine is currently not levied, despite its implementation has been discussed since 2015.

In Ukraine, the laws on e-cigarettes until recently provided only for a ban on their consumption in public places¹⁹⁵. The situation should change with the entry into force of legislative changes in 2021¹⁹⁶, which, in particular, provide for the separation of an UKTZED subheading "liquids used in e-cigarettes", as well as the fact that activities for the manufacture and sale of these products will be subject to licensing, their sale to minors will be prohibited, and special rules of sales and accounting will be applied.

However, on 16 January 2020, the Verkhovna Rada of Ukraine adopted the Law of Ukraine "On Amendments to the Tax Code of Ukraine Regarding the Improvement of Tax Administration, Elimination of Technical and Logical Inconsistencies in Tax Legislation" No. 466-IX¹⁹⁷, whose provisions, inter alia,

¹⁹⁵ On Measures to Prevent and Reduce the Use of Tobacco Products and Their Harmful Effects on Public Health: Law of Ukraine No. 2899-IV dated 22 September 2005. URL: <https://zakon.rada.gov.ua/laws/show/2899-15/ed20201016/stru#Stru>.

¹⁹⁶ On Amendments to Certain Laws of Ukraine to Improve the Tax Administration, Remove Technical and Logical Contradictions in the Tax Legislation: Law of Ukraine No. 465 dated 16 January 2020. URL: <https://zakon.rada.gov.ua/laws/show/465-20#Text>.

¹⁹⁷ Due to fierce dispute regarding this Law, the President of Ukraine signed it only on 21 May 2020.

provide that, starting from 2021, *heated tobacco products* will be subject to excise duty at the rate of UAH 1,456.33 per thousand of pieces, with an annual increase of this rate by 20% up to UAH 3,019.87 in 2025, as it is regulated for cigarettes (by the amount of the minimum excise duty for the latter). This innovation was adopted without taking into account the recommendations of the European Commission and the experience of EU countries on the taxation of these products. The level of differentiation of excise burden on heated tobacco products and cigarettes in Ukraine in 2020 corresponds to the trend of EU countries. Besides, the expediency of this legislative change is debatable also because the volume of consumption of these tobacco products with reduced health risk in Ukraine in 2019 (estimated at 2.3 - 2.4 billion pcs¹⁹⁸) accounted for less than 5% of the consumption figure for legal cigarettes (51.4 billion pcs¹⁹⁹).

Separately, one shall note that the departure from the practice of setting the rate of excise duty on heated tobacco products per unit of their weight expressed in kilogrammes creates a certain legislative conflict. Applying the "piecemeal" approach may be ineffective for tobacco, which is heated in capsules. If the latter product soon appears in the Ukrainian market, it cannot be taxed at the same level as tobacco sticks (because the excise duty thereon will be levied at a much lower rate – for other tobacco products). In other words, different rates of excise duty will be applied to different types of heated tobacco products, which cannot be considered economically feasible and fair.

It is important to understand that with each 20% increase in the excise duty rates for cigarettes in 2021-2025, as provided for by the Tax Code of Ukraine, there will be a decrease in consumption of legal cigarettes, primarily in the middle and low price segments (personal income grows much slower than the price for legal cigarettes). As a result, there will be a reduction in the legal production of cigarettes and, at worst, an increase in the market for illegal cigarettes and an increase in the consumption of bulk tobacco for roll-ups, mostly of illegal origin. Experience has proven that only a small proportion of smokers for whom legal cigarettes will become

¹⁹⁸ Director of Imperial Tobacco in Ukraine, Rastislav Chernak: "UAH 460 Mln AMCU Fine is Unreasonable." 18 February 2020. URL: <https://ua.interfax.com.ua/news/interview/641806.html>; The Federation of Employers Prepared Alternative Proposals To Certain Bill No. 1210 Provisions. 5 May 2020. URL: <http://fru.ua/ua/media-center/news/business-events/federatsiya-pidgotuvala-alternativni-propozitsiji-do-okremikh-norm-zakonoproektu-1210?fbclid=IwAR12LrF2mXmMEqUqk89ZQCaecpjtyds-v0vedvsMwixuwuBmHXhnK0MhBO>.

¹⁹⁹ Based on TNS Kantar data. According to the State Statistics Committee, in Ukraine, 44.3 billion cigarettes were sold in 2019. But this figure is calculated by subtracting the export from the sum of manufacture and import of cigarettes. In other words, it is not the actual indicator of consumption of this products, as in late 2019 there was a significant reduction in domestic cigarette manufacture due to the impact of the adoption of legislative changes to regulate the markup on wholesale and retail sales of tobacco products. Meanwhile, the smokers continued to consume the usual volumes of cigarettes (stocks in warehouses were sold and probably the illegal exports from Ukraine decreased).

unaffordable may decide to quit smoking. These processes will have negative consequences for budget revenues.

If, under these conditions, the excise duty rate on heated tobacco products increases by 4.2 times in 2021 (as adopted by the legislator), the greatest benefit of such reform will be obtained by representatives of the illegal tobacco business. Moreover, the risk of further rapid shadowing of the tobacco market is exacerbated by the fact that it is unknown which cigarette brands will be counterfeited and where they will be sold, as well as how the illegal market for roll-up tobacco will develop. An example of the rapid deployment of such undesirable processes is the experience of Georgia (see Chapter 2.2).

In addition, the risk of illicit turnover growth in heated tobacco products will be high. With markets with relatively low prices for the latter products, it is only a matter of time before those are smuggled into Ukraine. In February 2020, the price of a pack of HEETS sticks was: in Belarus – BYN 3.7 (EUR 1.55), in Moldova – MDL 35 (EUR 1.82), in Russia – RUB 145 (EUR 1.97), in Ukraine – UAH 50 (EUR 1.86)²⁰⁰.

And finally, if there are no fakes of popular heated tobacco products in Ukraine today, it does not mean that they will not appear in the domestic market in the near future (with a significant increase in economic interest in such illegal business; corresponding Korean "substitutes" already exist²⁰¹).

Smokers who have switched to using heated tobacco products can hardly be expected to never return to consumption of cigarettes (including cheap illegal cigarettes) or to use other alternatives (e.g. electronic cigarettes). Further transformations of the Ukrainian tobacco market will depend on the level of price growth for all tobacco products. In particular, in the event of an increase in the price of heated tobacco sticks by more than 60% (up to UAH 80 per pack)²⁰² due to one-time increase in the relevant excise duty, these legal products will become unaffordable for some consumers²⁰³. It is more likely that only a few people will stop smoking as a result of this. Initially, there may be an increase in the legal and illegal trade of cigarettes (it takes time to arrange smuggling and sale of heated tobacco products in sufficient quantities to meet the demand; some smokers will not want to switch to e-cigarettes, which will also have to be introduced in larger volumes within

²⁰⁰ PMI Investor Information. February 2020. P. 117-121. URL: <https://philipmorrisinternational.gcs-web.com/static-files/fbc49180-0375-49f6-8798-2807df03c49d>.

²⁰¹Retail & Consumer. KT&G launches new HNB tobacco sticks MIIX Classy. URL: <http://www.theinvestor.co.kr/view.php?ud=20190916000715>.

²⁰² Legal manufacturers are not interested in selling heat-not-burn tobacco products at prices that do not cover the cost.

²⁰³ Today in Ukraine, retail prices for a pack of heat-not-burn tobacco products and a pack of cigarettes are roughly the same (for example, in February 2020, prices for HEETS sticks and Marlboro cigarettes were at the level of UAH 50). Similar price parity is observed in EU countries. In case of its violation, there will be significant "incentives" to replace the consumption of legal heated tobacco products with cheaper alternatives.

the short term). It is clear that those who will develop a habit of buying cheap illegal tobacco products under the influence of "fiscal shocks" will be hard to motivate to give it up in the future. Consequently, there is a great risk that the planned volumes of excise duty revenue will not be collected (the growth rate of excise revenue from heated tobacco products will be significantly behind the growth rate of the corresponding tax rate).

It is also possible that excise duty revenues from heated tobacco products may decrease. An example of how fiscally dangerous a sharp rise in the price of tobacco products can be is the consequences of the adoption of bill No. 1049, which was vetoed by the President on 19 February 2020. Due to the threat of introducing an economically unreasonable mechanism for regulating the trade margin on wholesale and retail sales of tobacco products and the resulting sharp reduction in domestic cigarette manufacture, in October and November 2019 alone, excise duty revenues on tobacco products decreased by UAH 2.5 billion²⁰⁴. On 16 April 2020, the relevant Law of Ukraine was adopted again, but without amendment No. 8, which regulated the application of the above "tobacco markup".

The experts of the Federation of Employers of Ukraine²⁰⁵ have already assessed the fiscal effect of raising the excise duty rate for heated tobacco products in two scenarios: 1) in the case if the relevant innovation of Law No. 466-IX becomes effective; 2) provided that in 2021-2025 the rate of excise duty for these alternative products will increase by 35% annually. The changes that will occur in the domestic market of tobacco products and nicotine-containing products in the case of both tax transformations, as well as their consequences for the budget revenues, were taken into consideration (Annex F).

