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PUBLIC PROCUREMENT EFFICIENCY AS PERCEIVED BY MARKET PARTICIPANTS: THE CASE OF RUSSIA

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PUBLIC PROCUREMENT EFFICIENCY AS PERCEIVED BY MARKET PARTICIPANTS: THE CASE OF RUSSIA[5]

This paper studies the indicators of public procurement efficiency as perceived by public buyers and suppliers and what barriers must be overcome for them to consider public procurement efficient. The analysis, based on an online survey of Russian procurers and suppliers in 2020, reveals that, despite the importance of fighting corruption and increasing competition, most procurers and suppliers consider the supply of high-quality goods and timely contract execution the most important criteria. The natural experiment with COVID-19 has mitigated the rigidity of the regulation problem but exacerbated the ambiguity problem. During the pandemic, public procurement contract execution worsened. To improve procurement efficiency, the regulator should clearly specify its requirements and consider the main participants' interests.

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Introduction

Public procurement accounts for a considerable share of state budget expenses and developed and developing countries' GDP (OECD, 2017). As well as its main function of providing for public needs, public procurement is traditionally viewed as a tool for stimulating demand, developing small and medium businesses, and implementing innovations. Large public procurement expenditures require control over the efficient spending of funds, including clarity and unambiguity in regulatory requirements for all participants in the procurement process. The experience of 2020 has demonstrated the importance of flexible public procurement legislation, especially in emergencies such as the COVID-19 pandemic, when conducting a procurement rapidly becomes a matter of life and death (Folliot Lalliot & Yukins, 2020; OECD, 2020; Sanchez-Graells, 2020).

The search for optimal regulation exists both in developed and developing countries. However, for developing countries, this is further complicated by the imperfect institutional environment, authorities' lower accountability, and wider spread of corruption. One way to fight corruption and ensure procurement transparency in several developing countries, including Russia, involves the strict regulation of all procurement procedures. However, procurement efficiency from the perspective of satisfying current needs remains outside of the focus of legislation. Meanwhile, many public procurement practitioners and researchers highlight the need to shift focus from procurement procedures' strict regulation at the awarding stage to efficiency at the contract execution stage (see, e.g., Moszoro et al., 2016; Tkachenko et al., 2018).

However, understanding of the efficiency of public procurement among various procurement process participants may differ. Existing research and practice in public procurement generally follow the regulatory authorities' approach. Some research, however, reveals the views of direct public procurement participants (procurers and suppliers). These studies have mainly focused on identifying the causes of inefficient procurement, especially corruption. Meanwhile, to formulate a successful public procurement policy, it is important to know what procurers and suppliers understand by public procurement efficiency and how they perceive its achievement. This is especially important for developing countries and countries with imperfect institutions, including Russia.

This paper studies what procurers and suppliers perceive as public procurement efficiency and what barriers must be overcome to achieve it. Although COVID-19 has reduced legislation rigidity, it has also introduced greater ambiguity into public procurement processes. Therefore,

this paper additionally analyzes how assessments of public procurement efficiency have changed during the COVID-19 pandemic.

Nowadays, there are numerous open public procurement data, but they do not reveal what the direct participants in the procurement process think. To ascertain this, although extremely important, studying separate cases, case studies with individual examples of purchases, and the opinions of individual specialists is not sufficient. There is a need to conduct mass surveys to reveal the heterogeneity of opinions of many direct procurement participants.

In 2020, the authors conducted an online survey of Russian procurers and suppliers. The survey's aim was to identify the main public procurement problems and how participants assess the public procurement system's efficiency, as well as changes during the COVID-19 pandemic (for this, the survey was conducted in two stages). A total of 603 questionnaires were received from procurers and 786 from suppliers, covering all regions of Russia, various types of organizations, and sizes.

