

MANAGEMENT OF BUDGET FLOWS FROM EXCISE TAXATION IN UKRAINE

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Abstract: The article aims to identify possible directions for improving the management of budgetary flows from excise taxation in Ukraine to implementing the state's fiscal and socio-economic tasks through tax revenues. Using the method of analysis of hierarchies, a choice was made of an option for a possible adjustment of excise tax rates on alcoholic products, tobacco products, or the introduction of an excise tax on soft drinks and food products with high sugar content. The method used allowed taking into account the conditions of military aggression on the part of Russia, under which the modern financial system of Ukraine operates. The results obtained by the hierarchy analysis method contribute to balanced decisions in the process of budget flows, and their accounting in the excise taxation system ensures the choice of a reasonable level, tax rates, and the introduction of new types of taxes. The results of assessing the volume of revenues and excise tax based on the results of the implementation of the Consolidated Budget of Ukraine, the State Budget of Ukraine, and the share of excise tax in the budgets of some European countries, in particular, France and Germany, allowed identifying the problems and directions for a balanced and uniform movement of budget revenue streams from excise taxation. The implementation of these steps is associated with the improvement of the management of the movement of budgetary flows from excise taxation in order to eliminate obstacles to the development of the business of manufacturers of excisable goods.

Keywords: Budget, Budget process, Excise tax, Financial flows, Income, Taxation, Tax revenues.

1 Introduction

A balanced movement of income streams from excise taxation is a necessary component of an effective financial system of the state, based on the reasonable formation and rational distribution of financial resources in certain areas. The formation and use of budgetary flows in Ukraine occurs due to tax, non-tax revenues, income from capital transactions and official transfers, and the vast majority of budgetary flows are tax revenues. According to the Tax Code of Ukraine, excise tax is included in the list of national taxes of Ukraine. Excise tax refers to indirect taxes levied on payers that produce, import, and sell certain goods, services and carry out certain types of activities. The movement of budgetary flows based on the results of excise taxation is associated with the formation and use of budgetary funds, monitoring compliance with budgetary legislation as a result of the production, sale of excisable goods (products), or their importation into the customs territory of Ukraine. Ensuring a balance in the flow of revenues and expenditures of the budget is a necessary condition for the socio-economic stability of the state and its territories.

Budget flows cannot be managed taking into account only economic parameters due to the influence of social factors on the budget process. As a result of the formation and use of budgetary flows, socially important tasks and functions are provided by public authorities and local governments for a certain period of time. Social development implies a balanced and reasonable state policy to improve the management of budgetary flows. The fiscal importance of the excise tax as a budget-forming source is enhanced by its regulatory influence on the economic and social processes in the state [7, 18]. The excise tax is levied on the manufacturer, the seller and is included in the price of the goods - thus transferred to the final consumer, so an increase in excise duty on certain groups of goods may partially interfere with their consumption. Excise taxation as a fiscal process has a significant impact on the production and consumption of excisable goods (products). Coordination of relations and interests of participants in the budget process in accordance with their powers, producers and consumers of excisable goods (products) contributes to the efficiency of the movement of budgetary flows based on the results of excise taxation.

2 Literature Review

The tax policy strategy of the European Union (hereinafter – the EU) provides for the development of excise taxation and the calculation of effective tax rates for fair taxation and sustainable development of the state. Accounting for the provisions and principles of the Strategy is gradually reflected in the tax legislation of Ukraine, adapting to the requirements of the European Commission in the context of the course towards economic integration with the EU (Taxation and Customs Union of European Commission, 2022). Excise tax is, on the one hand, a constant source of replenishment of the budget with tax revenues, and on the other hand, it is a means of state influence on economic and social development through the regulation of prices for goods, works, services, the consumption of which can harm the quality of life, human health or lead to environmental degradation. If the state cannot prohibit the production or consumption of goods, works, services that are considered potentially harmful, then the establishment, collection and adjustment of excise tax rates makes it possible to compensate for the consequences of their use and promotes a healthy lifestyle. Thus, excise taxation is a tool not only for replenishing the budget, but also for regulating supply and demand. By introducing/abolishing the excise tax or increasing/decreasing its rates, it is possible to influence the structure of consumption of goods, works and services. Such a tool for managing the financial flows of the budget is appropriate and convenient in the context of constant and inevitable changes in the economic and social environment taking place in Ukraine.

S. Kachula and G. Shchiry define the prospects for the development of excise taxation in the current institutional conditions of the Ukrainian economy and focus on the need for proper administration of excise taxation, which is a necessary condition for ensuring stable revenues to the state and local budgets from individual/specific excises [9]. The system of administration that has developed in Ukraine in general and excise taxes in particular is a dynamic system that is constantly evolving and formally corresponds to European practice. With economic instability, low level of tax discipline in Ukraine, the tax administration system and the specifics of the excise tax administration process are a significant basis for improving the efficiency of the state tax policy in general and excise policy in particular. An effective excise tax administration system should become the basis for increasing the efficiency of excise policy in accordance with the requirements of the socio-economic development of society.