According to the calculations, the growth of the illegal market of heated tobacco products cannot be avoided in both scenarios. However, in the case of a step-by-step increase in the excise duty rate for the latter at a rate of 35% for the sample year, such growth will be minimal. Instead, if the rate of excise duty on heated tobacco products increases in 2021 by 4.2 times at once, this may lead not only to a sharp increase in illicit turnover of these products in Ukraine, but also to the transition of some consumers to the use of legal and illegal e-cigarettes and an increase in sales of conventional cigarettes (including the smuggled and counterfeit

²⁰⁴ "Kholodov's Margin" Caused UAH 2.5 Billion Losses to Ukrainian Budget, Mass Media Say. URL: <https://www.depo.ua/ukr/money/marzha-kholodova-zavdala-byudzhetu-ukraini-zbitkiv-na-25-milyarda-griven-zmi-202001131093956>.

²⁰⁵ The Federation of Employers Prepared Alternative Proposals To Certain Bill No. 1210 Provisions. 5 May 2020. URL: <http://fru.ua/ua/media-center/news/business-events/federatsiya-pidgotuvala-alternativni-propozitsiji-do-okremikh-norm-zakonoproektu-1210?fbclid=IwAR12LtF2mXmMEqUqk89ZQCaecpjtydsdv0vedvsMwixuwuBmHXhnKOMhBOo>.

ones). The scenario assumed that the tobacco market would recover from the negative influence of uncertainty with the entry into force of Bill No. 1049, as a result whereof, as already mentioned, with relatively stable cigarette consumption, their manufacture in Ukraine decreased.

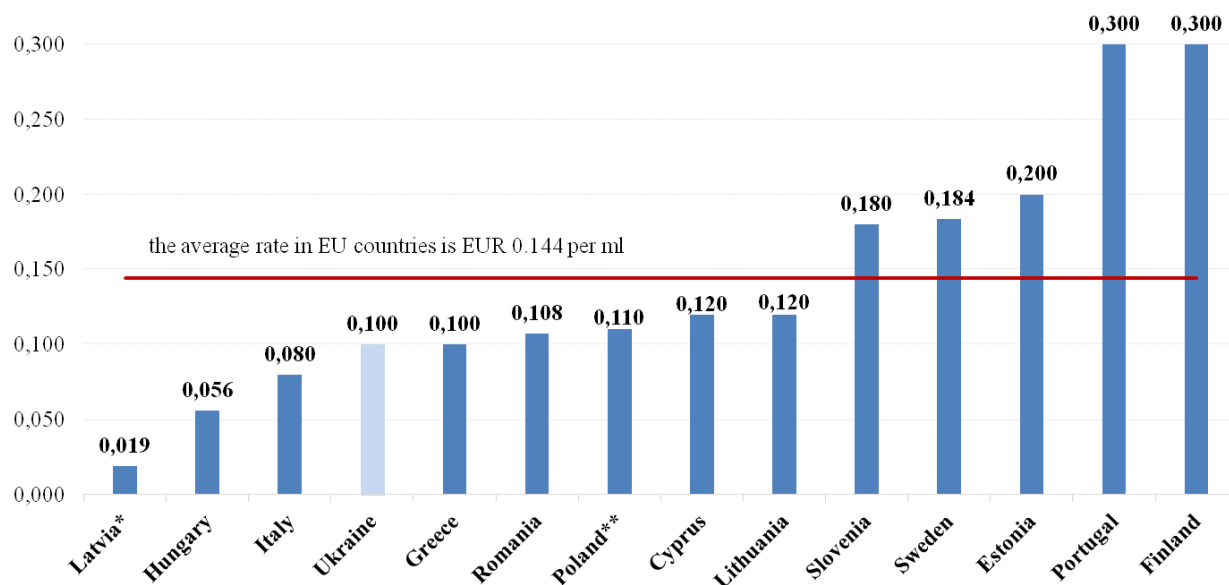
Thus, according to expert estimates, in 2021-2025, as a result of raising the rate of excise duty for heated tobacco products by 4.2 times at once, the loss of tax revenues (excise, including retail sales, and VAT) compared to the implementation of the scenario of a gradual increase in the relevant rate over five years by 35% per year, can reach the level of UAH 9 billion. Of this amount, UAH 3.5 billion account for non-receipt of taxes due to the replacement of the consumption of legal heated tobacco products with illegal ones; UAH 5.7 billion – for fiscal losses due to the abandonment of tobacco sticks in favour of vaping; meanwhile, the return of some consumers of heated tobacco products to smoking more harmful cigarettes will increase tax revenues only by UAH 0.2 billion (over five years). Note that such forecasts are highly probable. *A gradual increase in the rate of excise taxation of heated tobacco products will be more fiscally effective in the medium term than a radical one.*

However, these scenarios do not reflect the possible development of the illegal loose tobacco market under the influence of an increase in the excise duty rate on cigarettes by 20% annually. This would further worsen the national fiscal prospects. Meanwhile, the alternatives either 1) to consume legal heated tobacco products at the same price as cigarettes, but with less harm, or 2) to switch to the cheapest illegal cigarettes and roll-ups, will not exist in the case of a one-time increase in excise duty on tobacco sticks.

Besides, Law No. 466-IX dated 16 January 2020 defines the term of "electronic cigarette"²⁰⁶, and in 2021 it provides for the introduction of excise duty on liquids with and without nicotine, which are used in vaping, at the specific rate of UAH 3,000 per litre, and the use of excise duty stamps for such liquids. Taking into account the lack of official information about the development of the market for these products in Ukraine, it is difficult to draw conclusions about the economic consequences of the application, possible volumes of revenues and costs of administering such excise, as well as the risks of evading its payment.

If we compare the domestic rate of excise duty on e-liquids with the respective indicators in EU countries, its level is higher than in Latvia, Hungary and Italy. However, the latter does not exceed the average in terms of the EU countries that currently apply such excise duty (Fig. 3.16).

²⁰⁶ An electronic cigarette is a device designed for the consumption (inhalation) of vapors generated by heating liquids with or without nicotine by the components of such device. Electronic cigarettes can be disposable or reusable.



* The rate in Latvia is indicated taking into account the additional excise duty on nicotine at the rate of EUR 0.005 per ml; it is obtained from the calculation of the nicotine content of 18 mg in a container with 10 ml liquid volume.

** Since 1 July 2020.

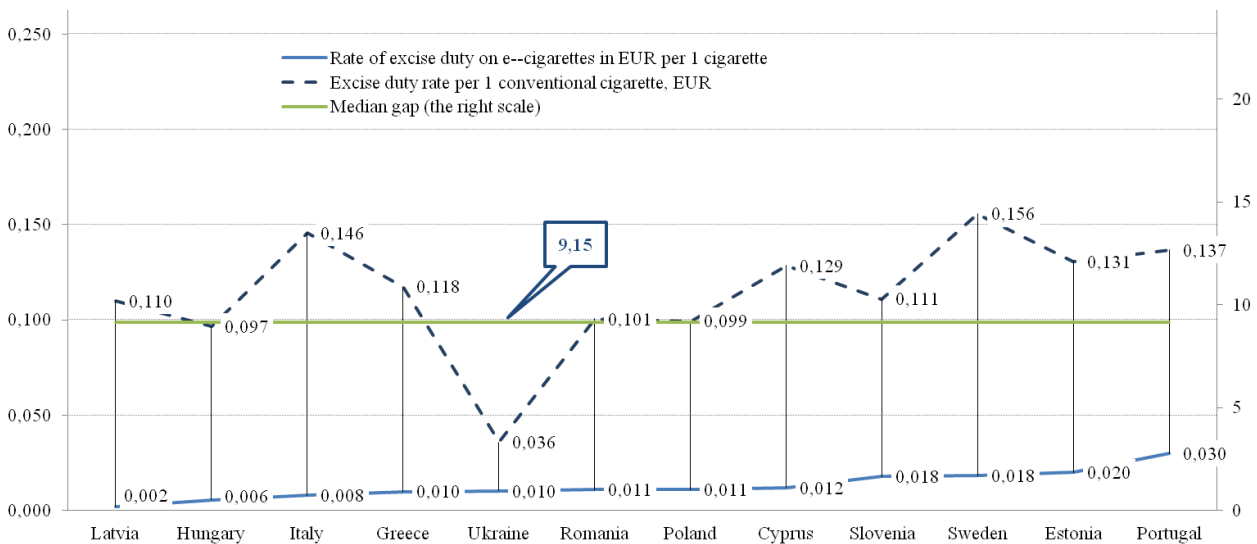
Note: the rates are set in the national currency and converted at the euro exchange rate as of April 2020 according to Eurostat.