Russia is a compelling case for several reasons. Although Russia is an example of a developing country with weak institutions and a high level of corruption, it has also introduced e-governance and transparency in public spending. This has made it possible to conduct a survey and obtain the necessary data. Moreover, participants in Russia operate under the same regulations, even though they are from different sectors of the economy.

The results of the present research cover four key areas. The first concerns analysis of how participants perceive public procurement efficiency. Findings revealed that the indicators of public procurement efficiency, as understood by public procurement direct participants, differ from the views of regulators traditionally used in most countries and in most studies using open data. Specifically, 77% of procurers and 67% of suppliers considered the most important efficiency criterion to be the supply of high-quality goods, while 55% of procurers and 43% of suppliers valued timely contract execution.[6]

Second, despite the acknowledged importance of the execution stage, most problems occur precisely at this phase of the public procurement process: 60% of procurers and suppliers noted the supply of low-quality goods/works/services as the most frequent problem in the Russian public procurement system. To overcome this, participants use a strategy of "predetermined choice," whereby the procurer chooses the supplier before conducting the procurement procedure. This strategy is justified by most procurers and suppliers. Owing to the

[6] For this question, respondents were required to choose a maximum of three options from the 12 available

strictness of regulation, however, this behavior can be typical not only of opportunistic but also of honest procurers.

Third, the situation caused by the COVID-19 pandemic represents a natural experiment that, while leading to a mitigation of the rigidity problem, has also exacerbated the problem of ambiguity in regulation during an emergency situation. Very few respondents mentioned positive changes during the COVID crisis. At the same time, the execution of the current contracts worsened; most procurers and suppliers mentioned the postponement of procurement procedures (46% and 56%, respectively) and defaulting on contract execution deadlines (43% and 49%, respectively).

Most likely, this is largely a consequence of the system being built without focusing on the final result of the procurement from the participants' perspective. Fourthly, this research shows that "procurement efficiency for a specific procurer" is the main goal for optimal regulation from the immediate participants' perspective. Simultaneously, procurers and suppliers also consider the importance of the "anti-corruption" goal for optimal regulation; however, this may not be a deliberate choice, but rather a prevailing perception in society.

Successful reforms in countries with an imperfect institutional environment are impossible without considering participants' opinion of the procurement process; however, regulatory changes in such countries are usually initiated "from the top." There are no institutional mechanisms to support regular feedback from actors in the public procurement market and to communicate their opinions and assessments to the regulators. Very few macro-level studies have been undertaken to provide a comprehensive overview of the public procurement situation from the perspective of parties directly involved in the public procurement process.

This research furthers understanding of public procurement efficiency from the perspective both of direct participants and regulators (European Commission, 2015; OECD, 2016; World Bank Group, 2016). This facilitates a novel view on the assessment of public procurement efficiency and reveals additional ways in which customers and suppliers can achieve this. One of the possible reasons for public procurement inefficiency, in addition to excessive bureaucracy and corruption (Grega et al., 2019) and low transparency and competition (Kacandolli-Gjonbalaj et al., 2018), may be the regulator's and public procurement participants' different perceptions of efficiency. As shown by the results of a natural experiment associated with the COVID-19 pandemic, not only incompetent resource management and excessive

political interference (Buor, 2019), but also unclear regulation, can lead to inefficient procurement in emergency situations.

The proposed approach to assessing the public procurement direct participants' opinions may also be used in developing countries and countries with a transitional economy, a poor institutional environment, and an immature public procurement regulation system. In such circumstances, it is necessary to make a rapid evaluation of the public procurement system's efficiency at a low cost and to draw wider conclusions on the need to introduce changes to procurement regulation. Additionally, the findings on understanding procurers' and suppliers' perceptions of public procurement efficiency can be useful in reforming public procurement regulation systems.

