

Conclusions.

Establishing the mechanism of oligomer formation from wash oil resin forming components makes it possible to influence the oil specific consumption in the existing technology. Previously, it was believed that the initiation of polymerization by flame heating allows to convert potential resins into actual resins, blew them down as polymers and further exploit the oil as free of potential resins. However, performed thermodynamic calculations have shown that the potential resins can be formed in amounts up to 1000 kg / t of crude benzene, which is about twice the maximum known in practice. But the advantages of flame heating are as follows: when the oil is heated above 140 °C the molecular weight and melting point of oligomers decreases, which leads to lower viscosity and precipitation temperature. This to some extent improves the operating properties of the circulating wash oil compared to lower heating before distillation.

References

1. Zhang Z. Experimental Study on the Fluorene Removal From Fluorene–Acenaphthene–Dibenzofuran Mixtures of Wash Oil / Z. Zhang, Z. Bai, R. Wang, X. Zhao, H. Shi // *Separation Science and Technology*. – 2013. – V. 48. – P. 1081–1085.
2. Banerjee C. Effect of wash oil inlet temperature in naphthalene scrubber on the absorptivity of naphthalene in coke oven by product plant / C. Banerjee, S. Agarwal, P. S. Dash, A. Roy // *Thermal Science and Engineering Progress*. – 2021. – № 10. – P. 1025–1029.
3. Nazarov V. G. Removal of naphthalene and tar from coke–oven gas in primary cooling and condensation / V. G. Nazarov // *Coke and Chemistry*. – 2016. – № 6. – P. 221–234.
- 4 K. G. Joback Estimation of Pure–Component Properties from Group–Contributions / Joback K. G. // *Chemical Engineering Communications*. – 1987. – V. 57. – P. 233–243.

PROBLEMS OF ENSURING THE FINANCIAL SUSTAINABILITY OF THE BUDGETS OF THE UNITED TERRITORIAL COMMUNITIES

*PhD student Bilyk Yuliia,
Accounting and Finance Department
National Technical University “Kharkiv Polytechnic Institute”
Kharkiv, Ukraine*

Abstract

Theses are devoted to the territorial communities in Ukraine that shape the development prospects based on the needs of the population. The state should perform protective and regulatory functions in this process. At present, there is a need to improve the system of functioning of the united territorial communities budgets in order to ensure the stability of budget revenues and its sustainability.

Keywords: local budget revenue, territorial communities, financial support, sustainability.

Introduction. United Territorial Communities (UTCs) are a relatively new concept in Ukraine. They were established in 2015 as a part of decentralization reform aimed at transferring powers and resources from the central government to local communities [1]. UTCs are a form of local self-government that allows communities to combine their efforts, resources and decision-making power to improve their living conditions and promote sustainable development. However, the financial sustainability of UTCs is still a major problem as they rely heavily on state transfers and face limited revenue-raising capacity [2].

Research methodology

The subject of the research work is financially ensuring the sustainability of the budgets of united territorial communities.

The aim of the research work is improvement of theoretical provisions, methodological foundations and development of practical recommendations for financially ensuring the sustainability of the budgets of UTCs.

The following methods were used: statistical data analysis, econometric methods, synthesis method, methods of theoretical analysis and generalization.

Results and discussion

The effectiveness of local governments depends on their financial capabilities. It is impossible to ensure the normal functioning of social infrastructure, maintenance of public utilities, as well as sufficient healthcare and education for the population without sufficient financial sustainability of local budgets [3].

The review and systematization of various sources allowed to establish a set of characteristics inherent in financial sustainability:

- budgetary independence and solvency;
- financial ability to withstand internal and external negative factors;
- balance of budget revenues and expenditures;
- financial ability to withstand internal and external negative factors,
- availability of cash reserves;

- the ability of local authorities to ensure timely financing of their obligations, while maintaining their financial security in the face of an additional level of risk.

UTCs in Ukraine face various problems related to their financial sustainability. One of the main problems is the limited revenue - raising capacity of local communities. UTCs can only rely on local taxes and fees, which are often insufficient to cover their expenses. Moreover, many communities in Ukraine suffer from a low tax base, which limits their revenue-raising potential. Another problem is the insufficient financial autonomy of UTCs [4].

The main ways of improving the sustainability of the system of financial support of local budgets are proposed as follows:

- expanding revenue sources;
- effective expenditure management;
- financial control;
- ensure budgetary stability;
- increasing control over the use of budget funds;
- changes in the system of subsidies;
- improving the efficiency of tax and fee administration.

Conclusions

The results of this work can be useful for developing effective strategies for financial support of territorial communities and ensuring their sustainability in the future. UTCs face various problems related to their financial sustainability, including limited revenue-raising capacity, insufficient financial autonomy, and difficulties in accessing external funding sources. Financial support can take various forms, including state transfers, expanding revenue sources, grants, loans, and technical assistance. State transfers are essential for covering UTCs' operating costs and implementing local development projects. However, relying solely on state transfers can lead to a lack of financial autonomy and accountability.

References

1. Kolomiets I., Pelekhaty A. Theoretical and practical aspects of the formation of united territorial communities in Ukraine. *Ukraine economy*, №4 (665), 2017 p.46–55
2. Lunina I. Development of budget decentralization in Ukraine. Scientific report /National Academy of Sciences of Ukraine, Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine. Kyiv, 2016. 70 p.
3. The State Strategy of the regional development in Ukraine up to 2025, approved by the Cabinet of Ministers of Ukraine from July 21, 2020, no 1001, available at: <http://kmu.gov.ua/kmu/control/uk/cardnpd>

4. Kraynik O. Financing the development of territorial communities in the context of decentralization/ O. Kraynik, O. Fedorchak //Financial and credit activity: problems of theory and practice/ Volume 2 (43)- 2022- c.118-124.

MULTIDISCIPLINARY EDUCATORS-RESEARCHERS- PRACTITIONERS CO-CREATION OF INTERACTIVE E- COURSES

Joakim Breitenstein (Joksu, architectural studio, Helsinki, Finland)

Tetyana Sergeyeva (National Technical University “Kharkiv Polytechnic Institute”, UA)

Natalya Turlakova (National Technical University “Kharkiv Polytechnic Institute”, UA)

Abstract

The research proposes model of human-centered and impact-oriented e-training course development. Multi-actor, multi-sector and multidisciplinary co-creation is considered as a key factor toward a successful interactive e-course development. Eco-humanistic model gives an understanding of HOW to manage the process of e-course co-creation on the basis of understanding its system forming factor, content-structure pattern and mechanisms. This understanding allows involvement, management, modeling, digitizing, simulating, piloting, demonstrating and duplicating the co-creation process. Eco-humanistic model triggers qualitative changes at several levels. It ensures synergetic interaction of diversities which is of exceptional importance in multi-actor/sector/disciplinary interaction based on: a) awareness of the value of diversities for synergistic development, b) strategic orientation mechanism that integrates personal senses (needs) into a unifying goal of mutual development and optimizes the process; c) digital support system modeling the existential process of multi-actor/sector/disciplinary co-development through interaction (co-creation); d) digital tool allowing to combine the diversities of individual visions reflected in the format of Ideal and Real profiles into Synergistic profile based on the innovative technology of cognitive schemas overlay. This makes it possible to create: a) an efficient system of digital support, b) multi-scale measurement of e-course efficiency; c) eco-humanistic developmental training programs. The digitized toolkit includes: (1) “OmniBase” compendium of information relevant to the subject