Excise taxation has a long history. Groups of goods subject to excise have undergone significant changes simultaneously with the course of world history, the history of an individual country and the modern conditions of its development. Thus, in connection with the military aggression of the Russian Federation against Ukraine, in accordance with the Law of Ukraine "On approval of the Decree of the President of Ukraine "On the introduction of martial law in Ukraine", martial law was declared in Ukraine on February 24, 2022 [31]. In order to improve legislation for the period of martial law, the Verkhovna Rada of Ukraine adopted the Law on Amendments to the Tax Code of Ukraine and other legislative acts of Ukraine, according to which customs duties and value added tax are temporarily canceled for the period until the termination or cancellation of the state of martial law, the state of emergency on the territory of Ukraine and excise tax on the import of vehicles from abroad, as well as zero excise tax rates for certain groups of excisable goods (products), such as: motor gasoline; other gasolines and oil products; heavy distillates (gas oil); liquefied gas (propane or a mixture of propane and butane) and other gases; butane, isobutane [30, 32].

Sokolovskaya A.M. the features of tax interstate harmonization in the EU countries, trends and contradictions of its development in the EU and the principles of adapting the tax legislation of Ukraine to the EU directives in the context of European

economic integration are considered. On the basis of a comparative analysis, the possibilities of approaching sections of the Tax Code of Ukraine to the directives of the EU Council, containing harmonized norms for collecting VAT and excise tax, are determined. The problems and prospects for increasing excise tax rates in the process of implementing the Association Agreement between Ukraine and the EU are revealed, general approaches to assessing the regulatory impact of harmonizing the taxation of energy products and electricity in Ukraine are characterized [23].

In the current situation of full-scale aggression on the part of Russia, it becomes necessary to direct financial flows in the budget process of Ukraine not only to defense, but also to social protection, health care, support for measures to promote a healthy lifestyle, etc. T. Bogdan and V. Lomakovych reveal the need, in the face of the COVID-19 pandemic, to inject public investment into an efficient healthcare system adapted to new challenges, modern education, advanced digital infrastructure and environmental protection [1].

The transformation of state functions during the period of liquidation of the consequences of the pandemic should be based on identifying the main shortcomings of fiscal policy in Ukraine, strengthening the tax system, improving financing of the social sphere and strengthening human potential. In Ukraine, education, health care and social services are chronically deteriorating, and the corona crisis has further exacerbated their condition and increased the level of poverty in the country. This is evidenced by the calculated indicators of the response of fiscal policy to the pandemic in Ukraine and the results of a comparative analysis of the structure of public finances in comparison with international models.

Yurchishin and Shevchuk characterize the improvement of excise taxation in Ukraine in terms of the formation of an effective excise tax system using an economically justified level of its rates and ensuring that it performs a function related to limiting the consumption of certain goods that are harmful to human health [33]. Tax administration must be efficient: to ensure a high degree of taxpayer compliance, and efficient: to keep administrative costs low compared to the revenues generated. One of such measures, which is justified not only by the fiscal interests of the government to fill the budget, but by necessity: maintaining a sober lifestyle, a person's ability to think sensibly and adequately respond to danger, is an excise tax on alcohol and tobacco products.

In order to maintain the ability to work and improve the health of the population by reducing the consumption of sugary drinks and food, the possibility of introducing an excise tax on soft drinks and products with a certain high (certain) sugar content should be considered. A review of foreign experience shows that sugar tax is levied in more than 65 countries of the world. A similar tax exists in the EU countries, the best practices of which can serve as an example of inheritance in Ukraine. Royo-Bordonada et al. revealed the experience and analyzed the implementation of a progressive increase in the excise tax on sweet drinks in the autonomous region of Spain – Catalonia.

The tax was introduced to reduce public health risks and in line with calls from the World Health Organization to levy specific excises on sugary drinks. The results of the observations showed that the Catalan excise tax on sweet drinks had a persistent and progressive effect over 3.5 years in reducing their consumption to 16.7%. The impact of rising prices on consumption is well observed in the long term, and the authors attribute such a decrease in consumption to a decrease in dependence on sugar, drawing a parallel with the addictive properties of sugar. The significant reduction in the consumption of sugary drinks through the Catalan tax provides the basis for its expansion to the rest of the country and can help curb the obesity epidemic in Spain [21]. Considering the trends in the impact of the sugar tax on the consumption of products with high sugar content, it is necessary to consider and adopt the positive experience of introducing a sugar tax in Ukraine to improve the nation, especially in post-COVID conditions.