Literature overview

In research and practice regarding the regulation of public procurement, "procurement efficiency" often appears as a key concept. However, understanding of this term is ambiguous. Thus, the World Bank and the Organisation for Economic Co-operation and Development (OECD), in their methodology for assessing procurement systems, identified 14 criteria for assessing efficiency based on the principles of transparency, fairness, good governance, and the reasonable ratio of price and quality ("value for money") (OECD, 2016). The European Commission regularly evaluates the efficiency of the public procurement market in European countries based on six criteria: the share of contracts with one participant; the share of non-competitive and joint purchases; the share of procurement procedures with a single price criterion for choosing a winner; the speed of decision-making; and the quality of reporting (European Commission, 2015). However, these criteria have often been criticized for the use of subjective weights and thresholds, leading to numerous biases in interpreting the results (Milosavljević et al., 2019). In the Russian regulation of public procurement, the efficiency of procurement is assessed by regulators, mostly in terms of savings on initial prices and ensuring competition in implementing the procurement procedure.

Efficiency, together with openness, transparency, competition, and non-discrimination, are the main principles of public procurement (Bovis, 2012; OECD, 2011; UNCITRAL, 2011). However, these principles cannot automatically function together, which often leads to the search for a compromise between corruption prevention and granting flexibility to procurers in taking decisions based on their own experience and knowledge (Rose-Ackerman, 1999). On the one hand, public procurement efficiency is restricted by the risk of corruption, which requires

regulation, including guaranteed transparency and a focus on competitive procedures (Di Tella & Schargrodsky, 2003). On the other hand, excessive regulation makes the public procurement system inflexible and generates high costs, which undermines public expenditure efficiency, especially in a low competitive setting (Yakovlev et al., 2018).

Public procurement efficiency largely depends on institutional factors (Plaček et al., 2020b). The quality of the institutional environment for public procurement may be characterized by the extent to which political connections are leveraged and by the extent of corruption (Boas et al., 2014; Goldman et al., 2013; Mironov & Zhuravskaya, 2016; Titl & Geys, 2019), the degree of interference from political elites (Coviello & Gagliarducci, 2017; Tkachenko & Esaulov, 2020), the public procurement system's transparency (Coviello & Mariniello, 2014; De Silva et al., 2009), administrative organization of the procurement process (Baldi & Vannoni, 2017; Detkova et al., 2018; Guccio et al., 2014), courts' efficiency in terms of conflict resolution (Coviello et al., 2018), and the authorities' approach to formal rules and procedures (Plaček et al., 2020a).

Most major public procurement studies have focused on procures' experience in developed countries, based on notions of public procurement mechanisms' successful implementation that use specific performance efficiency indicators (OECD, 2016; World Bank Group, 2016). Notwithstanding various arguments supporting public procurement reforms aimed at ensuring effective financial control and public expenditure accountability (Neupane et al., 2014; Transparency International, 2011), there is a limited number of studies demonstrating how efficiently public procurement mechanisms are implemented in countries with a poor institutional environment (see, e.g., Bawole & Adjei-Bamfo, 2020; Patil, 2017).

In such countries, the existence of a legislative framework does not guarantee compliance with regulation or the best value for money (Ibrahim et al., 2017) and, because of the poor institutional infrastructure and a lack of effective monitoring mechanisms, corrupt practices are widespread in public procurement (Bosio et al., 2020; Lengwiler & Wolfstetter, 2006). A poor institutional environment generally implies less transparency regarding the results of the use of government resources. This leads to increased costs for information collection and, consequently, public servants' decreased accountability (Besley, 2006), which explains why they are less motivated to comply with the prescribed task of monitoring contract delivery (Guccio et al., 2019).

Nevertheless, despite the importance of institutional factors, the main actors determining public procurement efficiency are procurers (Lacetera et al., 2016; Warren, 2014). Public

procurement research is often based on large open procurement data, which enables the use of econometric methods. However, they do not provide insight into the internal problems in the functioning of the procurement system encountered by its participants. Surveys are the traditional tools for revealing such problems. A few studies based on results of the surveys of procurers and suppliers exist (e.g. Bosio et al., 2020; Grega et al., 2019; PwC, 2011), mostly in a developed country setting. They have usually focused on rather narrow issues and surveyed only one side of the public procurement process (procurers), with suppliers being surveyed much more rarely. This biased perception may be characteristic of this group of respondents and it does not provide a holistic picture.

