

PECULIARITIES OF ECOLOGICAL TAXATION IN UKRAINE AND THE WORLD

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ABSTRACT

The article deals with the issues of environmental taxation in Ukraine and in the world. The share of environmental taxes in the total amount of taxation in different countries is considered, Ireland has the highest index-11.9%, the average indexes are inherent in Greece, Finland, Spain, about 6-8%, while Ukraine has the lowest share of 0.5-1.5%. The peculiarities of environmental tax are disclosed. The environmental tax has been found to serve a budget replenishment function, a cost recovery function and an encouraging function. It is revealed that the environmental tax is currently regulated by the Tax Code of Ukraine, which defines the definition of the "environmental tax" concept, as well as the activities for the implementation of which it is supposed to be payed. The types of environmental taxes in the Member States of the European Union are considered. It is concluded that Ukraine should increase the amount of environmental tax, reduce the cost of its administration and consider introducing a tax on fertilizers and pesticides, taking into account their widespread usage and contamination of soil. At the European Union level, it is suggested to pay attention at the development and implementation of additional regulation for the payment of carbon dioxide tax.

Keywords: Tax, Environmental Tax, Environment, Environmental Pollution, Tax Policy.

INTRODUCTION

Environmental issues are a major for all, without exception, EU Member States, as environmental pollution leads to incensement of mortality level. The basis for environmental policy in economically developed countries is to ensure maximum compliance with environmental standards at all stages of environmental activities. According to information proclaimed by the World Health Organization, air pollution is reaching levels that threaten human health in many cities. According to World Health Organization estimates, more than 2 million people die annually as a result of breathing the smallest particles existing in polluted air indoors and outdoors. That is why the formation of a positive and responsible attitude of society towards the environment is especially relevant.

One of the instruments that the state can use for this purpose is an environmental tax, the proceeds of which should be used to develop environmental protection, the development and usage of waste-free technologies or new ways of processing, waste management. Considering this, environmental taxes in the countries of the world occupy a leading place in the system of

taxes and duties in the country, in particular, the share of environmental taxes in the total amount of taxation in the USA-3.2%, the highest indicator shows Ireland-11.9% of the total amount of taxation, while the average level of environmental taxes is demonstrated by several countries: Greece-6.1%, Finland-7.3%, Spain-7.5%. While in Ukraine this indicator is only 1.5% on average, although in 2018 it was planned to receive 5 billion UAH of revenues from this tax, which is only 0,5% of the sum of all tax revenues of the consolidated budget.

Formulation of the Problem

Despite significant environmental tax earnings since 2017, environmental pollution in Ukraine remains steadily high, and environmental studies show the existence of a permanent environmental crisis. Considering this, the issue of environmental taxation is urgent for both Ukraine, where the environmental situation creates a significant threat to the state of population health, and the European community, taking into account that Ukraine is willing to gain the status of a full member of the EU, but its environmental policy still desires to be better, and should accordingly be adapted to European requirements, standards in this field.

LITERATURE REVIEW

According to Kulish et al. taxation is an important lever of state influence on the course of economic and other relations (Kulish et al., 2018). Krizanic et al. note that in continental European countries, an increase in environmental taxes by 1% after one year leads to 0.13% reduction in waste per capita. However, when technology and the economy adapt to changed environmental tax rates, as in the landfill tax, higher tax rates lead to a sharp reduction in pollution and, accordingly, have a limited fiscal effect (Krizanic et al., 2019). Moreover, Semenova, defines the environmental tax as an economical tool for environmental protection and effective environmental management. The scientist also systematized the key indicators that characterize the influence of business activity on the environment and natural resources (such as the dropping of polluted wastewater, emissions of pollutants into the air, water intake from natural water objects for usage) (Semenova, 2019).