In Ukraine, in recent years, considerable attention has been paid to the problem of improving the quality of life [15]. Decree of the Cabinet of Ministers of Ukraine dated March 3, 2021 No. 179 approved the National Economic Strategy for the period up to 2030, which defines a long-term economic vision, principles and values, “red lines” (unacceptable directions of movement), key areas (vectors) of economic development and for each of the 20 areas – strategic goals, ways to achieve them, taking into account existing and potential challenges and barriers, as well as the main tasks of the state economic policy and target indicators for the period up to 2030.

The strategy provides for one of the directions for its implementation – the quality of life. Direction vision: Ukraine is a country of educated, healthy, talented, comprehensively developed and protected citizens with a high level of well-being. The strategic goals in the direction of quality of life are: the creation of an inclusive, innovative and educated society in which citizens have equal rights and opportunities to develop their talent throughout their lives; creation of a favorable ecosystem for the realization of cultural potential; effective use of the economic potential of cultural heritage; creation of a safe environment for the population; ensuring a high level of health and high rates of duration and duration of healthy life; ensuring equal rights and opportunities for everyone, inclusion and freedom from barriers, a high level of social protection for a decent life; increasing the employment rate of women and men of appropriate ages and reducing the wage gap between women and men; creating proper conditions and ensuring the availability of physical culture and sports [5].

According to the Organization for Economic Cooperation and Development (2022) and the Obesity Evidence Hub's (2022), the demand for excisable goods (products) among the population is always high. The vast majority of excisable goods (products) are usually harmful: their production or storage leads to pollution of the environment (air, water, land) and is dangerous to human health and life. Consumption of excisable goods (products) by society provokes the emergence and development of chronic diseases (heart disease, cancer, diabetes, obesity, immune system disorders, etc.). Reducing the production and consumption of goods (products) that harm the nature and health of the nation, contributes to the implementation of strategic directions of state development and removes barriers to improving the quality of life.

3 Materials and Methods

Improving the management of budgetary flows in Ukraine provides for reasonable decision-making on excise taxation for the implementation of fiscal and socio-economic goals for the development of the financial system of the state. The application of the hierarchies analysis method (hereinafter – HAM) ensures the adoption of sound decisions on the budget and taking into account the current unstable conditions of the external and internal environment and their impact on the budget process. The method used made it possible to take into account the conditions for the introduction of martial law in Ukraine in connection with the military aggression of the Russian Federation against Ukraine, under which the modern financial system of Ukraine functions.

The HAM is based on the method of expert assessments, according to which the decision-making process consists of two parts: decomposition (using hierarchies) and synthesis (by finding relationships through judgments). During the decomposition, the goals of the study are determined, criteria that satisfy the goals, alternatives are established, a hierarchy is built.

The purpose of the HAM is to select options for improving excise taxation, which includes adjusting excise tax rates and introducing a new type of excise tax in Ukraine. In accordance with the goals of the HAM, criteria have been established that characterize the implementation of the fiscal and socio-economic tasks of the state in the process of movement of budgetary flows from excise taxation:

- Criterion 1(K 1): Filling the budget;
- Criterion 2 (K2): Improvement of the nation;
- Criterion 3 (K3): The defense capability of the state.

Possible options for excise taxation were selected as alternatives to improve the management of budgetary flows:

- Alternative 1(A1): Adjustment of excise tax rates for alcoholic products;
- Alternative 2(A2): Adjustment of excise tax rates on tobacco products;
- Alternative 3 (A3): Introduction of an excise tax on non-alcoholic beverages and foods high in sugar.

In the process of synthesis, paired comparisons of criteria and alternatives were carried out – an assessment of compliance with each of the established criteria by finding relationships through judgments. The assessment was made on a scale of relative importance (Table 1).

Table 1: Relative importance scale (degree of preference)

1	Criteria equal by importance
3	Weak advantage of the criterion
5	Sound significance of the criterion
7	Strong significance
9	Very strong (obvious) significance

Intermediate values of the scale (2, 4, 6, etc.) were put down when it was necessary to choose the average between two degrees of preference. The evaluation resulted in the degree of advantage of the criteria and alternatives, which is the basis for making informed decisions on budget issues. HAM is relevant for addressing budget flow management where possible development scenarios are needed, as the fiscal and social effects of changes in excise taxation can be seen and assessed in the medium and long term. The use of HAM in the budget process can bring as close as possible to the balanced management of budget flows in the medium-term budget planning.

4 Results and Discussion

In recent years, unfavorable conditions of the external and internal environment have been observed in Ukraine: the occupation of its territories, the ongoing armed conflict in the east of the country, the COVID-19 crisis, the military aggression of the Russian Federation against Ukraine, the imposition of martial law.

The onset of these events changes the emphasis on carrying out the envisaged structural reforms of the financial system to the need to overcome and eliminate negative consequences. In such circumstances, the importance of improving the management of financial flows in the budgetary process of Ukraine increases. To assess the formation and movement of budgetary flows, let us consider excise tax indicators as a significant budget-forming source.

