

Electronic purchases as a way of overcoming corruption in the state purchase system in Ukraine

Lyudmyla Chyzevska¹, Viktoriia Psota²

¹State University "Zhytomyr Polytechnic"
Department of Accounting and Auditing,
Zitomir, Ukraine
E-mail: chizhev@ztu.edu.ua

²State University "Zhytomyr Polytechnic",
Department of Accounting and Auditing,
Ribalko13/174, Novohrad-Volynsy, 11703, Ukraine
E-mail: vikadrach6@gmail.com

Abstract: *The article conducted a study of reforming the public procurement system in order to overcome the corruption component in the economy. The article examines the effect of budget savings and an indicator of the level of competition from the introduction of electronic procurement. The paper analyzes the positive and negative consequences of the introduction of new legislation and electronic trading in the public procurement system by overcoming the corruption factors in the economy. The authors proposed ways to improve the existing system in order to increase the level of competition, increase public savings, prevent discrimination of public procurement participants and increase control over the implementation of contracts, should strengthen the anti-corruption effect in the public sector. Prospects for further research is the analysis of the introduction of innovations in public procurement in practice and the search for mechanisms to improve the current system.*

Keywords: *public procurement, government procurement, corruption, public sector, electronic bidding, tender.*

JEL classification: *D73; H 57; H 50.*

1 Introduction

Corruption, as a social phenomenon, jeopardizes democratic values such as the rule of law and the preservation of human rights. Corruption destroys the democratic system of state governance, threatens law and order, endangers honesty and social justice, impedes economic development and competition in the economy, threatens the destruction of the moral principles of society. Therefore, advanced European economies in the fight against corruption are developing multi-vector tools that include different standards, including those related to public procurement.

Fair and transparent government procurement can drive the country's economic growth by opening new opportunities for small and medium-sized businesses and, consequently, creating new jobs for the population. The reform of the public procurement system in Ukraine was due to the need for improvement of existing rules and application of transparent and competitive procedures that would be based on objective criteria to overcome corruption risks in public procurement. In the article under the term "corruption" will be investigated any method of manipulation in the conduct of public procurement procedures aimed at violating or avoiding the use of applicable legal acts.

Scientists consider corruption in public procurement from a variety of aspects, investigating the issues of transparency, competition, detecting illegal schemes, and develop a strategy to combat the problem. Sewpersadh and Mubangizi (2017) are using experience of fighting corruption in Hong Kong to model anti-corruption measures for combating corruption in South Africa's public procurement system. Joseph K. Achua (2011) explores the reforms undertaken in the Nigerian public sector, assesses and formulates a strategy to combat corruption in the country. Mugadza (2018) conducts an analysis of the fight against

corruption in public procurement in Hong Kong, China and South Africa, and identifies four main directions for combating corruption: criminal, administrative, institutional and civic activity. In his work, Mugadza examines two approaches to combating corruption - traditional and classic, characterizes them, identifies key features and explores their strengths and weaknesses.

The world community, EU in particular, has a well-developed public procurement system, which many countries in the world are guided by. But in the EU the budget loses a certain amount from corruption schemes in the field of public procurement every year. Hessami (2014) in his work uses empirical data to explore advanced economies of 29 countries, and looks at the link between political corruption and public spending structure. Ferwerda et al. (2017) devoted their work to identifying significant indicators of corruption risks and identified indicators that could prevent corrupt practices in public procurement. Detkova et al. (2018) analyze the effects of corruption on encouragement of customers to maintain fair competition among participants and investigate weak competition in electronic trading. These problems are also relevant to Ukraine's public procurement system as well. In Ukraine, many scholars devoted their work to the study and analysis of public procurement, Parasiy-Vergunenko (2017) proposed a methodology for analyzing public procurement, which makes it possible to evaluate its effectiveness, for each analytical stage a system of indicators and algorithms for their calculations have been developed. Reform of public procurement system in Ukraine began more than two years ago, and this provides a large area for research and analysis with the aim of finding new approaches to increase control over spending and budget savings.

