BENCHMARKING PUBLIC PROCUREMENT AS AN INTERNATIONAL RATING SYSTEM FOR EVALUATION THE EFFECTIVENESS OF PUBLIC PROCUREMENT SYSTEM OF THE COUNTRIES

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The purpose of the article is to study the methodology of assessing the effectiveness of the public procurement system by World Bank, to conduct a comparative analysis of Ukraine's place among other countries in the world. Taking into account the globalization of the economy and the intensification of European integration processes, it has been proved that an important part of evaluating the effectiveness of public procurement should be a comparative analysis of the implementation procedures with the relevant systems of other countries of the world.

The methodologies of the World Bank's Benchmarking Public Procurement system are investigated. A comparative analysis of the Ukraine's place among other countries of the world, in particular among the group of countries of Europe and Central Asia, as well as with some OECD countries, which are considered as a group of high-income countries, has been conducted. Taking into account that the World Bank reports do not have a final score and a final rating, it has been justified the feasibility of comparing by the general amount of points.

It is substantiated that the results of such comparative analysis will allow identifying risk areas, and relevant information can be used in developing of recommendations and proposals for improving the effectiveness of the public procurement system, especially in the context of reforming the law on public procurement and the introduction of the new system "Prozorro". As a prospects for further researches the study of second-tier indicators and the methodology of evaluating the public procurement systems by the World Bank, taking into account its relatively short setbacks compared to other ratings, have been identified.

Keywords: public procurement, public procurement system, international ratings, Benchmarking Public Procurement, efficiency, assessment, evaluation

INTRODUCTION

Effective spending of public funds is an urgent task for all countries, so optimization of the process of public procurement is one of the priorities in the list of directions of its solution. Public procurement is not only a process of ordering products (goods, works, services), their production and supply (provision, performance), but also an instrument of performance by state government of functions in the field of national security and its components (economic, food, social, environmental, etc.), solving problems such as developing the market and maintaining a competitive environment, supporting certain regions and populations, developing specific industries and market actors, and more. But while public procurement can be an incentive for development, it can also be the basis for corruption and fraud. Considering problems of the governance and corruption, Daniel Kauffman distinguishes procurement, tax, customs, or the judiciary as highly vulnerable institutions [2]. This is why public procurement requires constant monitoring, collection and analysis of a wide range of data, including international comparisons and evaluations.

Literature review. Among foreign scholars, Daniel Kauffman pays considerable attention to the problems of public procurement [5; 2]. Scientists, experts and experts highlight the problematic aspects of forming a mechanism for managing the public procurement system in Ukraine [29], professionalization of public services, provision and receipt of educational services in the field of public procurement [24], the legal characteristics of public procurement [10], peculiarities of public procurement as an object of state regulation of the economy in the context of considering them as an element of the public services market, which, according to the author's interpretation, cover public and social goods supplied by the state [16], efficiency of public procurement [25; 12; 15; 17], including their legal support in the context of European integration [19], harmonization of Ukraine's public procurement system with EU standards [20], opportunities to apply a procurement mechanism to activate key segments of the economy through the prism of the WTO Agreement on Public Procurement and the EU-Ukraine Association Agreement [18].

Some aspects of the multifaceted problem of control (audit, monitoring, auditing) of public (public) procurement (as an independent form of state financial control in accordance with the Law of Ukraine "On the basic principles of the implementation of state financial control in Ukraine" [14] and an important element in the implementation of public procurement policy in accordance with the Law of Ukraine "On Public Procurement" [13]) considered in their works



Ukrainian scientists [1; 8; 9; 10; 11; 21]. Researches on public procurement monitoring by representatives of civil society organizations at the local level in Ukraine [22; 23], public control of public procurement [22], corruption risks and the reliability of the public procurement logistics system [25] are presented in the scientific literature.

Important information on the effectiveness of the public procurement system is represented by an international rating prepared by the World Bank Working Group. But despite the fact that the methods of calculating international ratings and the directions of their use are quite widely represented in the economic literature, the rating of the efficiency of the public procurement system remains unaddressed. It is extremely important to study Ukraine's place in the international rankings with a focus on the effectiveness of the public procurement system as an important and integral element of government regulation and the business environment, identify the factors that influence changes in indicators, their critical evaluation in view of the following considerations:

- (1) firstly, it is necessary to understand the environment in which our country is perceived by international organizations, investors, lenders and other interested persons in order to determine the directions of improvement and their predictive influence on the position of our country in order to increase its rating, including in the sphere of efficiency of public procurement systems:
- (2) secondly, the study and analysis of the components of the international rating allows to improve the quality of preparatory work for public procurement in the field of innovation and the market for innovative products.