The excise tax is credited to the general and special fund of the State Budget of Ukraine and the general fund of local budgets of Ukraine. The transfer of excise tax between budgets is determined by the type of its origin: the State budget receives excise tax from excisable goods (products) produced in Ukraine and imported into the customs territory of Ukraine (except for excise tax paid by payers registered in the Autonomous Republic of Crimea)); the local budgets of Ukraine are credited with excise tax on the sale of excisable goods by retailers and a certain percentage of excise tax on fuel produced in Ukraine and imported into the customs territory of Ukraine (Table 2).

Table 2: Enrollment of excise tax in the state and local budgets of Ukraine (Verkhovna Rada of Ukraine, 2010)

State budget of Ukraine	
General Fund	Special Fund
Excise tax on excisable goods (products) produced in Ukraine	Excise tax on fuel and vehicles produced in Ukraine and fuels

and excise tax on excisable goods (products) imported into the customs territory of Ukraine in addition to excise tax on excisable goods (products) produced in Ukraine, paid by payers registered in the ARC, 8 part 2 of Article 29 of the Budget Code of Ukraine)	and vehicles imported into the customs territory of Ukraine (paragraph 1.2 of part 3 of Article 29 of the Budget Code of Ukraine)
Local budgets of Ukraine	
General Fund	
ARC budget revenues	
Excise tax on excisable goods (products) produced in Ukraine, paid by taxpayers registered in the ARC (paragraph 6 of Part 1 of Article 66 of the Budget Code of Ukraine)	
Revenues of budgets of rural, settlement, city territorial communities	
Excise tax on the sale of excisable goods by retail trade entities (paragraph 16 of part 1 of Article 64 of the Budget Code of Ukraine)	
13.44 percent of the excise tax on fuel produced in Ukraine and imported into the customs territory of Ukraine is automatically credited: in the first half of the current budget period - in proportion to the volume of fuel sold by retail trade entities in the relevant territory for the second half of the previous year of the budget period in the total volume of fuel sold in Ukraine as a whole for the second half of the corresponding budget period; in the second half of the current budget period - in proportion to the volume of fuel sold by retail trade entities in the relevant territory for the first half of the current budget period in the total volume of such fuel sold in Ukraine as a whole for the first half of the corresponding budget period (clauses 16.1 and 16.2 of Part 1 of Article 64 Budget Code of Ukraine)	
The excise tax on the sale by retailers of tobacco products, tobacco and industrial tobacco substitutes, liquids used in electronic cigarettes is credited to local government budgets automatically in accordance with the parts determined monthly, as the ratio of the cost of tobacco products, tobacco, industrial tobacco products sold by retailers tobacco substitutes, liquids used in electronic cigarettes in the relevant territory for the reporting month to the total value of tobacco products, tobacco, industrial tobacco substitutes, liquids used in electronic cigarettes sold by retailers, for the reporting month in general for Ukraine (part 3 of Article 64 of the Budget Code of Ukraine)	

Indicators of the monthly movement of budget revenue and excise tax flows in the process of execution of the Consolidated Budget of Ukraine during 2019-2021 are presented in Figure 1. The indicators of the Consolidated Budget of Ukraine in the period under study included a set of budget indicators of the State Budget of Ukraine, consolidated budgets of regions and the budget of Kyiv. Indicators: consolidated budget of the ARC; Sevastopol; separate district budgets, budgets of local self-government in the territory of Donetsk and Luhansk oblasts were not taken into account due to the temporary occupation of the territories of Ukraine by the Russian Federation.

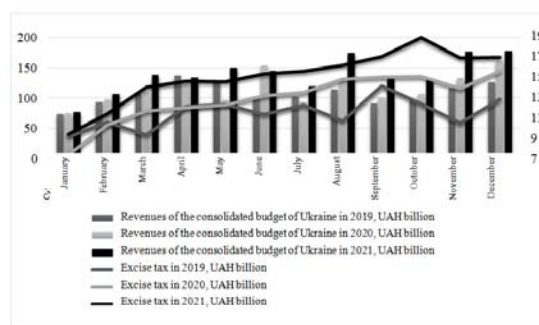


Figure 1 – Volumes of revenues and excise tax according to the results of the Consolidated Budget of Ukraine in 2019-2021, UAH billion (Ministry of finance of Ukraine, 2020; Ministry of finance of Ukraine, 2021; Ministry of finance of Ukraine, 2022)

During January-December, the volume of revenues of the Consolidated Budget of Ukraine ranged from UAH 73.9 to 136.5 billion in 2019; from UAH 74.9 to UAH 161.4 billion in 2020; from UAH 75.9 to 176.9 billion in 2021, the average value of the Consolidated Budget of Ukraine in terms of revenue per month

is 107.5; 114.9 and 137.5 billion hryvnias in 2019-2021, respectively. The amounts of excise tax of the Consolidated Budget of Ukraine during January-December 2019-2021 increase from the beginning of the year, and the peak of their growth occurs at the end of the year (October-December every year).