Varchenko et al. concluded that the need for agricultural manufacturing companies of livestock products to pay the environmental tax and to direct the funds received to environmental protection measures. According to scientists, the basis for calculating the value of this tax should be an indicator of the number of animals per 100 ha of agricultural land, taking into account the natural climatic zones. (Varchenko et al., 2018). McAuliffe et al. also highlighted the problem, pointing out that commercial livestock production, which has a significant environmental impact, is a complex system that involves the production of animal feed, transportation, animal husbandry and waste management (McAuliffe et al., 2016).

Miceikiene et al. while analyzing the impact of environmental taxes on environmental protection in the European Union, the USA, Japan and the PRC, Norway and Turkey in the period of 1994–2015, have concluded that:

1. Environmental tax effect is more intensive in countries with slow economic and tax growth, but faster development of renewable energy technologies;
2. The role of environmental taxes is more noticeable, when the level of natural energy resources is maintained through the usage of renewable energy;

3. Environmental taxation encourages the development and implementation of technologies that reduce pollution and generate the conditions for job creation;
4. Environmental taxes are directly related to the environmental quality of life (Miceikiene et al., 2018).

METHODOLOGY

The methodological basis for the study of the environmental taxation features in Ukraine and foreign countries consists of the range of comparative-legal, formal-legal and structural-functional methods. Using the comparative-legal method, the study of foreign state regulation experience regarding features of environmental taxation was carried out. The formal-legal method made it possible to find out the content of the relevant norms of current Ukrainian legislation governing environmental taxation issues. The structural-functional method of analysis was used to determine the features of environmental taxes in Ukrainian general system of taxes and fees.

FINDINGS AND DISCUSSIONS

According to Sibatulina, the economic development of organizations in modern business space is characterized by high environmental risks, caused by both the expansion of eco-standards and the increased consumption of resources connected with the development of industry and increased demands for life quality (Sibatulina, 2018).

Maksimova et al. point out that about 500 types of environmental taxes are currently being used in foreign countries, which are divided into three groups according to their target area. The first group consists of taxes that perform a fiscal function and aim not only to cover the costs of environmental regulation but also to replenish the budget. The second group includes taxes aimed at covering costs and restoring the environment (payment for water collection, disposal of waste, etc.). The next and the last group includes encouraging taxes levied on changes in the behaviour of entities that harm the environment, that is, "*taking into account*" responsible behaviour (Maksimova et al., 2018).

We agree with Diaconu et al. that the environmental tax, as an economic tool, fully supports the principles of sustainable development and contributes to improving the balance of all four reliances (economic, environmental, social and institutional). Environmental taxation is flexible and costly tool to strengthen the polluter pays principle and achieve environmental policy aims (Diaconu et al., 2018). Based on the foregoing, one of the environmental taxation features is that environmental progress is achieved with the least loss for the economy compared to other regulatory instruments. The usage of price stimulus by taxing "*harmful production*" higher taxes than "*environmentally friendly*" alternatives has a more flexible reaction from producers and consumers. Taxes leads to behavior change through a system of stimuli, but not coercion (Suchek, 2018).

At the same time, as it was mentioned by Shuvalova et al. all environmental taxes included in the tax system should be targeted, so the financial resources collected from their aggregation should be used to improve the environmental security of the region and promoting the restoration and maintenance of the natural balance. A system of statistics can be used for the evaluation, which should include an analysis of the origin of tax revenues for the implementation of environmental policy at the micro and macro levels. (Shuvalova et al., 2017). Instead, the analysis of the budget indicators of Ukraine shows that there is a fundamentally different

situation in the country, because in regions where the quality of living is high, the cost of environmental protection is twice more than the amount of environmental tax. That is why it is obvious that the main purpose of environmental tax is not fulfilled in a particular region of the state.

Since the 1980s, most OECD countries have installed several environmental taxes, and several reports provide assessment of these instruments. Nowadays, the Tax Code of Ukraine (2010) (Art. 240) states that environmental tax is paid by taxable entities if they pay:

1. Emissions of pollutants into the atmosphere by stationary sources of pollution;
2. Emission of pollutants directly into water bodies;
3. Waste disposal;
4. Generation of radioactive waste;
5. Temporary storage of radioactive waste by their manufacturers over the specified terms of the license.