Figure 3.16. Comparison of excise duty rates on e-liquids in EU countries in 2020 and in Ukraine, according to legislative changes as of 2021, EUR per ml

Source: prepared by the authors based on Tax Data Center. Vapor Products Tax. URL: <https://vaporproductstax.com/taxation-database/>

The rate of the national excise duty on e-liquids is close to the level of the neighbouring countries. This fact will help to avoid the spread of smuggling of these products. In Poland, starting from 1 July 2020, this rate of excise will be UAH 3,200 in terms of the national currency, in Romania and in Russia, it is UAH 3,089 and UAH 4,760 per litre of liquid, respectively.

The median gap between the excise duty rates for conventional cigarettes and e-cigarettes in EU countries in 2020 is slightly more than 9 times and varies from 57.9 times in Latvia to 4.56 times in Portugal. In Ukraine, this gap will be 3.38 times in 2021, and in 2025, after a series of increases in the excise rate for conventional cigarettes, it will be 7.35 times, which is much lower than the median level in the EU (Fig. 3.17). Thus, the differentiation of the level of excise burden on these types of products in Ukraine is many-fold less than in the EU, which indicates a fairly high level of excise duty on e-liquids in Ukraine.



Notes: in terms of one conventional cigarette in the ratio of 1 ml of liquid = 10 conventional cigarettes; in Ukraine, the rate of excise duty for e-liquids shall be introduced starting from 1 January 2021; excise duty rates for e-liquids in EU countries are taken as of May 2020; in Latvia, the rate for the e-liquid is calculated taking into account the additional excise duty on nicotine at a rate of EUR 0.005 per ml, based on the nicotine content of 18 mg in a container with a liquid volume of 10 ml.

Figure 3.17. Correlation between excise duty rates for e-liquids and conventional cigarettes in EU countries and Ukraine, in terms of one conventional cigarette

Source: prepared by the authors based on Tax Data Center. *Vapor Products Tax*. URL: <https://vaporproductstax.com/taxation-database/>; Excise Duty Tables. Part III - Manufactured Tobacco. European Commission. URL: https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/excise_duties/tobacco_products/rates/excise_duties-part_iii_tobacco_en.pdf.

However, there may be difficulties in controlling the turnover of liquids for reusable open-type e-cigarettes²⁰⁷, which will increase the risks of evasion of excise duty. This is caused by several factors. Firstly, there is no standardised form of packaging for liquids with or without nicotine, like a pack of conventional cigarettes. Liquids are contained in glass or plastic bottles of various shapes and volumes, which makes it impossible to develop and apply a typical design of the excise duty stamp²⁰⁸. In addition, liquids are produced and imported into Ukraine in large containers and volumes, and bottled in smaller volumes at the distribution stage. Thus, excise stamps will be affixed only to large containers, and the containers that will be on sale will remain without these stamps²⁰⁹. Secondly, not all substances for liquid mixing are excisable²¹⁰. This means that the turnover of the latter is not subject to special control by the government. This refers to such substances as propylene glycol, glycerol,

²⁰⁷ Provide for mixing and refilling the liquid in a refillable cartridge by the consumer.

²⁰⁸ E-Cigarettes And Heat-Not-Burn Systems: Technology And Risks For Public Health. Tobacco Tactics. URL: <https://tobaccotactics.tobaccocontrol.org.ua/novi-produkti-tyutyunovoyi-industriyi/novi-produkti-tyutyunovoyi-industriyi-full/>.

²⁰⁹ Source: TV channel 112.ua. 20 January 2020. URL: <https://112.ua/statji/slugi-reshili-podoit-biznes-kak-rada-pere-kroila-nalogovyy-kodeks-522642.html>.

²¹⁰ E-Cigarettes And Heat-Not-Burn Systems: Technology And Risks For Public Health. Tobacco Tactics. URL: <https://tobaccotactics.tobaccocontrol.org.ua/novi-produkti-tyutyunovoyi-industriyi/novi-produkti-tyutyunovoyi-industriyi-full/>.

flavours, etc., which are widely used in the food, cosmetic and pharmaceutical industries.

The experience of EU countries shows that excise taxation of e-liquids should be introduced along with governmental regulation of their manufacture and turnover; otherwise, tax revenue may not be received in full. Moreover, it is necessary to comply with the requirements of the WHO Framework Convention on Tobacco Control and to implement the provisions of Directive 2014/40/EU into the national law²¹¹. In particular, the following additional measures need to be introduced in Ukraine: printing a warning on the package that the e-liquid contains nicotine, which is addictive, and notifications about its content; limiting the volume of refill containers/cartridges to 10 ml, and the volume of replaceable cartridges or tanks to 2 ml; setting a limit on the maximum nicotine content in the liquid of up to 20 mg/ml; ban on the use of vitamins, caffeine, taurine, which stimulate vitality or give the impression that the consumption of such products is good for health, as well as ingredients that colour the steam, and carcinogenic, mutagenic and other harmful substances. Besides, it is necessary to introduce a mandatory pre-marketing notice for the sale of e-cigarettes and limit their advertising, sponsorship, and any sales promotion. The norm on setting age limits also needs to be improved, as it only prohibits the sale of e-liquids to minors, but they still can buy the devices.

Summing up the above, let us formulate the *conclusions and recommendations* for Ukraine regarding excise taxation of heated tobacco products. It is not appropriate to increase the excise duty rate for these goods by more than 4 times (especially at a time), taking into account: 1) the schedule of growth of excise duty rates on cigarettes and 2) the recommendations of the European Commission and the medical research findings on the level of harmfulness of such alternative products to human health. In this matter, Ukraine should not go ahead of the EU countries that do not dare to conduct such experiments (because the risks of rapid shadowing of the tobacco market, in general, and the spread of heated tobacco products smuggling, in particular, will be high). It is better to review the relevant amendments to the Tax Code. It should be done not only regarding the excise duty rate, but also regarding the tax base, which should be determined per unit of weight in kilogrammes, and not per thousand of product units. It is advisable to tax heated tobacco products at a moderate excise rate and to monitor how effective the implemented measures will be in combating the illicit trade of tobacco products.

²¹¹ On the approximation of laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products and repealing Directive 2001/37/EC. European Parliament and Council Directive dated 3 April 2014 (2014/40/EU). URL: <https://www.kmu.gov.Ua/storage/app/sites/1/55-GOEEI/2014-40-es.pdf>.

In other words, there are two ways for Ukraine:

1. To make the excise burden on cigarettes and heated tobacco products almost equal at a time, and to increase the amount of the budget deficit above the statutory level (because the planned increase in excise revenues in the budget will not take place; the latter will only be an "attractive figure on paper").

2. To increase gradually the excise duty rate for heated tobacco products at a step of not exceeding 35% a year, thus ensuring real growth of tax revenues, which can be directed to social or economic goals. Smokers can "finance" a lot of the government's social expenditures, but only if they buy legal products.

We believe that it is advisable to choose the second way. It will ensure a reliable increase in excise duty revenues and will help to avoid the transformation of the domestic tobacco market in the direction of increasing the volumes of consumption of illegal and most harmful products.

Meanwhile, Ukraine needs to use an already regulated excise taxation of e-cigarettes at a moderate rate by taxing e-liquids, regardless of their nicotine content, but it is better to waive the use of excise duty stamps and introduce additional measures to regulate their manufacture and turnover. Moreover, to ensure effective administration of excise duty, it is important to take into account the development of the national e-cigarette market, which requires further research, in view of the additional information collected on trends and features of consumption and sale of such products.

Setting relatively low rates of excise duty on heated tobacco products and e-cigarettes in Ukraine can be seen as a tool to prevent further shadowing of the tobacco market and/or transition of smokers to the most harmful tobacco products due to higher excise duty rates on cigarettes.

CONCLUSIONS

The excise policy of the European countries has a complex goal: to regulate the consumption of different categories of tobacco products in a way that ensures the optimal balance between such goals as budget revenues, healthcare and the European integration. Excise taxation of heated tobacco products and e-cigarettes should be based, on the one hand, on scientific approaches applied to all tobacco products and, on the other hand, it should take into account their physical characteristics and focus on reducing the risk to human health from their use. A lower level of harm from the use of these novel tobacco products and nicotine-containing products as compared to cigarettes, is evidenced by the results of a number of toxicological examinations (including by the US government authority), but medical research on the long-term effects of their consumption is still ongoing.

Despite the low elasticity of demand for tobacco products when their price changes, in practice it is proven that when excise rates increase, budget revenues increase only to a certain extent, notably to the point of the fiscal optimum of the Laffer curve, and after this, tax revenues start to decline as a result of the consumers' transition to cheaper alternatives (often of smuggled and counterfeit origin). Raising excise rates without taking into account the purchasing power of consumers has a negative impact on the development of the tobacco market, undermines the stability of tax revenues, and usually leads to the formation of large unregulated illegal markets. However, when the affordability of tobacco products is taken into account, then excise rates and revenues therefrom can be increased, the consumption will go down, while the illegal trade stays under control.