The average monthly excise tax is 11.4; 12.8; UAH 15 billion in 2019, 2020 and 2021, respectively. Each year is characterized by an increase in revenues and excise taxes in the last quarter of the year, which is associated with the end of the budget year, repayment of debts to the budget and other settlements with the budget. The amount of excise tax on the results of the Consolidated Budget of Ukraine in the dynamics and the main types of tax are presented in Figure 2.

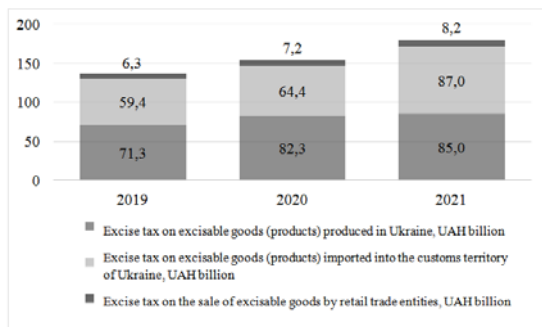


Figure 2 – Volumes of excise tax based on the results of the Consolidated Budget of Ukraine in 2019-2021, UAH billion (Ministry of Finance of Ukraine, 2020; Ministry of Finance of Ukraine, 2021; Ministry of Finance of Ukraine, 2022)

Among the main types, the largest amount falls on the excise tax on excisable goods (products) produced in Ukraine, the figure of which increased by UAH 13.7 billion in 2021 compared to 2019. In second place in terms of volume – revenues from excise tax on excisable goods (products) imported into the customs territory of Ukraine, which increased by UAH 27.6 billion in 2021 compared to 2019. The lowest amount of revenues is observed from excise tax on the sale of excisable goods by retailers, which increased by UAH 1.9 billion in 2021 compared to 2019. The total amount of excise tax in the Consolidated Budget of Ukraine in the dynamics increased during 2019-2021 from 137.1 to 180.3 billion UAH, which positively characterizes the movement of budget flows according to the results of excise taxation in the study period.

Excise tax is an important and constant source of tax revenues not only in Ukraine but also abroad.

Comparing the experience of excise taxation in Ukraine and EU countries, it can be argued that the gradual alignment of national tax legislation in line with EU law. In accordance with the Directive on the system of excise taxation in the EU countries, common rules and uniform conditions for the system of excise taxation of the same goods (products) in the European internal market have been established. Adherence to these rules and conditions ensures fair competition between European companies and reduces the administrative burden on them (The Council of the European Union, 2008). According to the Directive, the production, storage and transportation of tobacco products, energy products and electricity, alcohol and alcoholic beverages are subject to excise tax (in the EU – consumption tax).

The structure of taxation and the minimum tax rates for consumption tax are determined for each group of goods in separate special directives for each type of goods (products). The Directive also allows the imposition of other types of excise tax in each country, but subject to compliance with EU tax rules and the removal of barriers to the functioning of the European internal market: exemption from formalities and border controls for such goods (products). Let us consider the amount of excise

tax and revenues of the State budget in developed EU countries - Germany and France and compare with similar indicators in Ukraine (Figure 3).

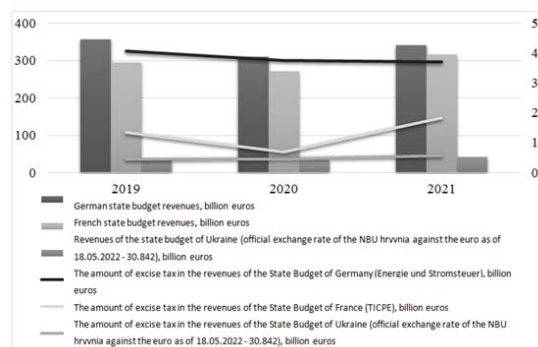


Figure 3 – State budget revenues and excise taxes in Germany, France and Ukraine, billion euros (Bundesministerium der Finanzen, 2022; La plateforme des finances publiques, du budget de l'État et de la performance publique, 2022; Ministry of finance of Ukraine, 2020; Ministry of Finance of Ukraine, 2021; Ministry of Finance of Ukraine, 2022)

The revenues of the State budget and excise tax are the largest in Germany. The amount of revenues of the State Budget of Germany in 11, 9, and 8 times in 2019, 2020, and 2021, respectively, exceeded the revenue side of the State Budget of Ukraine. However, the revenue of the State Budget of Ukraine was the least affected by the COVID-19 crisis and its consequences, growing by 9.7 billion euros during 2019-2020.

During the same period, the revenue of the State Budget of Germany decreased by 15.5 billion euro. The amount of excise tax is also the highest in Germany, which in 2021 is twice as high as in France and 6 times in Ukraine. To compare the excise tax rates in Germany, France and Ukraine, the Energy and Electricity Taxes in Germany (Energie- und Stromsteuer) and the French Domestic Energy Consumption Tax (TICPE) were used due to their and fiscal significance (about 10% of budget revenues in Germany and 6% in France) and availability of reporting in line with EU law. The share of excise tax in the revenues of the State budgets of Germany, France and Ukraine is presented in Figure 4.