2 Methodology and Data

During the last decade in Ukraine, at the level of legislation governing public procurement, many reforms were undertaken to overcome the existing and potential risks of corruption. The system of public procurement, which stopped working in August 2016, was considered to be corrupt and allowed for a conspiracy between the participants and customers, permitted the use of non-competitive procurement procedures, and lacked the possibility of conducting procurement through electronic bidding. The biggest achievement of the new system was the introduction of the ProZorro Electronic Procurement System, the main principle of which is: "everyone sees everything." The introduction of electronic procurement system in Ukraine has enabled small and medium-sized businesses to participate in the bidding, which has increased competition among participants. All interested parties were given access to the monitoring of the procurement process; participants are able to challenge unfair decisions. But the main achievement of the electronic system is the saving of public funds, which is reflected on the official site of public procurement system. As of today, this figure is 62.35 billion UAH. But according to the decision of the Accounting Chamber of Ukraine "On reviewing the report on the results of the analysis of the state of public (government) procurements in 2017" No. 13-1 from 31.05.18, there is no methodology for calculating the saving of budget funds, which makes it impossible to officially analyze and estimate the savings of budget funds during the use of the ProZorro Information and Telecommunication System. Which means that the information provided for public use cannot be considered as credible. To date, no public service entity in Ukraine has been tasked with collection of information on the implementation of public procurement, and therefore, the amount of funds used, the number of concluded contracts which were paid for with budget funds and the amount of savings of budget funds are impossible to officially determine.

Now, the savings are calculated as the difference between the expected value of the purchase and the actual value of the contracts. Expected value of procurement is determined by the customer at the time of the publication of the procurement announcement and shows the maximum amount of money that can be spent by the customer under a separate procurement contract, which is rather a subjective indicator, since during the establishment of the initial contract price, a reasonable and real market value of the item are not taken into account. The actual value is approved at the time of

conclusion of the contract on the basis of the purchase, and is, as a rule, the lowest price proposed for a contract.

Calculation using this method does not reflect the efficiency of budget funds use in procurement by bidding and procurement by negotiation procedure, that is, without the use of open bidding due to the lack of offer with an expected value. And according to statistical data from 2017, such procedures account for almost half of all purchases. Consequently, the total cost of threshold procurement and procurement conducted under the negotiation procedure amounts to 216.132 billion UAH, and the cost of procurement in open bidding amounts to 264.621 billion UAH. Thus, calculation of estimated budget savings in procurement proposed by ProZorro does not fully reflect the effectiveness of procurement and can only be used for operational analysis. It does not take into account a number of indicators, in particular: the level of competition, compliance with the law, the level of execution of contracts.

Therefore, in order to calculate the savings of budget funds, it is necessary to develop and approve at the legislative level an analytical assessment of the efficiency of usage of budget funds. This should be a comprehensive indicator which will take into account all stages of the budget procurement process: planning, proclamation, contract performance, which will give a complete picture of the savings of budget funds. At present, the indicator of budget funds savings differs in the study of different sources of information due to the lack of a single methodology for analysis.

One of the main tools for combating corruption during public procurement is the increase of competition and the introduction of the principle of non-discrimination of participants, as stipulated in Article 3 of the Law of Ukraine "On Public Procurement". The implementation of this principle is carried out through the establishment of equal conditions for participation in the procedures of participants of all forms of ownership and organizational and legal forms of activity. In this case, customers are prohibited from resorting to actions that would discriminate against potential participants. This rule is not always used as intended by the law.