The prerequisite for the formation and implementation of an effective excise policy, in general, and in the field of tobacco products, in particular, is the compliance with the following institutional requirements: the compromising nature, complementarity of tax changes, rejection of radical tax initiatives (including predictable decision-making), stability, and flexibility.

Despite the approved international instruments on smoking control, novel tobacco products and nicotine-containing products with potentially reduced risk for human health require more favourable excise duties than cigarettes. This is important to prevent the spread of the most harmful and/or illegal tobacco products in the context of a gradual increase in the tax burden on cigarettes. Taxes on smuggled and counterfeit cigarettes and loose tobacco are either not paid at all, or the budget revenues are minimal. Besides, as far as there are no medical research findings on the identical level of harm to health from the use of heated tobacco products and

cigarettes, most countries take it slow to raise the rate of their excise duty. Many foreign experts believe that the differentiation of the excise burden is important for the implementation of the global approach to smoking harm reduction, which is used to reduce risks to public health. A similar excise duty should be fixed only for equally harmful excisable goods, and serious complications in the fight against smoking in general highlight the need for a policy of choosing the "lesser evil": using less harmful alternatives is not a victory over the habit but a partial achievement of healthcare goals.

Novel tobacco products and nicotine-containing products are the alternatives to conventional tobacco products that significantly differ from the latter and from each other in their physical composition and aspects of use. Heated tobacco products contain tobacco, while cartridges/containers of e-cigarettes contain a nicotine or non-nicotine chemical solution. This is a determining factor for the classification of these products by the World Customs Organization. In Ukraine, the Customs Tariff of Ukraine has been amended to introduce new product subcategories to UKTZED (Ukrainian Commodity Coding System) for heated tobacco products and e-liquids: starting from 2021, UKTZED codes 2403.99.90.10 "Heat-not-burn (HNB) tobacco products for electric heating with an electronically controlled heating element" and 3824.90.97.20 "Liquids used in e-cigarettes" will be applied, which is in line with international practice.

Heated tobacco products and electronic cigarettes are not harmonised excisable goods. However, the European Commission, concerned that the EU countries will implement different national excise duty systems for heated tobacco products, which will hinder the development of a harmonised approach in this area, recommends that these products be taxed according to the approaches (including the rates) used for the harmonised excisable category "other smoking tobaccos". However, given the limited information available on e-cigarettes, including regarding the impact of their consumption on human health, this authority expresses considerations on the caution in harmonising the excise taxation thereof and gives no recommendations to EU countries on the collection of the relevant excise.

Today, e-cigarettes are the most widespread in the EU among the novel tobacco products and nicotine-containing products (the number of regular consumers of the latter in 2020 amounted to 16.22 million people, which is 13.2% of the total number of smokers), and heated tobacco products just began to actively take on the European market. However, the spread of these types of alternative products is not identical in all countries; in some EU countries, heated tobacco systems are still not available on the national market. As the popularity of heated tobacco products grows, more and more national lawmakers are inclined to create a separate excise category for such products.

In 2019, most EU countries applied the same excise rate to heated tobacco products as to other smoking tobaccos (i.e., the specific rate per unit of weight in kilogrammes). However, in all EU countries, the excise duty burden on these products was lower than on cigarettes. In seventeen EU countries, where heated tobacco products were released to the market in 2019 and were subject only to the specific excise duty, the excise burden ratio of these products and cigarettes ranged from 17.44% in the Netherlands to 41.37% in Bulgaria. The average EU excise duty for this alternative to conventional tobacco products was roughly 26.58% of the cigarette excise rate. Thus, in the EU countries the excise burden of heated tobacco products was almost four times lower than that of cigarettes, while the difference between the excise duty amount in the price of a tobacco stick pack and a cigarette pack was 73.42%.

In 2020, Ukraine is applying the same approach to setting excise duty rates on heated tobacco products as most EU countries. The domestic level of differentiation of the excise burden on these products and cigarettes is in line with the EU trend.

Currently, excise duty on e-liquids is introduced in fourteen EU countries. Approaches to its collection continue to differ – liquids with and without nicotine are taxed, but most countries have set a specific rate for all liquids used for vaping. Latvia additionally taxes nicotine content in e-liquids at the rate of EUR 0.005 per mg; Italy applies the differentiated excise rate (depending on whether the liquid contains nicotine), which is calculated based on the weighted average retail price of conventional cigarettes. In Croatia, e-cigarettes are classified as excisable goods but with a zero excise rate.

In 2020, the European Commission acknowledged that the differences in approaches to the categorisation and excise taxation of heated tobacco and e-cigarettes in EU countries create obstacles for the functioning of the internal market, administrative barriers to the cross-border movement of such products, and a number of other problems. This makes the intensification of efforts towards the harmonisation of excise taxation of these goods relevant.

Moldova and Georgia are among the few countries in Europe where the reform of the excise duty on tobacco products took place not so much based on scientific approaches to changes in taxation and the corresponding European experience, but by finding unique national solutions. In particular, in these countries, laws equating heated tobacco products to cigarettes for excise purposes came into force.

Moldova pursued a radical tax policy in excise taxation of tobacco products, and the reforms regarding certain products have been ambiguous in the context of ensuring compliance with EU standards and achieving the declared goals. Until 2020,

Moldova applied different rates of excise duty for filter and non-filter cigarettes, and since 2020, it is the only country where excise duties on heated tobacco sticks are collected at the level of the minimum excise duty for cigarettes, and the excise duty on fine-cut tobacco is more than 160% of the excise on cigarettes. However, the rapid growth of excise duties in the country did not impact cigars and cigarillos, as well as other smoking tobacco. Moldova still has opportunities to increase the sales of certain tobacco products (in particular, cigarillos resembling non-filter cigarettes in a brown wrapper by their composition), which will be in demand among smokers because they will be cheap, while paying relatively low excise duties. Therefore, the experience of Moldova cannot be considered as a positive example in reformation of excise duty on tobacco products.

The policy in the field of excise taxation of tobacco products implemented in Georgia was quite contradictory in terms of ensuring compliance with EU standards, while a sharp increase in excise rates on cigarettes in a short period of time led to enhanced consumption of loose tobacco and Georgian "substitutes" of filter cigarettes, as well as to the development of the illegal tobacco market. This led to fiscal losses and hindered the smoking prevalence reduction. Due to the establishment of uniform excise duty rates for heated tobacco products and cigarettes, the country's budget did not receive revenues from these alternative products (it was not officially introduced into the market), and demand for them among the consumers willing to consume potentially less harmful tobacco products generates smuggling of the sticks. Thus, the excise reforms of tobacco products in Georgia are essentially an example of how preferring unique national tax innovations can lead to ambiguous fiscal consequences and regulatory effects.

The modern transformations of the tobacco market in Ukraine are taking place under the influence of a significant increase in the excise duty burden on cigarettes and the popularisation of alternative products for nicotine consumption with less risk to human health than cigarettes have. The increase in excise rates has led to undesirable structural deformations of the market, which manifested themselves in the gradual replacement of cigarettes with products that are not taxed or taxed at lowest rates, in particular, illegal cigarettes and roll-ups. The latter products "won" a significant market share from legal cigarettes and in 2019 accounted for 9-10% of the market of tobacco products and alternatives. Another factor that has led to structural changes in the domestic tobacco market is the global trend of healthy lifestyle. The prevalence of smoking is gradually declining, as is the average number of cigarettes consumed by smokers. Consumers are increasingly choosing a potentially less harmful alternative to cigarettes – heated tobacco products and electronic cigarettes, whose share in the Ukrainian market is already about 9%; this figure is not higher than in EU countries. The latter trend was also facilitated by the fact that the

consumption of open-type e-cigarettes is less expensive compared to cigarettes, including due to the lack of excise taxation of vaping liquids.

The cigarette market in Ukraine is gradually shrinking, which leads to a reduction in excise duty revenues on tobacco products. In recent years, the largest decline in sales of cigarettes in the domestic market was observed in 2019, which, among other factors, was significantly affected by the uncertainty regarding the introduction of an economically unreasonable regulation of margin for wholesale and retail sales of tobacco products.

The use of econometric modelling tools made it possible to find that in 2015-2019 in Ukraine, an increase in cigarette prices by 1% led to an increase in illicit turnover of these products by 1.64%. As a result of considerable price advantages, illegal cigarettes occupied 6% of the market of tobacco products and alternatives, which led to losses of excise duty and VAT revenues in the amount of UAH 4.7 billion. Consumers have also begun to switch to roll-ups, which are made of both legal and illegal raw materials. In addition, the growth rate of the quantity of "cheap whites", which are legally produced in Ukraine but illegally supplied abroad, has slowed down. All these factors, together with the application of tax avoidance schemes (forestalling, in the first place) led to a decrease in excise duty revenues from tobacco products.