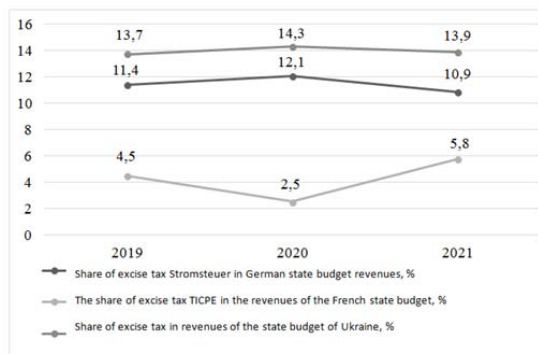


Figure 4 – Share of excise tax in revenues of the State Budgets of Germany, France and Ukraine, billion euros (Bundesministerium der Finanzen, 2022; La plateforme des finances publiques, du budget de l'État et de la performance publique, 2022; Ministry of Finance of Ukraine, 2020; Ministry of Finance of Ukraine, 2021; Ministry of Finance of Ukraine, 2022)

The share of excise tax in the revenues of the State Budget of Ukraine is the largest and is growing in 2021 compared to 2019 and 2020. However, to estimate the share, we used the indicator from all types of excisable goods (products) produced in Ukraine and imported into the customs territory of Ukraine, and for Germany and France, consumption excise taxes Energie- und

Stromsteuer and TICPE are used, respectively (all other excise taxes from these countries are classified as other tax revenue in the financial statements). The share of the Energie- und Stromsteuer excise tax in the revenues of the State Budget of Germany is less than the part of the excise tax on goods (products) of all types in the revenues of the State Budget of Ukraine by 2-3% during 2019-2020. Comparison of the share of the excise tax on energy consumption in the budgets of Germany (Energie- und Stromsteuer) and France (TICPE) indicates that the indicator in Germany exceeds that in France by 3; 5 and 2 times in 2019, 2020 and 2021 respectively [2, 20].

Taxes that are fully assigned to the German federal budget include a number of excise taxes (consumption tax). Consumption taxes are divided into three groups: on food products (taxes on sugar, salt); taxes on "pleasure" products (tobacco, coffee, beer); other taxes on consumption (e.g., taxes on petroleum products). Consumption taxes harmonized with EU legislation have been introduced in German national legislation, such as the energy consumption tax, the specifics of which are regulated in the Energy Tax Law. On its own initiative, Germany introduced a tax on coffee and a tax on alcohol [2].

In France, among its own taxes, similar to excise taxes, taxes are levied: on alcoholic beverages and tobacco - in favor of health insurance; for drinking water, including drilling wells for the needs of the municipal administration - to save drinking water resources; for the felling of trees in private areas of protected forests - to compensate for the transplantation of plantations; for all electronic products or products that are difficult to process due to their environmental toxicity and non-degradability - in favor of the fund that finances their processing and research; for passenger air transport - in favor of the International Development Fund; to digital or analogue copying media (magnetic tapes, hard disks, physical recording media) - in favor of a fund for artists and media producers, designed to compensate for the legal right to private copying [20].

According to the experience of France and Germany, increasing the tax burden and expanding the list of excisable goods causes manufacturers to quickly adapt to new rules. For example, the introduction of an excise tax on soft drinks and food with a certain high (certain) sugar content causes producers to reduce the sugar content in beverages to the permissible level, which avoids paying excise duty. Such restrictions smooth and stabilize the state's relations with producers, do not hinder the development of their business, as they do not reduce consumption, but promote the transition of producers and consumers to healthier alternatives. These demands are justified in terms of budget replenishment and strengthening the economy and contribute to the recovery of the nation. Taking into account the world experience for improving the management of budget flows from excise taxation, we outline obstacles to business development of excise tax producers, economic effect (obstacles) for the budget and social effect for quality public life with possible introduction of certain types of excise tax in Ukraine (Table 3).

Table 3: Effects of excise taxation

Type of excise tax for implementation	Barriers to taxation for the development of manufacturers' business	Economic effect (obstacles) for the budget	Social effect for the quality of life of society
For sugar and beverages and products with a high (certain) sugar content	- Decrease in demand for beverages and products due to rising prices; - Forced search for alternatives for the production of products with permitted sugar content.	- Replenishment of the budget - Growing distrust of the government on the part of producers	- Reduction of morbidity and mortality; - Better health for the nation.
For meat	- Decline in production due to rising prices; - Deterioration of	Replenishment of the budget	- Reduction of morbidity and mortality; - Rehabilitation