Purpose of the study. The purpose of the article is to study the methodology of assessing the effectiveness of the public procurement system by World Bank, to conduct a comparative analysis of Ukraine's place among other countries in the world.

Results. Benchmarking Public Procurement Performance Study launched by the World Bank in 2013. Benchmarking Public Procurement focuses on legal and regulatory environments that affect the ability of private sector companies to do business with governments.

Three reports have been published:

- (1) Benchmarking Public Procurement 2015 [26], which covered 11 economies (Afghanistan, Chile, Ghana, Jordan, Mexico, Russian Federation, Sweden, Thailand, Turkey, Uganda, United States), and data was also collected later in the Russian Federation:
- (2) Benchmarking Public Procurement 2016 [27], which expanded geographical coverage to include 77 economies in seven regions (Ukraine has been included in the study since 2016);
- (3) The Benchmarking Public Procurement 2017 [28] report presents comparable data on public procurement laws and regulations across 180 economies.

The Benchmarking Public Procurement 2017 report presents comparable data on public procurement laws and regulations across 180 economies to meet the various needs of different stakeholders for information, analysis, and policy action. It provides private sector firms with insights on issues involving their participation in the public procurement market, while offering policy makers information on their country's public procurement regulatory system and related business practices. The data also benefit the academic and research community by offering better tools and data on procurement systems and facilitating cross-country analysis.

In Benchmarking Public Procurement 2016 indicators was aggregated by subtopic and designed to help policy makers evaluate their system's performance in a specific area of public procurement. Such indicators were evaluated:

- (1) procurement life cycle: preparing bids, submitting and evaluating bids; awarding and executing contracts;
- (2) complaint and reporting mechanism: availability of complaint and reporting mechanisms; first-tier review process; second-tier review process.

Scores was presented in five categories at the subindicator level: 0-20, 21-40, 41-60, 61-80 and 81-100. Economies with a score of 81 or more, which are considered close to good practice on a certain subindicator, was in the top quintile. Economies with a score of 20 or less was in the bottom quintile in the charts, which means that the economy has a lot to improve in the light of internationally, accepted good practices and principles on what Benchmarking Public Procurement measures.

Two thematic pillars are covered by the Benchmarking Public Procurement 2017 report (table 1):

- 1. The procurement process, from the needs assessment to the implementation of the procurement contract.
- 2. The public procurement complaint review mechanisms.

The two thematic pillars and eight key areas of the public procurement process covered by Benchmarking Public Procurement 2017 are summarized in table 2. In Benchmarking Public Procurement 2017 the methodology for evaluating the public procurement system includes the following groups of indicators:

- (1) that are quantified in points (the maximum score for each indicator, which is quantified, is 100 points);
- (2) that are not quantified and presented only in descriptive form.

Table 1. Two thematic pillars covered by the Benchmarking Public Procurement 2017 report

Two Thematic Pillars		
The procurement process, from the needs assessment to the implementation of the procurement contract		
Needs assessment, call for tender, and bid preparation	Rationale: The transparency of the bid preparation phase is critical because it is precisely at this moment that potential bidders can seek information and assess the opportunity to bid for the procurement contract.	
Bid submission	Rationale: Once prospective bidders decide to bid for a public procurement contract, they need to comply with a variety of requirements in order to bid effectively and avoid having their bid rejected if it does not comply with the stated requirements.	
	These requirements can create unnecessary hurdles. It is therefore important to make sure that the process is streamlined and easily accessible to all bidders.	
Bid opening, evaluation, and award	Rationale: This phase is critical for purposes of transparency and integrity. It is important to make sure that enough guarantees are in place to protect the fairness and efficiency of the process	
Content and management of the procurement contract	Procurement contracts must be managed in a prompt and transperant way, and with sufficient safeguards, to protect suppliers from unilateral decisions and actions by the procuring entity.	
Performance guarantee	Rationale: The performance guarantee protects parties in case of delays in the execution of the contract; however, to protect suppliers, the amount of the guarantee should be regulated.	
Payment of suppliers	Rationale: Suppliers need to be paid on time. Delayed payments could hurts their cash flows, impair their ability to supply, and even put them at risk.	
The public procurement complaint review mechanisms		
Complaints submitted to the First-tier review body	Rationale: When bidders or potential bidders notice flows in the procurement process, they should be able to file a complaint and receive a decision in a timely manner.	
Complaints submitted to the Second-tier reviewer body	Rationale: If a first decision has been rendered concerning the procurement process before the contract has been awarded, the complainant should be able to appeal the decision to a second-tier jurisdiction	