Heated tobacco products are represented by several brands in the Ukrainian market, while the range of e-cigarettes is wider. The popularisation of tobacco sticks ensured that the budget receives revenues from excise duty, as such products are subject to excise taxation, but the transition of consumers to e-cigarettes led to a shortfall in this tax. The introduction of the domestic excise duty on e-liquids should be accompanied by effective control measures, as significant volumes of these products enter Ukraine illegally through cross-border Internet trade, which is also typical for EU countries.

Ukraine adopted a legislative initiative, under which starting from 2021, heated tobacco products will be subject to excise duty at the rate of UAH 1,456.33 per thousand pcs with an annual increase of this rate by 20% to UAH 3,019.87 in 2025, as it is fixed for cigarettes (by the amount of the minimum excise duty for the latter). This innovation was adopted without taking into account modern science-based approaches to the formation and implementation of the excise policy and the EU experience in the taxation of these products.

It is necessary to increase the level of excise duty for heated tobacco products in Ukraine taking into account the following: 1) the schedule of growth of excise duty rates on cigarettes and 2) the recommendations of the European Commission and the

medical research findings on the level of harmfulness of such alternative products to human health. Therefore, it is advisable to review the relevant amendments to the Tax Code, which create significant risks of further shadowing of the domestic tobacco market, in general, and smuggling of heated tobacco sticks, in particular, and thus, the risk of losing tax revenues due to such processes. It refers not only to the excise duty rate, but also to the tax base, which should be determined per unit of weight in kilogrammes, and not per thousand of product units.

An alternative way for Ukraine could be a gradual increase in the excise duty rate on heated tobacco products at a rate not exceeding 35% per year, thus increasing the tax revenues, which can be directed to social and economic purposes. Smokers can "finance" a lot of the government's social expenditures, but only if they consume legal products. A gradual increase in the rate of excise taxation of heated tobacco products will be more fiscally effective in the medium term than a radical one.

Starting from 2021, it is also envisaged to introduce an excise in Ukraine on e-liquids with and without nicotine at the specific rate of UAH 3,000 per litre (EUR 0.100 per ml) and the use of excise duty stamps for e-liquids. This national rate is lower than its average level in EU countries, where such an excise has been introduced (EUR 0.144 per ml), and close to the level of neighbouring countries, thus permitting to avoid the spread of smuggling of these alternative products. However, the use of excise duty stamps on vaping liquids will complicate tax administration and will not be an effective tool to prevent misuse.

Starting the practice of excise taxation of electronic liquids, Ukraine needs to introduce additional measures to regulate the manufacture and turnover of e-liquids. It is primarily about the introduction of: printing of medical warnings on the packages, limiting the volume of refill containers/cartridges and replaceable cartridges or tanks, the maximum nicotine content; bans on the use of substances that stimulate vitality or create the impression that the product is good for health, as well as colouring agents and harmful ingredients; a pre-marketing notice; restrictions on sales promotion, prohibition of sale to minors (not only e-liquids, but also vaping devices). Moreover, to ensure effective administration of excise duty, it is important to take into account the development of the national e-cigarette market, which requires further research, in view of the additional information collected on trends and features of consumption and sale of such products.

Establishing relatively low rates of excise duty on novel tobacco products and nicotine-containing products in Ukraine can be seen as a tool to prevent further shadowing of the tobacco market and/or transition of smokers to the most harmful tobacco products due to higher excise duty rates on cigarettes.

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ANNEXES

Annex A

Highlights of Researchers and Practitioners on the Feasibility of Differentiating the Approaches to the Taxation of Tobacco Products and Nicotine-Containing Products According to the Level of Their Harm to Human Health

Author	Arguments in favour of the position
1	2
S. Vaccarella, J. Lortet-Tieulent, R. Saracci et. al.	Combustible tobacco products are considered to be of highest risk for health; non-combustible products such as snus have been shown (in the work by L. Ramström and T. Wikmans) ²¹² to reduce tobacco-attributable mortality ²¹³ .
E-Cigarettes. Report of the Committee on Science and Technology of the House of Commons of the United Kingdom	The level of taxation on smoking-related products should directly correspond to the health risks that they present, to encourage less harmful consumption. Applying that logic, e-cigarettes should remain the least-taxed and conventional cigarettes the most, with heat-not-burn products falling between the two ²¹⁴ .
E. Fruits	<p>There is widespread support among health policy experts for maintaining differential tax rates between cigarettes and non-combustible alternatives.²¹⁵</p> <p>When we look at the twenty countries which established dedicated excise tax categories for heat-not-burn products, we see that these products are consistently treated differently when compared to cigarettes; and they are treated in general in a similar way to so called "other manufactured tobacco products".²¹⁶</p> <p>For the case of heat-not-burn products, a specific tax on the weight of tobacco is applied by almost all countries²¹⁷.</p> <p>Most of the harm from smoking is caused by the inhalation of toxicants released through the combustion of tobacco. Non-combustible nicotine delivery systems, including e-cigarettes, "heat-not-burn" products, smokeless tobacco and other nicotine delivery systems, are generally considered to be significantly less harmful than combustible cigarettes²¹⁸.</p> <p>Many experts believe that the best option for smokers who are unable or unwilling to quit smoking is to switch to less harmful alternatives, such as using smokeless products with similar properties. Policies that encourage smokers</p>

²¹² Ramström L., Wikmans T. Mortality attributable to tobacco among men in Sweden and other European countries: an analysis of data in a WHO report. Tobacco Induced Diseases. 2014. Vol. 12. No. 9. URL: <http://www.tobaccoinduceddiseases.org/pdf-67115-6266?filename=Mortality%20attributable%20to.pdf>.

²¹³ Reducing Social Inequalities in Cancer: Evidence and Priorities for Research. / Ed. by Vaccarella S., Lortet-Tieulent J., Saracci R., Conway D. I., Straif K., Wild C. P. 2019. IARC Scientific Publication No. 168. WHO Press, World Health Organization, Switzerland. P. 158. URL: https://publications.iarc.fr/_publications/media/download/5768/2ede2d8620766dfd85bf922f28c91ec123274f1.pdf.

²¹⁴ E-cigarettes. Seventh Report of Session 2017-19. United Kingdom, House of Commons Science and Technology Committee. August 2018. P. 34. URL: <https://publications.parliament.uk/pa/cm201719/cmselect/cmsstech/505/505.pdf>.

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²¹⁶ Fruits E. Vapor products, harm reduction, and taxation. Principles, evidence, and a research agenda. International Centre for Law & Economics. 2018. P. 15. URL: <https://laweconcenter.org/wp-content/uploads/2018/10/Harm-Reduction-White-Paper-v9.1-181001.pdf>. P. 18-19.

²¹⁷ Ibid. P. 20.

²¹⁸ Ibid. P. 1.

Annex A (cont.)

1	2
	to switch from more harmful combustible tobacco products to less harmful non-combustible products would be considered a form of "harm reduction"* ²¹⁹ .
Fairchild A., Healton C., Curran J., et. al.	Whatever specific regulations and policies are promulgated at local, state, national, or international levels, policies or regulations must be risk-proportionate. The most harmful products on the nicotine-harm continuum, combustible products, should be much more aggressively and stringently regulated than less harmful noncombusted nicotine products. Policies that fail to differentiate will fail public health ²²⁰ .
Chaloupka F.J., Sweaner D., Warner K.E.	<p> Policymakers should consider an approach that differentially taxes nicotine products in order to maximize incentives for tobacco users to switch from the most harmful products to the least harmful ones²²¹.</p> <p> Extensive research demonstrates that higher tobacco taxes can help promote quitting among current users, deter initiation among potential users, and reduce tobacco use among continuing users. Studies have also shown that changes in the relative prices of tobacco products lead some tobacco users to switch to less expensive products. Given the belief that all tobacco products are seriously deleterious to health, conventional wisdom in the tobacco-control world has long been that all products should be taxed similarly. For example, the World Health Organization states that adopting "comparable taxes and tax increases on all tobacco products" is a best practice for tobacco taxation²²².</p> <p> The rapid evolution of the nicotine-product marketplace suggests that it's time to rethink the idea that similar taxes are best practice. We believe that national, state, and local policymakers should consider an approach that differentially taxes nicotine products in order to maximize incentives for tobacco users to switch from the most harmful products to the least harmful ones²²³.</p>
Bentley G.	Heat-not-burn tobacco products are not without risk, but it is clear from the available literature that they present significantly less harm than combustible cigarettes. A systematic review of the scientific literature on heat-not-burn tobacco products concluded: peer-reviewed evidence on heat-not-burn tobacco products ²²⁴ indicates that HnB are effective nicotine delivery devices that expose users and bystanders to substantially fewer harmful and potentially harmful compounds than smoking cigarettes ²²⁵ .

Note. * This refers to the implementation of the global approach of tobacco harm reduction used in developed countries to reduce public health risks from this habit. The implementation of such approaches is important to support the development of the market for low-risk alternative products, which provides potentially less harmful ways to deliver nicotine to smokers who do not want to quit smoking.

Summarised by the authors.