	the financial situation of producers due to economic disadvantages.		of the nation; - Reduction of emissions into the atmosphere; - Improving the environment
For fats, trans fats, oil, palm oil, preservatives, etc.	- Decline in production due to rising prices; - Deterioration of the financial situation of producers due to economic disadvantages; - Forced search for alternatives for the production of products with the replacement of prohibited components.	Replenishment of the budget	- Reduction of morbidity and mortality; - Rehabilitation of the nation; - Reduction of emissions and air pollution.
On green electricity	- Decline in the production of alternative energy sources due to its rise in price; - Deterioration of the financial situation of producers of alternative energy sources due to economic disadvantages; - Lack of guarantees and compensations from the state.	- Replenishment of the budget; Growth of energy independence and provision of the state with alternative sources of the electric power; - Growing distrust of the government by renewable electricity producers.	Growing energy independence and providing society with alternative sources of electricity.
On emissions of harmful substances into the air	- Decline in production of producers who emit harmful substances into the air; - Forced search for alternatives for the production and provision of services with permitted emissions of harmful substances into the air.	- Replenishment of the budget.	- Reduction of morbidity and mortality; - Reduction of air emissions; - Reducing the concentration of harmful substances in the air; - Preventing climate change.

Using HAM, an option was chosen for possible adjustment of excise tax rates and an assessment was made of the appropriateness of introducing a new type of excise tax in Ukraine under conditions of military aggression by the Russian Federation. The established criteria and alternatives in section 2 of the study made it possible to use the scale of relative importance (degrees of preference), given in Table 1 to make pairwise comparisons and to establish degrees of advantages of criteria (Tables 4, 5).

Table 4: Pairwise comparisons for certain criteria on a scale of relative importance

Choice of criterion	K1	K2	K3
K1	1	5/1	1/4
K2	1/5	1	1/6
K3	4/1	6/1	1

The comparisons of the criteria allowed evaluating and converting the results of the comparisons into numerical values. The importance of each criterion was determined using the specific gravity (W) (Table 5).

Table 5: Conversion of results of pair comparisons of criteria into numerical values

Choice of criterion	K1	K2	K3	Sum	W, %
K1	1.00	5.00	0.25	6.25	34
K2	0.20	1.00	0.17	1.37	7
K3	4.00	6.00	1.00	11.00	59

According to the results of calculations, the criterion K3 (defense capability of the state) is in the first place in terms of importance, K2 (recovery of the nation) is in the second place and K3 (filling the budget) is the least important criterion.

Similarly, the calculations were performed and the degree of importance (W) was calculated for each alternative, which to the greatest extent determines the established criteria (Table 6-8).

Table 6: The results of pairwise comparisons of alternatives by Criterion 1

Selection of alternatives by criterion 1	A1	A2	A3	Sum	W, %
A1	1	0.5	0.14	1.64	9
A2	2	1	0.17	3.17	17
A3	7	6	1	14.00	74

Table 7: The results of pairwise comparisons of alternatives by Criterion 2

Selection of alternatives by criterion 2	A1	A2	A3	Sum	W, %
A1	1	0.33	6	7.33	41
A2	3	1	5	9.00	51
A3	0.17	0.2	1	1.37	8

Table 8: The results of pairwise comparisons of alternatives by Criterion 3

Selection of alternatives by criterion 3	A1	A2	A3	Sum	W, %
A1	1	7	9	17	75
A2	0.14	1	3	4.14	18
A3	0.11	0.33	1	1.44	6

According to the results of the calculations, the percentages of the share of alternatives according to the defined criteria (W) were calculated (Table 9).

Table 9: The results of pairwise comparisons of alternatives according to the established criteria

Alternative/ Criterion	K1	K2	K3	Sum	W, %
	Filling the budget	Better health for the nation	The country's defense capabilities		
A1					
Excise tax on alcoholic beverages	9	41	75	125	42
A2					
Excise tax on tobacco products	17	51	18	86	28.8
A3					
Excise tax on soft drinks and foods high in sugar	74	8	6	88	29.4

The obtained results of calculations are transferred to the "tree of hierarchies" (Figure 5).

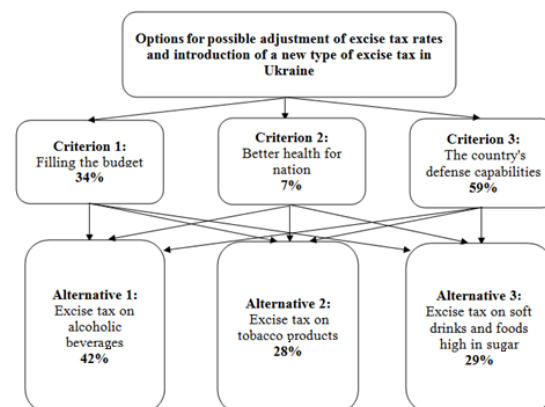


Figure 5 – "Tree of hierarchies" for possible adjustment of excise tax rates and the introduction of a new type of excise tax in Ukraine