Very few studies exist considering public procurement efficiency based on surveys of direct participants (procurers and suppliers) at the macro level. One rare example is Grega et al.'s (2019) study, which aimed to evaluate procurers' and suppliers' opinions in Slovakia regarding the causes of public procurement inefficiency. Their survey findings revealed the two main causes of inefficiency to be red tape, including the impact of frequent legislative amendments leading to excess transactional costs, and corruption. A survey of suppliers in the Republic of Kosovo demonstrated that the main factors of public procurement inefficiency were a lack of transparency and an insufficient level of competition, as well as a shortage of qualified procurement staff (Kacandolli-Gjonbalaj et al., 2018).

Bosio et al. (2020), based on a survey data of over 1,200 professionals (public procurement practitioners and lawyers) involved in the procurement activity in 187 countries in 2019, showed that heavier procurement regulation was associated with greater efficiency outcomes in countries with lower quality public sectors, and with worse outcomes in countries with higher quality sectors. Another large-scale study of the public procurement system considering different views on public procurement efficiency is the PwC project based on a survey of 5,500 procurers and 1,800 suppliers (PwC, 2011). However, PwC experts evaluated only the level of competition during the tender procedures and the procurer's and suppliers' costs in these procedures.

The present paper presents results regarding the problems and (in)efficiency of Russian public procurement from the immediate participants' perspective (procurers and suppliers). It uses the same approach as the PwC study but applies it to more aspects of the public procurement system's functioning.

This study also includes an analysis of public procurement market participants' attitudes regarding the public procurement situation during the COVID-19 pandemic. The literature

comprises very few works analyzing public procurement in emergency situations. In this context, Schultz and Søreide (2008) mentioned the risks of increased corruption during emergencies and emphasized the importance of monitoring. Moreover, incompetence in resource management and excessive political interference may cause procurement inefficiency in emergency situations (Buor, 2019). Further, conducting public procedures on the open market without formal procedures in a situation of emergency shortens the timelines for the procurement of goods and services (Hurst et al., 2017). A recent study in Colombia showed that easing procurement rules in response to large negative shocks caused by the COVID-19 pandemic may increase corruption, and thus governments encouraging spending should, alongside relaxing contracting rules, use different accountability tools, such as monitoring and audits (Gallego et al., 2020). These large-scale surveys have not, however, examined the understanding of efficiency from the perspective of public procurement participants, especially their understanding of efficiency in emergency situations.

The procurement system in Russia

The Russian public procurement system is now regulated in accordance with Federal Law No. 44-FL "On the Contract System in the State and Municipal Procurement of Goods, Works and Services" (44-FL) that came into force on January 1, 2014. The main focus of regulation has traditionally been on fighting corruption, lowering prices, and ensuring procurement transparency. To achieve these goals, the entire procurement process is strictly regulated, including requirements for participants in procurement procedures, rules and procedures for their implementation, etc. However, the current legislation is not aimed at procurement's final results, i.e. meeting procurers' needs.

The main characteristics of public procurement in Russia [according to the latest data from the Russian Ministry of Finance (2020) and the Accounts Chamber of the Russian Federation (ACRF, 2020)] are as follows:

- In 2019, RUB 8.1 trillion (USD 109.9 billion) from budgets at all levels involved public procurement, which equals 7.4% of GDP.
- The central web-portal for public procurement (https://zakupki.gov.ru/) is the aggregator of public procurement information, and the key digital interaction between participants in the contracting system is carried out on private trading sites.