²¹⁹ Fruits E. Vapor products, harm reduction, and taxation. Principles, evidence, and a research agenda. International Centre for Law & Economics. 2018. P. 15. URL: <https://laweconcenter.org/wp-content/uploads/2018/10/Harm-Reduction-White-Paper-v9.1-181001.pdf>. P. 18-19.

²²⁰ Fairchild A., Healton C., Curran J., Abrams D., Bayer R. Evidence, alarm, and the debate over e-cigarettes. *Science*. 2019. Vol. 366, Issue 6471. P. 1320. URL: <https://regulatorwatch.com/wp-content/uploads/2019/12/2019-12-13-ABRAMS.pdf>.

²²¹ Chaloupka F. J., Sweaner D., Warner K. E. Differential Taxes for Differential Risks – Toward Reduced Harm from Nicotine-Yielding Products. *The New England Journal of Medicine*. 2015. Vol. 373. No. 7. P. 596. URL: <https://www.nejm.org/doi/pdf/10.1056/NEJMp1505710?articleTools=true>.

²²² Ibid. P. 595.

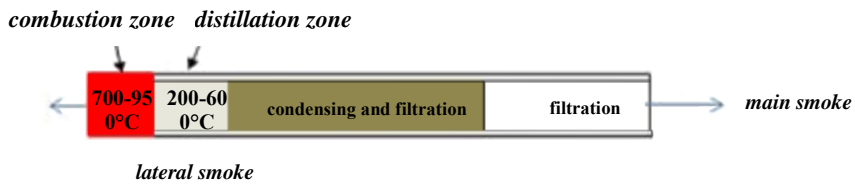
²²³ Ibid. P. 595.

²²⁴ Simonavicius E., McNeill A., Shahab L., Brose L.S. Heat-not-burn tobacco products: a systematic literature review. *Tobacco Control*. 2019. Vol 28. Issue 5. P. 582-594. URL: <https://tobaccocontrol.bmj.com/content/tobaccocontrol/28/5/582.full.pdf>.

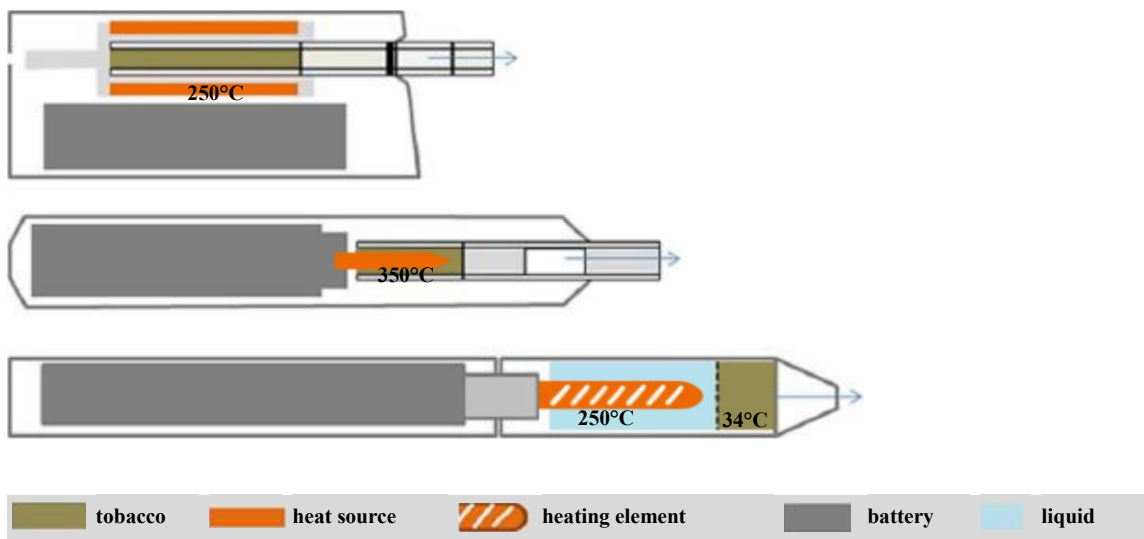
²²⁵ Bentley G. Heated Tobacco Products: Frequently Asked Questions. Reason Foundation. September 2019. P. 4. URL: <https://reason.org/wp-content/uploads/faqs-heated-tobacco-products.pdf>.

The Structure of Cigarettes and Novel Tobacco Products and Nicotine-Containing Products

1) tobacco burning product (cigarette)



2) types of heated tobacco systems



3) e-cigarette

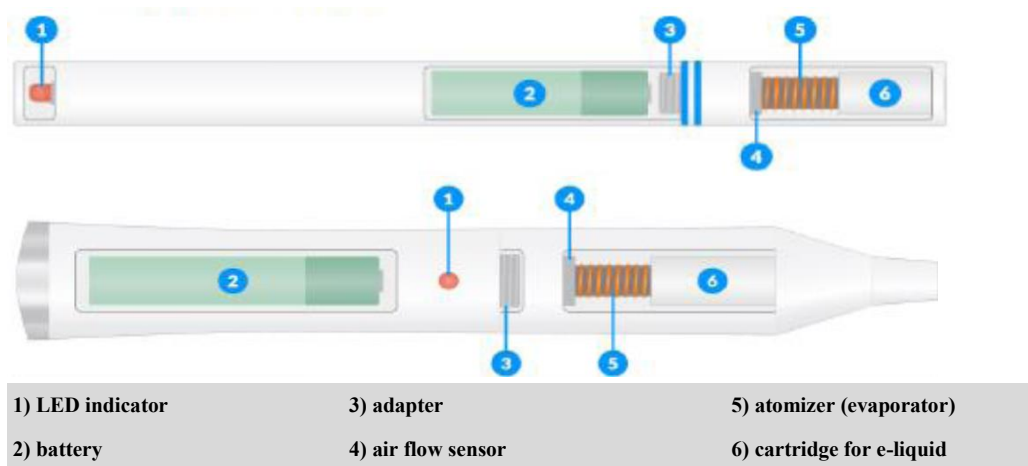


Figure B. 1 The structure of cigarettes and some types of heated tobacco systems and e-cigarettes

Source: Nadja Mallock, Elke Pieper, Christoph Hutzler, Frank Henkler-Stephani, Andreas Luch. Heated tobacco products: a review of current knowledge and initial assessments. Department of Chemical and Product Safety, German Federal Institute for Risk Assessment (BfR), Berlin, Germany. URL: <https://www.frontiersin.org/articles/10.3389/fpubh.2019.00287/full>; Vapor Taxes by State, 2018. Tax Foundation 2018. URL: <https://taxfoundation.org/vapor-taxes-2018/>.

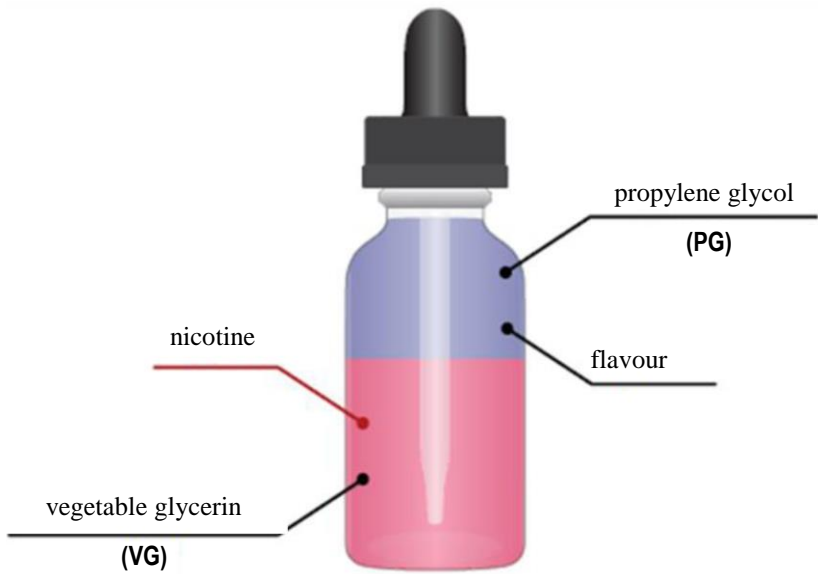


Figure B.2. The main components of e-liquids

Source: E-cigarette, or vaping, products visual dictionary. Centers for Disease Control and Prevention.
URL: https://www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/ecigarette-or-vaping-products-visual-dictionary-508.pdf.






Annex C


The Evolution of Electronic Cigarettes



Source: E-cigarette, or vaping, products visual dictionary. Centers for Disease Control and Prevention.
 URL: https://www.cdc.gov/tobacco/basic_information/e-cigarettes/pdfs/ecigarette-or-vaping-products-visual-dictionary-508.pdf.