If we pay attention to environmental taxes in the Member States of the European Union, we can conclude that there is a range of environmental taxes, in particular:

1. Charges for pollution of water objects (Germany, Finland, Austria and the Netherlands);
2. Tax on products (goods): for products that do not meet environmental standards (Poland), payment for products containing chlorofluorocarbon (Czech Republic), landfill tax;
3. Airport tax: air tax (Germany), noise pollution tax (Czech Republic);
4. Fertilizer and pesticide tax: fertilizer tax in the form of a mark-up on the price of goods (Austria, Finland, Netherlands, Sweden), levies on sulfur fertilizers and disposal of unused fertilizers (Belgium), tax on pesticides (Denmark), fertilizer tax and pesticides (Norway);
5. Tax on pollutant emissions into the atmosphere (Gromadska & Chernenko, 2019).

It is obvious that the environmental taxes in Ukraine and the EU Member States are similar, however, there is no tax on fertilizers and pesticides in Ukraine, and the amounts of taxes themselves and the amount of money that comes from their payment to the budget do not yet completely correspond to the European average indicators. At the same time, certain steps of Ukraine in this direction are obvious. First of all, the legislation of Ukraine states that in order to stimulate polluting enterprises to reduce their devastating effect on the environment, as well as to approximate the rates for greenhouse gas emissions to those prevailing in the EU countries, to raise the environmental tax rate since 01.01.2019 carbon dioxide (CO₂) stationary sources emissions from 0.41 UAH/ton to 10 UAH/ton.

It should be mentioned that, nowadays, the payment for air pollution is one of the most troubling issues in the European community. This is due to the fact that air pollution is one of the main factors causing a number of global environmental problems (global warming, greenhouse effect, etc.). Accordingly, each state should take measures at national level to minimize the negative impact on the atmosphere and contribute to the achievement of the overall goal of preventing the environmental crisis. However, states are concerned that at the general level this issue is controlled by the fiscal authority, while at the European Union level such institution is absent, but taking into account the urgency of the topic, the question of its creation and the need to introduce additional regulation of carbon dioxide emissions tax is increasingly raised. (CO₂) (Fullerton et al., 2008).

Another important issue of environmental taxation in Ukraine is that the cost of administering taxes is extremely important. Nowadays, in contrast to the European Union countries, the cost of administering environmental taxes is quite high, and that is why it is

advisable to reduce such costs. For comparison, it is worth pointing out that the costs of administering environmental taxes in Germany are quite low. Thus, only 0.1% of their income is spent on environmental taxes, and 2.2% and 5% of these taxes are spent to administer the personal income tax and corporate income tax respectively. The same importance has the issue of adapting the existing fiscal system in Ukraine to changes in the tax and levy system, as Muljavka and Reznik have stated one of the important tasks of these entities is to prevent tax crime (Muljavka & Reznik, 2013) due to the fact that some entities that are obliged to pay environmental taxes will still evade their payment, however, under the criminal law of Ukraine, this is a criminal offense.

RECOMMENDATIONS

Today, in the field of Ukrainian environmental taxation there are a number of tasks caused by the approximation of legislation to the indicators of the European Union countries. Among the points that need attention:

1. An amount of environmental tax that does not cover the amount of money spent on environmental restoration and does not encourage businesses to implement technologies that minimize the damage caused to the environment;
2. The reduction in the cost of administering the environmental tax, which is high compared to European countries, leads to decrease in the effectiveness of the tax. Additional regulation of the carbon dioxide (CO₂) tax at regional level should be developed and implemented in European countries, as far as, clean and safe atmospheric air is a global aim for countries around the world.