Source: compiled by the authors based on the Benchmarking Public Procurement 2017 [28]

Table 2. Thematic areas measured in Benchmarking Public Procurement 2017

Indicator	Description	
are presented in descriptive form and are quantified (resulting in a final score ranging from 0 to 100)		
	This indicator aims at assessing the transparency and information flow at the	
Needs assessment, call for	preparation stage from the procuring entity's end. It looks at: (1) the	
tender, and bid preparation	consultation with the private sector; (2) the tendering method; (3) potential	
	bidders' accessibility to bidding information.	
Bid submission	This indicator looks at the requirements for suppliers to place bids, including:	
	(1) registration with a government registry; (2) eligibility of foreign firms; (3)	
	possibility of submitting bids online; minimum time frame for bid submission;	
	(4) bid security requirements.	
Bid opening, evaluation, and award	This indicator aims at assessing transparency at the bid opening and	
	evaluation stages. It considers: (1) the method for opening the bids, including	
	accessibility for bidders to the bid opening session; (2) the fairness of the bid	
	evaluation; (3) notification and feedback to unsuccessful bidders; (4)	
	standardized contract form used when awarding a contract.	
	This indicator looks at: (1) the relevant procedural requirements; (2) the	
Content and management of the	possibilities of modifying or terminating the procurement contract when the	
procurement contract	contract is awarded and signed; (3) the acceptance of the completion of	
	works by the purchasing entity and related procedures.	
Performance guarantee	his indicator looks at the performance guarantee, including: (1) the purchasing	



Indicator	Description	
	entity's monitoring of the requisite performance guarantee and its amount; (2) return of such guarantee; (3) the existence of a separate entity to oversee the procuring entity's decision to withhold it.	
Payment of suppliers	This indicator examines: (1) the procedure regarding suppliers' request for payment; (2) the time frame for the purchasing entity to process payment; (3) the time frame for suppliers to actually receive payment; (4) the interests or penalties available to suppliers in case of payment delays.	
are not scored and merely presented for contextual purposes		
Structure of the complaints mechanism	This indicator looks at: (1) legal framework on complaints mechanism; (2) description of complaints mechanism; (3) choice of the authority before which filing a complaint.	
Complaints submitted to the First- tier review body	his indicator examines issues regarding: (1) filing a complaint to challenge the tender and bidding process before the award is granted, including the complainant's standing; (2) cost of filing, duty to notify the procuring entity; (3) suspension of the procurement process; (4) independence and training of the complaint reviewers; (5) time frame for decisions; (6) legally provided remedies; (7) publication of the decisions.	
Complaints submitted to the Second-tier review body	This indicator measures the process of appealing the first-tier review body decisions regarding: (1) the time granted to appeal the decision; (2) costs associated with the appeal. It also assesses the review process that takes place before the second-tier review body, including: (1) the actions required to trigger a suspension of the procurement process; (2) the time frame for a decision on the appeal; (3) remedies legally available at the second-tier review; (4) the publication of the decisions.	
Post-award complaints	This indicator looks at: (1) process to complain same than for pre-award complaints; (2) standstill period after contract award to allow filing of complaints; (3) standstill time period (calendar days); (4) standstill period mandated in the legal framework; (5) standstill period set out in the notice of intention to award.	

Source: compiled by the authors based on the Benchmarking Public Procurement 2017 [28]

For each indicator developed, the scores of individual questions are averaged and multiplied by 100, resulting in a final score ranging from 0 to 100. The economies at the top of the range (with scores approaching 100) are considered to have a regulatory framework that closely aligns with internationally recognized good practices, whereas the economies at the bottom of the range (with scores closer to 0) have significant room for improvement in the particular area measured.

The description of each indicator allows a detailed assessment of the performance of each country's public procurement system, but comparisons between countries can only be made using quantifiable metrics.

In Benchmarking Public Procurement 2016 and Benchmarking Public Procurement 2017 The World Bank has rated Ukraine's public procurement system at a rather high level. In 2016, three out of five indicators received a sufficient score within 61-80 points, two indicators ("submitting and evaluating bids", "availability of complaint and reporting mechanisms") were highly rated (81-100 points) (Fig. 1).