The results of HAM application make it possible to choose the option to adjust the rates of excise tax on alcohol and tobacco products and the appropriateness of introducing a new type of excise tax – on soft drinks and foods high in sugar in Ukraine. Under the current conditions of full-scale aggression in Ukraine on the part of the Russian Federation, the most favorable option for adjusting rates is the excise tax on alcohol. This option has the largest share with an advantage of 42% among the other two options (introduction of excise tax on soft drinks and foods with high sugar content – 29%; adjustment of excise tax rates on tobacco products – 28%), and therefore most meets the requirements established criteria and satisfies the purpose of the study. Adjusting the rates of excise tax on alcohol products in the direction of growth will increase the cost of these excisable goods (products), which will contribute to: on the fiscal side – filling the budget with revenues; from the point of view of socio-economic regulation – reduction of alcohol consumption for a healthy lifestyle and recovery of the nation and the ability of a person to think soberly and adequately respond to danger in hostilities.

A review of legislative and other sources reveals the importance of improving excise taxation to ensure a balanced flow of budget flows and provides an opportunity to outline the development and restoration of the modern financial system of the state.

4.1 Strengthen Measures to Combat Illegal Production, Circulation and Import of Excisable Goods (Products) for the Transparent Movement of Budget Flows

Given the high share of excise tax in tax revenues and high demand for excisable goods and products, it is necessary to constantly strengthen measures to combat violations of budgetary and tax legislation: illegal production, circulation and import of excisable goods. In Ukraine, in accordance with paragraph 3 of the Regulation "On the Ministry of Finance of Ukraine", the Ministry of Finance of Ukraine ensures the formation and implementation of a unified state tax policy, state policy in combating offenses in the application of tax legislation, including legislation on excise tax [4]. The activities of the state in the field of establishment, legal regulation and organization of tax collection in the centralized funds of monetary resources of the state are provided by the bodies of the State Tax Service of Ukraine. In order to improve the management of budget flows from excise taxation, the implementation of state tax policy measures by the bodies implementing it consists in the introduction of the best world practices of improving the existing procedures in the activities of the tax authorities of Ukraine. The study of the experience of Germany and France points to the need to further harmonize Ukraine's tax legislation with the legal requirements of EU countries and strengthen criminal and administrative sanctions inherent in European fiscal practice for tax offenses. This will ensure the establishment of processes of institutional renewal and development of the functional capacity of the system of bodies implementing state tax policy, in terms

of strengthening tax control to reduce tax offenses and transparent movement of budget flows based on excise taxes [2, 20].

4.2 Compensation for the Negative Consequences of Consumption of Excisable Goods (Products) for Effective Management of Budget Flows from Excise Taxes

A review of foreign experience in the conduct of excise taxation in Germany and France provides an opportunity to identify patterns of influence of types and rates of excise tax on fiscal, industrial and social processes in society. The presence of a sufficiently high share of excise tax in the revenue side of national budgets and the growth of this tax in dynamics indicates the important fiscal importance of this tax in filling budgets [3, 13].

In Ukraine, in the transition to medium-term budget planning, the introduction of progressive growth of excise tax is appropriate for stable and constant movement of budget flows [20]. Calculating social and economic effects (barriers) and taking them into account in the practice of excise taxation in Ukraine in order to increase tax rates and reduce consumption of excisable goods (products) due to higher cost will reduce risks to health and the environment. Consideration of foreign experience of EU countries outlines the advantages of crediting budget flows from excise taxation to a special budget fund with further determination of its directions [29, 30]. In the long run, the target direction of budget flows - the implementation of expenditures at the expense of specific revenues will help compensate for the negative and harmful effects of consumption of excisable goods (products) or maintain and maintain sustainable development of vulnerable sectors of the economy and social sphere.

5 Conclusion

The outlined areas of improving the management of budget flows from excise tax contribute to the modernization and development of the budget process of Ukraine in terms of ensuring fiscal and socio-economic objectives of the state through tax revenues. Adjusting the stable and balanced movement of budget flows from excise taxation is associated with increasing the volume and share of excise tax in the revenue side of the State Budget of Ukraine, which is a significant budget-generating source, which in 2021 accounted for 13.9% of total revenues.

The validity of the movement of budget flows based on the results of excise taxation is achieved through the adoption of informed decisions on budget issues. The choice of the option for possible adjustment of excise tax rates on alcohol, tobacco products or the introduction of excise tax on soft drinks and foods with high sugar content with the help of HAM was carried out. The method used allowed substantiating the option of adjusting the rates of excise tax on alcohol products, based on fiscal and social considerations, with taking into account the current conditions of martial law in Ukraine.

Adaptation of the positive experience of developed European countries for the management of budget flows based on the results of excise taxation in Ukraine contributes to the harmonization of relations between the state and producers and consumers of excisable goods (products). Determining and taking into account the effects of excise taxation for the state, producers and consumers determines the feasibility of introducing new types of excise tax and ensures the effective movement of budget flows.

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