An analysis of the level of competition in public procurement is an important part of the research of the competitive environment, since higher levels of competition reduces corruption and creates favorable conditions for the most profitable deals, which leads to an increased efficiency of public procurements. Typically, the level of competition is calculated as the ratio of the number of participants to the number of procedures in public procurement. This technique is used when calculating the level of competition in the "ProZorro" system, and Parasiy-Vargunenko (2017) proposes to use the formula:

$$P = \frac{K}{N} \quad (1)$$

Taking into account the negative factors and despite the simplification of the procedure for public procurement, competition among the participants remains low, the dynamics of competition in the public procurement market for 2016-2018 are presented in Table. 1. Since the launch of electronic public procurement system in August 2016, there has been a steady rise in the number of participants and procedures. But the level of competition over the 2016-2018 period remains insignificant, at the level of two participants per procedure, indicating lack of competition, an overstated price, and guarantee of procurement by agreement. To prevent such a situation in the market of public procurement, Law of Ukraine "On Public Procurement" provides a procedure of appeal.

Table 1 Analysis of the level of competition

Indicator	September 2016	September 2017	September 2018
Number of procedures, thousands	50,8	82,69	92,54
Number of participants, thousands	118.9	185,2	211.92
The level of competition	2,34	2,24	2,29

Compiled by the author on the basis of: ProZorro Statistics, 2016-2018

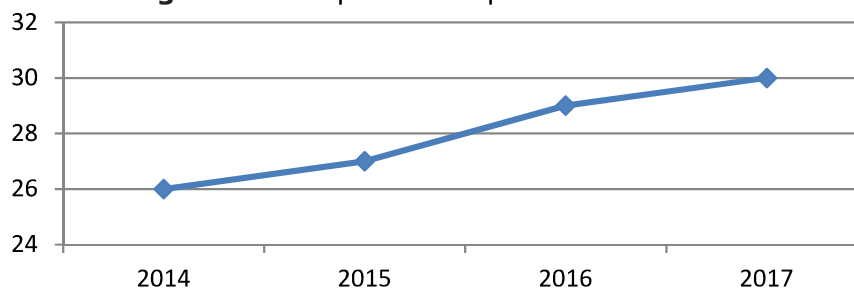
The use of the electronic system during procurement provides access to information for potential suppliers, participants dissatisfied with the procurement process and public observers. On one hand, this leads to increased competition, promotes transparency of work done by the government organizations, facilitates public control and increases the likelihood of exposure of conspiracies, fraud and inefficient spending of budget funds. On the other hand, dissatisfied participants have access to the information on the tenders that have taken place and may contest the decision on the winning bid by appealing to the Antimonopoly Committee of Ukraine about the violation of the principle of non-discrimination of participants.

3 Results and Discussion

Worldwide experience shows, that for a stable development of society it is necessary to reform the budget system in accordance with the strategic tasks of socio-economic development of the country. Having chosen the path of European integration, Ukraine must adhere to world standards of ensuring financial stability, social guarantees, and high economic activity. Therefore, the main task of fiscal policy is to modernize the budget sector of the economy, reform public expenditures, increase the efficiency and effectiveness of budget funds use. To fulfill these tasks, a public procurement reform was launched in Ukraine, based on transparency, proper governance, and prevention of misconduct, monitoring, accountability and control.

The implementation of these principles through the introduction of new legislation and e-procurement system should have reduced the level of corruption in Ukraine. But according to the research conducted in recent years by the Transparency International Ukraine, the Corruption Perception Index in Ukraine (2018) remains rather low. The index is based on a series of independent surveys involving international financial and human rights experts, including Asian and African development banks, the World Bank and the American organization Freedom House. The index is a rating from 0 (maximum level of corruption) to 100 (no corruption). The results of research in Ukraine are presented in Fig. 1.

Figure 1 Corruption Perception Index in Ukraine



Compiled by the author on the basis of: Transparency International Ukraine

As can be seen from the graph, Ukraine is experiencing, albeit very slow, the growth of the Corruption Perception Index (CPI). Along with other factors that help fight corruption, such as judicial reform, the introduction of electronic declarations for officials, etc., great significance plays the introduction of new legislation in the field of public procurement and the introduction of the electronic procurement system.