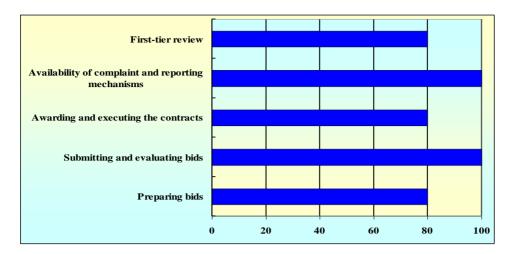


Figure 1. Assessment of Ukraine's public procurement system by the World Bank according to Benchmarking Public Procurement 2016 Report

Source: compiled by the authors based on the Benchmarking Public Procurement 2016 [27]

The assessment of the effectiveness of the public procurement system of Ukraine in 2017 by indicators covering the so-called procurement life cycle is as follows (Fig.2).

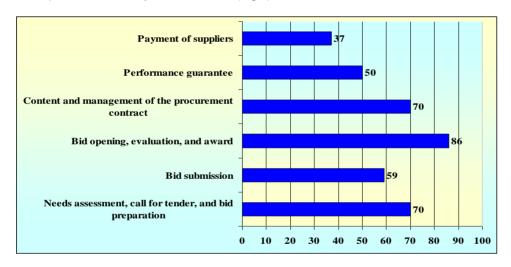


Figure 2. Assessment of Ukraine's public procurement system by the World Bank according to *Benchmarking Public Procurement 2017* Report

Source: compiled by the authors based on the Benchmarking Public Procurement 2017 [28]

The highest score (86 points) was obtained from the "bid opening, evaluation, and award". High marks (70 points) were obtained on the indicators "content and management of the procurement contract", "needs assessment, call for tender, and bid preparation". The average scores (59 and 50 points, respectively) were obtained for "bid submission and performance guarantee". For "payment of suppliers" Ukraine received only 37 points out of 100.

Analysis of the data from the countries covered by the study shows that the maximum score (100) was obtained by such countries as: Russia - on the indicator "needs assessment, call for tender, and bid preparation"; Ecuador, Peru, Philippines, Singapore, Suriname - on the indicator "performance guarantee"; Australia, Denmark, Finland, Italy, Republic of Korea, Spain, USA - on the indicator "payment of suppliers indicator".

The minimum score (0) was earned by: Antigua and Barbuda, Australia, Czech Republic, Finland, Hong Kong, Iceland, Ireland, Lesotho, Luxembourg, New Zealand, Norway Singapore, Slovakia, Sweden, Vanuatu - on the indicator "Performance Guarantee"; Dominican Republic, Trinidad and Tobago, Vanuatu - on the indicator "Payment of suppliers".



It is informative to compare the estimates obtained by the Ukraine with the countries of Europe and Central Asia (a group covering 25 countries and Ukraine included), as well as with some OECD countries that are classified as high-income countries. Given that the Report lacks a final score and a final rating, we consider it appropriate to make a comparison by the amount of points.

According to the data presented (Fig. 3), European countries (mainly Eastern Europe) and Central Asia received at least 250 points (only Uzbekistan has 247 points and San Marino - 253 points).

Points in the range from 301 to 400 were awarded to 16 countries (64% of all countries in the group), and 7 countries (28%) have points ranging from 401 to 500. Ukraine receiving 372 points (or an average of 62.0 points) is at 13th place, ahead of Latvia, Kyrgyzstan, Serbia, Lithuania, Tajikistan, Croatia, Montenegro, Belarus, Azerbaijan, Armenia, San Marino and Uzbekistan. The highest total score in the group was obtained by the public procurement system of Kazakhstan - 477 points (average score - 79.5).

By the indicator "Bid opening, evaluation, and award", Ukraine, along with Kazakhstan, Albania and Cyprus, has the highest scores among the countries in the group - 86. The highest (maximum) number of points (100) by the indicator "Needs assessment, call for tender, and bid preparation" were awarded to the public procurement system in Russia. Romania received the highest rating (94 points) for "Bid submission", Kazakhstan (91 points) for "Content and management of the procurement contract", Bulgaria (94 points) for "Performance guarantee", Bulgaria, Kosovo, Lithuania (75 points) - for "Payment of suppliers".

According to the data presented (Fig. 4), the total score of high-income OECD countries in Europe does not cross the lower limit of 300 points. Points from 301 to 400 were awarded to 17 countries, and 8 countries scored from 401 to 500.