CONCLUSION

The environmental tax is not innovative for Ukraine, the countries of the European Union and the entire world, but in Ukraine this tax does not fulfil its purpose. Thus, the question of ensuring the increase of revenues from the environmental tax to the state budget and directing all received funds for environmental restoration remains urgent. Nowadays, the amount of such funds is twice or larger than the amount of environmental tax revenue, this leads to reduction of its effectiveness. The same situation with the high cost of administering the environmental tax, which should be much less. In addition, the Ukrainian legislator should pay attention to the introduction of new sub-types of environmental tax, in particular the tax on fertilizers and pesticides, as they are frequently used in Ukraine and cause damage to the soil and human condition. However, not only Ukraine needs to focus on environmental taxation. In particular, measures should be taken at EU level concerning further regulation of environmental taxation.

REFERENCES

- Diaconu, A., Balu, O.F., & Stancioiu, F. (2018). Environmental taxes in Europe union. *Quality-Access to Success*, 19(1), 208–211.
- Fullerton, D., Leicester, A., & Smith, S. (2008). *Environmental taxes: No. w14197*. Retrieved from <https://ssrn.com/abstract=1179867>
- Gromadska, A.V., & Chernenko, N.O. (2019). Environmental tax as a factor of effective influence on the volume of waste of enterprises. *Current Issues in Economics and Management*. Retrieved from http://ela.kpi.ua/bitstream/123456789/29367/1/2019-13_1-04.pdf

- Krizanic, F., Oplotnik, Z.J., Mencinger, J., & Brezovnik, B. (2019). The influence of ecological taxes on the exposure of waste and CO₂ emissions in a selected group of EU countries. *Journal of Comparative Politics*, 12(2), 38-48.
- Kulish, A., Petrushenko, M., Reznik, O., & Kiselyova, E. (2018). The relations unshadowing in business activities: The economic and legal factors of security at the macroeconomic level. *Problems and Perspectives in Management*, 16(1), 428-436.
- Maksimova, A., Rudenko, O., & Kondratuk, O. (2018). Ecological tax as an economic tool for environmental policy in Ukraine. *Scientific Journal of Polonia University*, 27(2), 61-71.
- McAuliffe, G.A., Chapman, D.V., & Sage, C.L. (2016). A thematic review of life cycle assessment (LCA) applied to pig production. *Environmental Impact Assessment Review*, 56(1), 12-22.
- Miceikiene, A., Ciuleviciene, V., Rauluskeviciene, J., & Streimikiene, D. (2018). Assessment of the effect of environmental taxes on environmental protection. *Ekonomicky casopis*, 66(1), 286-308.
- Muljavka, D.G., & Reznik, O.N. (2013). Tax law-enforcement authorities in the USA and Ukraine: ОІІбІ? Organizing structure and legal control experience. *Criminology Journal of Baikal National University of Economics and Law*, 24(1), 114–118.
- Semenova, G. (2019). The ecological tax in Russia as the economic instrument of the environmental protection. *E3S Web of Conferences*.
- Shuvalova, E., Sibatulina, N., & Kurochkina, I. (2017). The tax system and environmental safety. *International Multidisciplinary Scientific Geo Conference Surveying Geology and Mining Ecology Management*.
- Sibatulina, N. (2018). Development and implementation of ecological tax investment functioning model at the level of the subject of the Russian federation. *International Multidisciplinary Scientific Geo Conference Surveying Geology and Mining Ecology Management*.
- Suchek, S. (2018). Ecological taxation: European experience and prospects of its application in Ukrainian realities. *Economic Journal of the Lesya Ukrainka Eastern European National University*, 3(15), 85-93.
- Tax Code of Ukraine. (2010). Retrieved from <http://sfs.gov.ua/nk/>
- Varchenko, O., Svynous, I., Grynnchuk, Y., Khakhula, B., & Ibatullin, M. (2018). Improvement of eco-taxation of goods producer of pig husbandry in Ukraine. *Academy of Accounting and Financial Studies Journal*, 22(5), 1-11.