- The main public procurement methods in Russia are electronic open auctions (74% of all procurement notifications) and single sourcing (15%).
- The overall share of procurement from a single source and failed bids exceeds 54% of the total procurement volume. The prevalence of non-competitive procurement procedures is a system-wide problem in Russian procurement, negatively affecting procurement efficiency.
- An average of 3.12 bids were submitted per one lot in 2019. The number of suppliers has also decreased every year.
- Scheduled and unscheduled audits conducted by the regulatory authorities in 2019 detected violations in 39% of the checked procurement procedures.

Currently, the Russian public procurement law is 320 pages long, but regulators regularly introduce changes, tightening the already strict regulation and control over all participants' activity in the procurement process. Both procurers and suppliers therefore have to keep adjusting to new rules, which often leads to further ambiguity and questions. Excessive regulation makes the regulators themselves incapable of distinguishing opportunistic behavior from honest participants' informal activities aiming to ensure the supply of high-quality goods and guarantee contract delivery.

Data and methodology

This study is based on the results of an online survey of procurers and suppliers conducted from March to May 2020. The survey's main purpose was to identify Russian public procurement regulation problems from the perspectives of its immediate, key participants (procurers and suppliers). All sections of the questionnaire were discussed and agreed with public procurement practitioners, and the questionnaires were piloted with public procurement experts. The questionnaires were designed to take no more than 20 minutes to complete. Two questionnaires were created, one for procurers and one for suppliers, with mostly symmetrical questions, allowing subsequent comparison.

To generate the sample of respondents, public procurement participants' email addresses were obtained from the official public procurement website (www.zakupki.gov.ru). Procurers' email addresses were obtained for all executives mentioned in the procurement announcements from January 2017 to September 2019. Suppliers' email addresses were collected from the contract information cards for the same period. The final sample for mailing questionnaires comprised 94,500 procurers' email addresses of (who had placed at least five announcements

during the study period, including at least one in 2019) and 207,800 suppliers' email addresses (who had supplied at least three procurement contracts during the study period). The sample comprised therefore specialists from organizations and firms with sufficient experience in public procurement.

The survey was conducted in two stages. The first stage was conducted from March 17 to May 29, 2020 and coincided with the crisis caused by the spread of COVID-19, which could have impacted the number of respondents. Nevertheless, the first stage generated 434 completed questionnaires from procurers and 586 from suppliers. The second stage was conducted in Autumn 2020 to ascertain how participants evaluated the changes in public procurement regulation and practice during the COVID-19 pandemic. The questions used were similar to those in the first stage, but included an additional question regarding the frequency of the occurrence of various situations, both positive and negative, in respondents' practices during the COVID-19 pandemic. The second stage ran from September 28 to November 10, 2020. A total of 169 new questionnaires were received from procurers and 200 from suppliers. The total number of responses in the two stages was 603 procurers and 786 suppliers. No significant difference was registered in the sample structure of the two survey stages (see the Appendix).

Within the survey, suppliers' average experience of working with public contracts was nine years and for procurers it was eight years. Approximately 48% of procurers and 70% of suppliers had experience with complex procurement procedures (open tenders, limited tenders, two-stage tenders). Most procurers were women, whereas suppliers were predominantly men. Among procurers, our sample includes organizations of higher subordination compared to the population and, probably, more competent ones. The respondents of our survey are of municipal subordination in 45% of cases, regional – in 34% of cases, and federal - in 21% of cases. The population includes 59% of municipal, 26% of regional, and 15% of federal public bodies. With respect to the suppliers, the population includes 16% of individual entrepreneurship and sample includes 16% of them. That is the sample is well representative according to this characteristic. Among suppliers, 47% were located in regional centers and 19% in Moscow; 56% of procurers were located in small towns and villages. Among suppliers, 57% worked in companies with 20 or fewer employees, while most procurers worked in larger companies.[7]

[7] Among the procurers, 43% had 100 employees or more and 24% had 50–100 employees

Results

This section first analyzes what procures and suppliers perceive as public procurement efficiency in Russia and the main objectives of optimal public procurement regulation. It then explores the most frequent problems in public procurement practice and discusses the strategy of "predetermined choice" that procurers use to overcome them and achieve procurement efficiency. Finally, it uses the natural experiment generated by COVID-19 to analyze how assessments of public procurement efficiency have changed during the pandemic.