Characteristics of Certain Types of Electronic Cigarettes and Heated Tobacco Systems

Name of Product	Characteristic	Specific Brands
1	2	3
Disposable e-cigarettes		
Disposable e-cigarettes 	Type of rechargeable and non-rechargeable e-cigarettes. It consists of a battery, a cartridge and a vaporizer. Once the aerosol has evaporated, it is subject to disposal.	NJOY OneJoy, Aer Disposable, Flavorvapers
Reusable electronic cigarettes		
Rechargeable e-cigarettes 	Cigalike device containing a battery connected to a vaporizer and used to heat the solution. Often contains an element that regulates the duration of consumption.	Blu, GreenSmoke, EonSmoke
Medium-sized pen-like rechargeable e-cigarettes 	The device is larger than a cigarette, often with a large capacity battery. Contains a disposable or replaceable cartridge/tank (also called a clearomizer). These devices are often equipped with a manual switch that allows adjusting the length and frequency of puffs.	Vapor King Storm, Totally Wicked Tornado
Big rechargeable e-cigarettes with a tank (tanks or mods) 	A type of modified e-cigarette ("mod") containing a control board with extended functionality. Includes <i>Sub-Ohm Tank</i> , which is designed to create a large cloud of aerosol with a greater capacity to deliver nicotine or other substances.	Volcano Lavatube, Eleaf
Mini-vapes (pod mods) 	Modern technological evaporators, in which the bulk tank with liquid is replaced by small replaceable cartridges with nicotine salt (pods). Hence the second name of the devices – pod systems. Nicotine salts, which have a lower pH than nicotine without a base, allow to inhale a particularly high content of nicotine easier and with less irritation of the throat than nicotine without a base. In general, pod systems are a mini version of vapes with an identical operation principle. They consist of a battery and a heater that converts the pod content into steam. These are miniature devices, thin and light; visually they look like elongated USB-sticks.	Juul, Suorin, Joint, Logic Compact, MarkTen Elite, PAX Era

1	2	3
Heated tobacco systems		
	<p>Heated tobacco systems are a class of various products that heat a tobacco stick to produce aerosol inhaled by the user. They are different from e-cigarettes, which heat the liquid.</p>	<p><i>iQOS, Ploom Tech, glo, PAX</i></p>

Source: prepared by the authors according to the data of Nguten D., Aamodt G. Electronic Cigarettes the Past, Present and Future URL: <https://www.dentalcare.com/en-us/professional-education/ce-courses/ce451/the-history-of-e-cigarettes> and other web-resources.

Annex E

**Average Price of E-Liquids for Open- and Closed-Type Systems in the EU,
the UK and Ukraine (May 2020)**

Country	Price of liquids for open-type systems, EUR/ml		Rate of price increase/decrease for liquids for open systems 2020/2017, %	Price of liquids for closed-type systems, EUR/ml
	2017	2020		2020
Belgium	0.62	0.47	75.00	-
Bulgaria	0.44	0.30	68.56	3.83
United Kingdom	0.57	0.34	59.92	3.44
Greece	0.60	0.42	69.31	1.00
Ireland	0.51	0.39	76.78	-
Spain	0.44	0.35	79.55	-
Italy	0.66	0.49	74.24	4.96
Netherlands	0.50	0.19	38.00	1.76
Germany	0.50	1.00	200.00	3.89
Poland	0.24	0.39	162.50	-
Portugal	0.51	0.39	76.47	2.99
Romania	0.40	0.29	72.36	8.48
Hungary	0.43	0.31	72.09	6.00
Ukraine	0.12	0.11	91.67	4.78
Finland	0.54	0.45	83.33	-
France	0.58	0.52	89.66	4.28
Czech Republic	0.48	0.37	77.08	3.55
Sweden	0.55	0.69	125.28	8.22

Note: the value of the lowest price registered in the most popular online stores of the respective country. Prices are converted into EUR at the official exchange rate of the European Central Bank.

Source: compiled by the authors.

Annex F

Proposals of the Federation of Employers on the Taxation of Heated Tobacco Products

An alternative proposal to increase the excise duty on HNB by 35% annually will increase the excise duty rate by 350% in 5 years instead of a one-time destructive increase by 320%.

	Annual increase of excise rates, %				
	2021	2022	2023	2024	2025
Bill No.1210	20%	20%	20%	20%	20%
	320%	20%	20%	20%	20%
Alternative proposal	20%	20%	20%	20%	20%
	35%	35%	35%	35%	35%

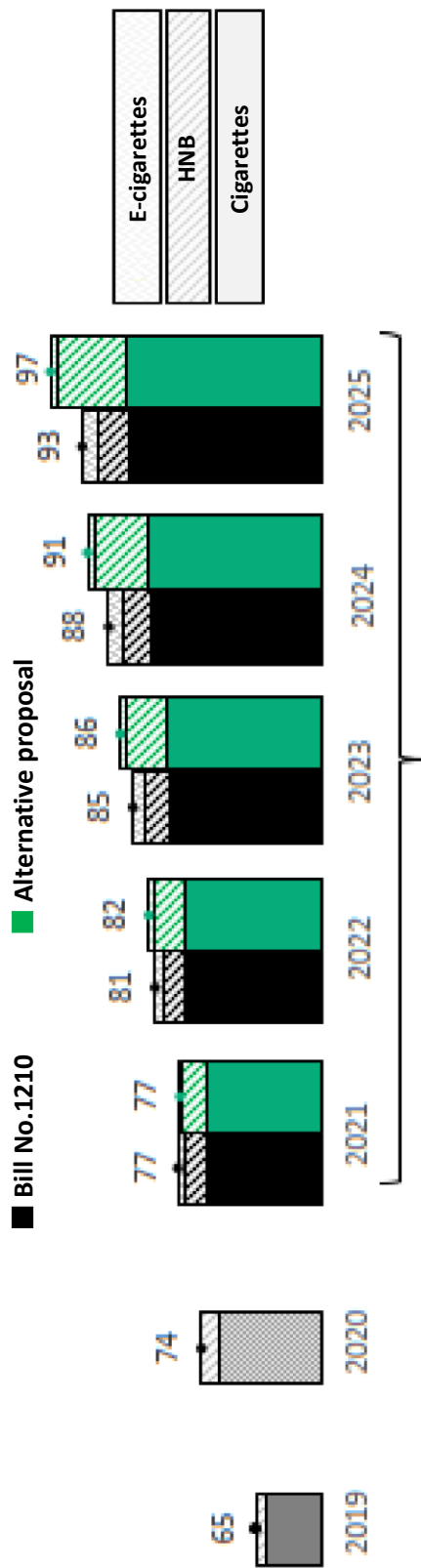
A cumulative increase of the excise rate on HNB by 350% for the period from 2020 to 2025

	Price for HNB pack, UAH					
	2020	2021	2022	2023	2024	2025
Bill No.1210	50	80	88	97	108	121
Alternative proposal	50	53	58	63	71	82

A sharp one-time increase in excise duty by 320% under Bill No.1210 will increase HNB price by 60%.

The proposed alternative tax plan with an annual increase in excise duty on HNB by +35% will increase tax revenues in comparison with Bill No.1210 by UAH 9 billion over 5 years.

Forecast of tax revenues (Excise duty, VAT and 5% excise on retail sales), 2019-2025, UAH bln

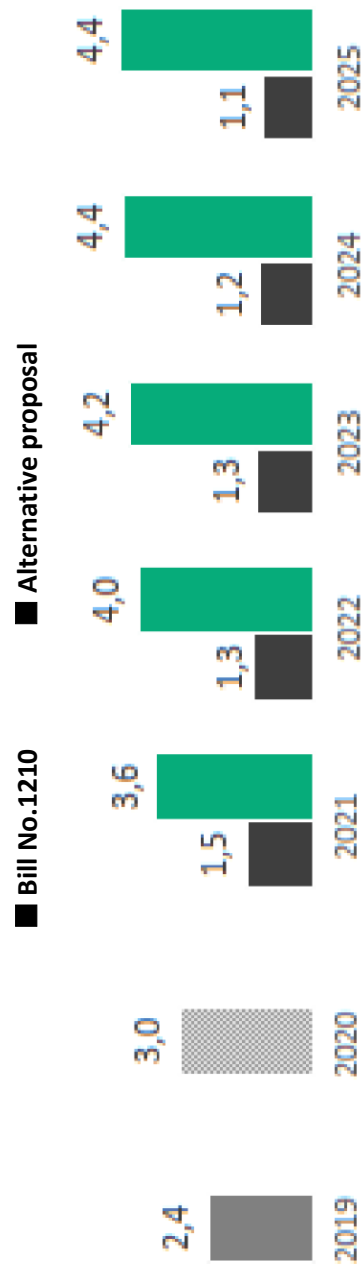


Tax losses compared to the alternative proposal due to:

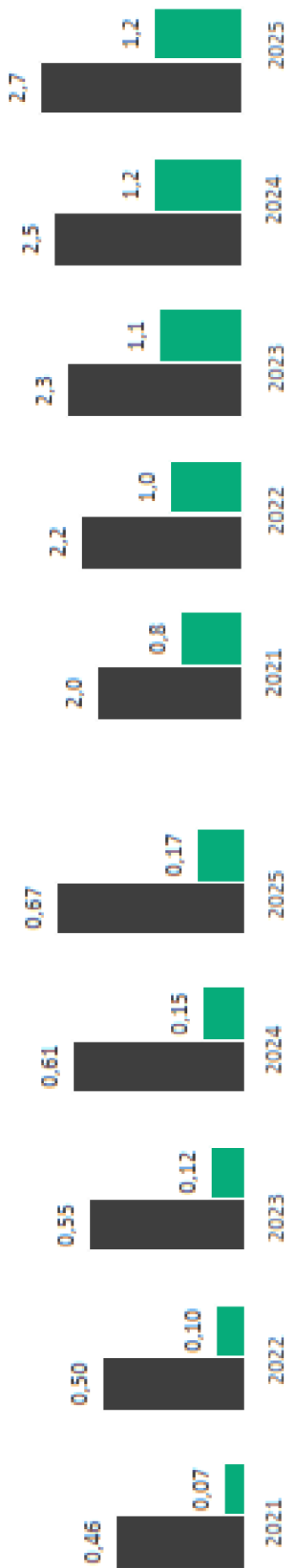
- UAH 9.0 bln
- transition from legal to illegal products - UAH 3.5 bln
- transition from HNB to e-cigarettes - UAH 5.7 bln
- smokers' return to traditional cigarettes + UAH 0.2 bln

The significant increase in HNB prices caused by the increase in excise duty will lead to the emergence of an illegal HNB market, transition to the use of e-cigarettes and return of smokers to traditional cigarettes.

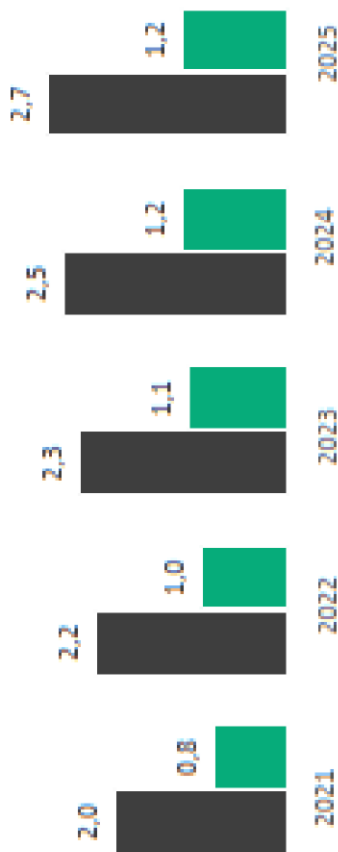
Forecast of the development of legal HNB market, bln pcs



Forecast of the development of illegal HNB market, bln pcs

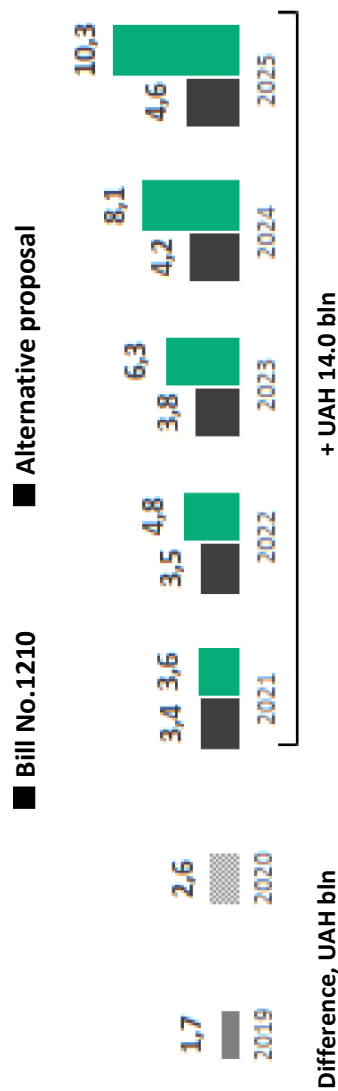


Forecast of the development of legal e-cigarette market, bln pcs

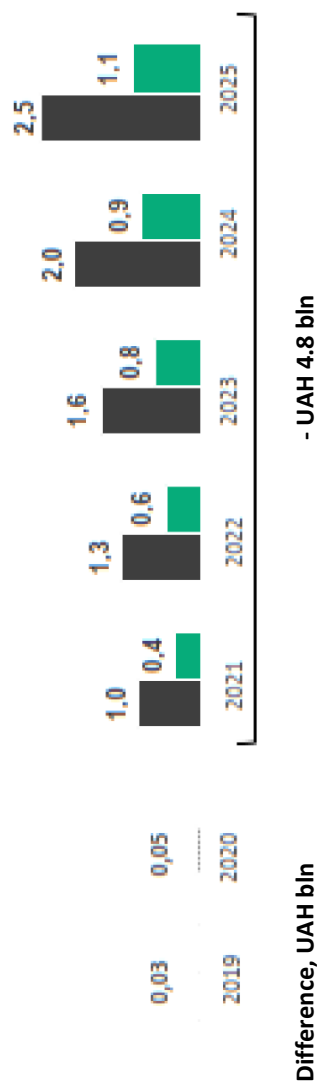


The growth of the e-cigarette category caused by Bill No.1210 will not compensate for the tax losses from the reduction of the HNB category

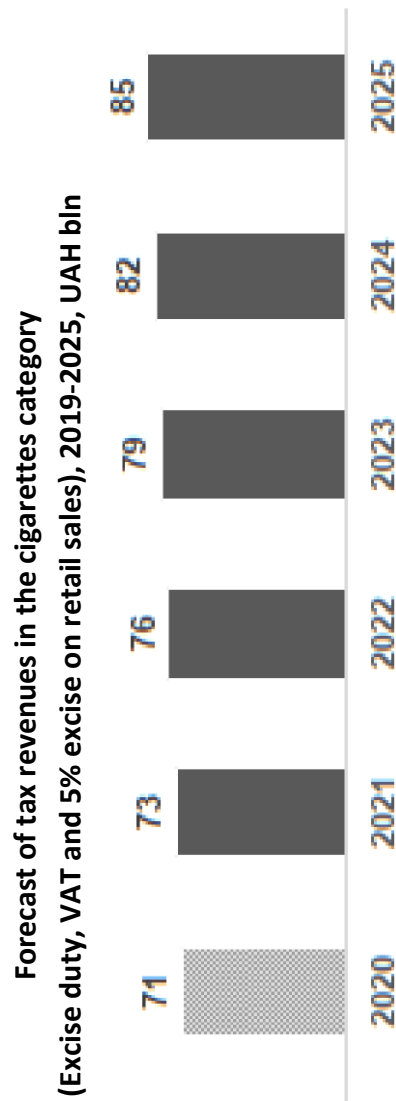
**Forecast of tax revenues in the HNB category
(Excise duty, VAT and 5% excise on retail sales), 2019-2025, UAH bln**



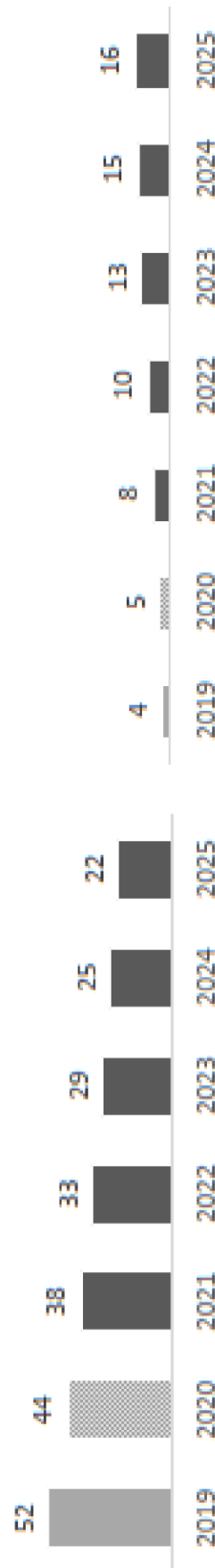
**Forecast of tax revenues in the e-cigarette category
(Excise duty, VAT and 5% excise on retail sales), 2019-2025, UAH bln**



The alternative proposal will allow to generate tax revenues from the conventional cigarettes category at the same level as suggested by Bill No.1210*



Forecast of the development of legal cigarette market, bln pcs Forecast of the development of illegal cigarette market, bln pcs



* the difference is UAH 0.2 bln in 2021 in favour of Bill No. 1210 in connection with the return of smokers to conventional cigarettes

Source: The Federation of Employers Prepared Alternative Proposals to Certain Bill No.1210 Provisions. 5 May 2020. URL: <http://fru.ua/ua/media-center/news/business-events/federatsiya-pidgotavala-alternativni-prosMwixuwuBmHXhnKOMhBOo>

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***Volodymyr Korotun, Tetiana Koshchuk,
Nadiia Novytska, Inna Khliebnikova***

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IN THE CONDITIONS OF ITS
TRANSFORMATION**

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