In the worldwide rating for 2017, Ukraine did not significantly improve its position among neighboring countries: Poland - 60, Romania - 48, Hungary - 45, Belarus - 44, Moldova - 31; although for the first since 2010, bypassed Russia - 29.

An important indicator that affects the level of corruption during public procurement is the efficiency of the public funds use, and therefore, the budget savings of the country. Such an indicator should reflect the productivity, performance and cost-effectiveness of budget spending. The absence of a clear legally established principle and mechanism for the effective use of budget funds in Ukraine affects the identification of corrupt actions by participants in the budget process. At present, it is impossible to determine at a legislative level the results of budget funds use, since the current system is not oriented on the efficiency of budget funds use.

Conclusions

Public procurement is a powerful tool for influencing the country's economic market, which allows for the formation of a stable and efficient economic system. The reform of public procurement in Ukraine allowed the public procurement system to be more open and simplified the access of participants to bidding, reduced the level of government spending on administration and accelerated the procurement process.

But despite the transparency, constant public monitoring and optimization of the process corruption component in public procurement in Ukraine is present. It is necessary to develop a number of tools to overcome corruption risks in the system of public procurement: amend the legislation in order to increase the level of competition, reduce the number of unfounded appeals, and monitor the implementation of contracts. It is necessary to develop and regulate at the legislative level a single system of analysis of the indicator of economy of state funds.

The public procurement reform gained considerable support among Ukrainians and from the international community, but faced considerable resistance and caused ardent debates. There are white spots in the system which increases corruption risks, making it impossible to analyze and monitor public procurement.

References

Corruption Perceptions Index, (2018) Transparency International Ukraine. Received from: https://ti-ukraine.org/ti_format/doslidzhennya/cpi

Detkova P., Podkolzina E. and Tkachenko A. (2018). Corruption, centralization and competition: data on government procurement in Russia. *International Journal of Public Administration*, Vol. 41 (5-6), pp. 414-434, Received from: <https://doi.org/10.1080/01900692.2018.1426014>

Ferwerda, J., Deleanu, I. & Unger, B. Eur. J., (2017) Corruption in Public Procurement: Finding the Right Indicators. *Crim Policy Res* (2017) 23: 245. Received from: <https://doi.org/10.1007/s10610-016-9312-3>

Hessami Z. (2014) Political corruption, public procurement, and budget composition: Theory and evidence from OECD countries. *European Journal of Political Economy*, Vol. 34, June 2014, pp.372-389.

Joseph K. Achua (2011) Anti-corruption in public procurement in Nigeria: challenges and competency strategies. *Journal of Public Procurement*, Vol. 11 Issue: 3, pp.323-333. Received from: <https://doi.org/10.1108/JOPP-11-03-2011-B002>

Mugadza, W.T. (2018) Combating corruption in public procurement in developing countries: a legal analysis. *Institutional Repository of the North-West University*. Received from: <https://repository.nwu.ac.za/handle/10394/31417>

Parasiy-Vergunenko I. M. (2017) Analysis of Public Procurement: Methodological and Practical Aspects. Scientific notes of the National University of Ostroh Academy. Economics series: a scientific journal. Ostrog: NaUOA Publishing House, December, 2017. No. 7 (35) pp. 65-71.

ProZorro Statistics, (2017). Received from: <https://bi.prozorro.org/sense/app/fba3f2f2-cf55-40a0-a79f-b74f5ce947c2/sheet/HbXjQep/state/analysis#view/pEh>

Sewpersadh P. and Mubangizi J.C. (2017) Using the Law to Combat Public Procurement Corruption in South Africa: Lessons from Hong Kong. Potchefstroom Electronic Law Journal. Vol.20, No.1, pp.1-31. Received from: <http://dx.doi.org/10.17159/1727-3781/2017/v20i0a1359>

Transparency International Ukraine (2017) <https://ti-ukraine.org/>