Public procurement efficiency

Based on existing approaches to the perceptions of public procurement efficiency, 12 different indicators of a successful procurement were identified, which were later proposed to the respondents (Table 1). The survey showed that results at the execution stage are the most important for public procurement participants of: 77% of procurers and 67% of suppliers believed that a successful procurement can be characterized as "A high-quality product was supplied" and 55% of procurers and 43% of suppliers cited "The contract was delivered on time" as the most important efficiency criterion." However, procurers value the supply stage more – the difference between shares of procurers and suppliers who have chosen the execution stage is significant.

Tab. 1. What do you think are the main indicators of an efficient procurement? (Choose no more than three options)

Indicator	*Procurers (%)*	*Suppliers (%)*	*Total (%)*	*Difference*
A high-quality product was supplied	77	67	71	.1***
The contract was delivered on time	55	43	48	.12***
The procurement was conducted through a competitive procedure	32	34	33	-.02
The procurement was conducted within the scheduled timelines	34	24	28	.1***
No conflict in the process of the contract delivery	18	30	25	-.12***
The market price level was achieved	12	33	24	-.21***

No claims from the regulators	21	13	16	.08***
High competition during the procurement	18	11	14	.07***
Considerable price rebate during the auction	19	5	11	.14***
The contract was awarded to a small business entity	3	16	10	-.13***
A domestic product was supplied	2	7	5	-.05***
The procurement was conducted in compliance with environmental requirements	1	1	1	0
Other	1	6	4	-.05***

*** p<0.01, ** p<0.05, * p<0.10

Note: The last column shows the difference between shares of procurers' and suppliers' who have chosen the corresponding answer. Stars correspond to p-value of the two-sided t-test.

Interestingly, the indicators traditionally regarded as elements of public procurement efficiency by the regulators (high competition and rebate during the auction) were perceived as important by very few respondents (18% and 19% of procurers and 11% and 5% of suppliers, respectively). Supplies of domestic products (2% of procurers' responses and 7% suppliers' responses) and compliance with environmental requirements (1% of procurers' and suppliers' responses) were seldom mentioned as indicators of procurement efficiency.

Thus, understanding of public procurement efficiency among the regulator and direct participants differs. To verify whether their positions on the goals of optimal public procurement regulation coincided, respondents were also asked what they thought these goals should be (Table 2). Procurement efficiency for a particular procurer and anti-corruption were the most frequent answers. Procurers valued procurement efficiency first (71%), while suppliers' main objectives for optimal procurement regulation was anti-corruption measures (54%). Nevertheless, suppliers also value the procurement efficiency for a particular procurer, as it is the second option for them (50%). National economic development was also recognized as an important priority (30% of procurers and 38% of suppliers).

Tab. 2. What do you think should be the objectives of optimal regulation of public procurement? (Choose no more than two options)

Objective	*Procurers (%)*	*Suppliers (%)*	*Total (%)*	*Difference*
Procurement efficiency for a particular procurer	71	50	59	.21***
Anti-corruption	44	54	49	-.1***
National economic development	30	38	34	-.08***
Regional development	24	28	26	-.04*
Social development	9	11	10	-.02
State policy priorities	5	3	4	.02*
National security	5	3	4	.02*
Other	2	4	3	-.02**

*** p<0.01, ** p<0.05, * p<0.10

Note: The last column shows the difference between shares of procurers' and suppliers' who have chosen the corresponding answer. Stars correspond to p-value of the two-sided t-test.

Respondents indicated in the "other" option: striking a balance between government entities' and business' interests; the possibility of developing entrepreneurship and small businesses; and simple, invariable rules for all participants in the procurement process. Respondents also discouraged excessive bureaucracy in the public procurement system and continuous changes to public procurement legislation.