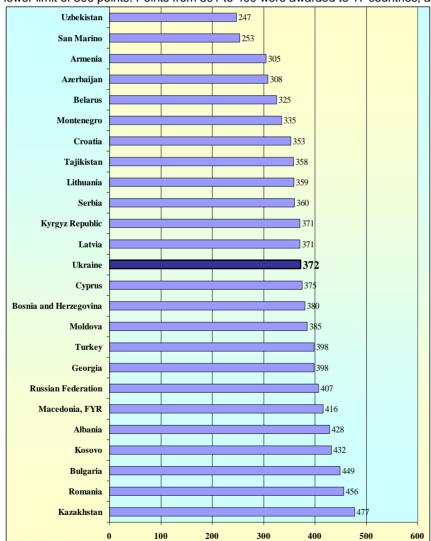


Figure 3. Rating of the countries of Europe and Central Asia group by the total number of points of assessment of efficiency of the public procurement system

Source: compiled by the authors based on the Benchmarking Public Procurement 2017 [28]

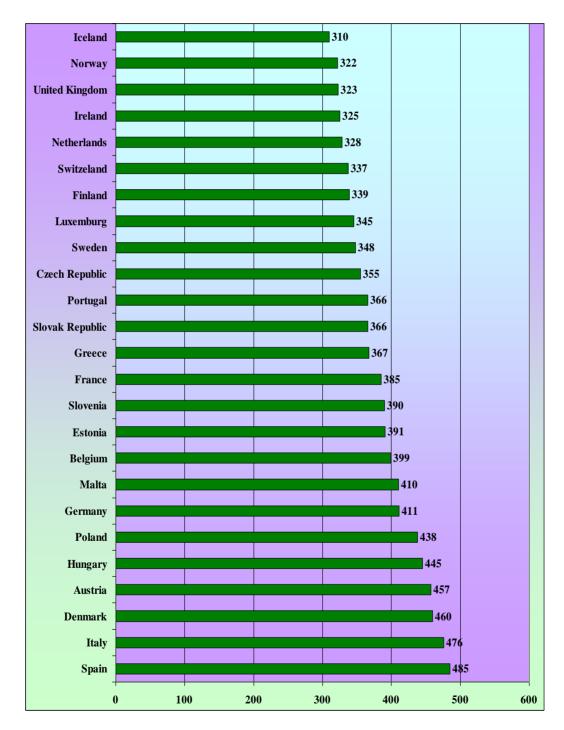


Figure 4. Rating of European countries included in the OECD high-income group by the total number of points of assessment of efficiency of the public procurement system

Source: compiled by the authors based on the Benchmarking Public Procurement 2017 [28]



The highest score was received by the public procurement system in Spain - 485 points. According to the calculations, Ukraine's public procurement system outperformed high-income OECD countries such as Iceland, Norway, the United Kingdom, Ireland, the Netherlands, Switzerland, Finland, Luxembourg, Sweden, Czech Republic, Portugal, Slovakia, Greece.

The data collected for *Benchmarking Public Procurement 2017* were used for the *Doing Business 2017* publication, which this year includes an analysis on the ease of private suppliers selling to the government [3]. *Benchmarking Public Procurement* also complements other initiatives that enhance the transparency of public financing in general, and assess the quality and effectiveness of procurement systems in particular. Such initiatives include the Public Expenditure and Financial Accountability (PEFA) framework and the Methodology for Assessing Procurement System (MAPS) of the Organization of Economic Co-operation and Development (OECD).

Conclusions and prospects for further research. The public procurement methodology involves the actions of their participants at certain stages, which cover the so-called "public procurement lifecycle", which is why a lot of control and analytical work is needed to improve the efficiency of public procurement. The result of public financial control in the form of audit, audit, monitoring should be not only the assessment of the performance, efficiency and economy of public procurement, but also the determination of the effectiveness of public procurement procedures. Given the globalization of the economy and the intensification of the European integration processes in our country, a comparative analysis of the procedures of their implementation with the corresponding systems of other countries of the world should become an important component of the evaluation of public procurement effectiveness. The results of such benchmarking identify areas of risk, and relevant information can be used to develop recommendations and proposals to improve the efficiency of the public procurement system, especially in the context of the reform of public procurement legislation and the introduction of the new Prozorro system. The results of the public procurement analysis indicate that there are some shortcomings that correspond to Ukraine's low scores according to World Bank estimates, indicating that it is advisable to use international valuation results. The prospect of further research is to investigate the second-tier indicators and methodology for evaluating the public procurement systems by World Bank for using in public procurement monitoring and review.

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