Responses regarding what problems were most often encountered by public procurement participants helped not only to identify the public procurement system's main problems but also to reveal the true picture concerning public procurement efficiency and the achievement of optimal procurement regulation objectives. Respondents were offered a list of problems in public procurement performance and asked to assess the frequency of their occurrence (Table 3). The results (considering the aforementioned procurement efficiency indicators) were quite disappointing.

Tab. 3. Share of respondents describing as "frequently encountered" the following problems in the practice of public procurement

Problem	*Procurers (%)*	*Suppliers (%)*	*Total (%)*	*Difference*
Delivery of low-quality goods/works/services	60	61	60	-.01
Delaying procurement timelines	44	31	37	.13***
Unjustified additional procurer requirements	10	57	37	-.48***
Informal engagements between the procurer and the supplier	17	48	35	-.31***
Default on the deadlines for delivery of goods/works/services	48	24	34	.24***
Delaying the payment deadlines	16	45	32	-.29***
Collusion between suppliers	27	25	26	.02
Delaying the deadlines for work acceptance or signing acceptance certificates	12	33	24	-.21***
Conflict of interest between contractual parties	7	22	16	-.15***
Appealing procurement deliverables by suppliers	18	16	16	.02
Contract termination	15	7	10	.08***

*** p<0.01, ** p<0.05, * p<0.10

Note: The last column shows the difference between shares of procurers' and suppliers' who have chosen the corresponding answer. Stars correspond to p-value of the two-sided t-test.

Despite the tendency to blame other actors (e.g. when procurers complain about defaulting on delivery deadlines and suppliers find fault with additional requirements and delays in the acceptance or work and payment timelines), both groups agreed that the Russian public procurement system's most acute problem was the delivery of low-quality goods/works/services (60% of procurers and 61% of suppliers). The Russian public procurement legislation's outstanding problems were further confirmed as 48% of suppliers and 17% of procurers highlighted the frequently encountered problem of informal engagements between procurers and suppliers. Both groups acknowledged the problem of collusion between suppliers (27% of procurers and 25% of suppliers).

Almost half of procurers and 31% of suppliers mentioned the problem of delaying procurement timelines as "frequently encountered," and 57% of suppliers highlighted unjustified additional procurer requirements. Many respondents complained of the contradictory and ambiguous legal requirements. Thus, respondents' assessments indicate inefficiency in the public procurement system. The main problems for direct participants are precisely those they chose as the main indicators of public procurement efficiency.

The practice of contracting predetermined suppliers

To ensure efficient procurement and reduce the risks of poor-quality supplies and non-fulfillment of contracts in the context of excessively rigid and unclear regulation, procurers often turn to informal practices, e.g. "predetermined choice" (when the procurer chooses the supplier before the tender procedures are conducted). To ascertain how widespread this practice is, the question "Considering your professional contacts with your colleagues, what is your estimation of the approximate share of procurers practicing predetermined suppliers' contracting in 2018–2010?" was asked. Although this practice contradicts effective procurement legislation, the survey revealed its widespread use by both groups (see Table 4). On average, suppliers estimated that it is used by 52% of organizations conducting public procurement, while the figure for procurers was 38%; only 2% of procurers and 1% of suppliers did not answer this question. The possible explanation is that both procurers and suppliers do not fear admitting to practicing "predetermined choice," which highlights that it is not punishable (one respondent wrote: "everyone knows about it, but no one will do anything").

Tab. 4. Share of procurers resorting to the strategy of concluding contracts (agreements) with predetermined suppliers in 2018–2019.

Share of procurers	*Procurers (%)*	*Suppliers (%)*	*Total (%)*	*Difference*
0–10%	24	9	16	.15***
11–20%	13	8	10	.05***
21–30%	11	12	12	-.01
31–40%	6	7	7	-.01
41–50%	13	9	10	.04**
51–60%	8	11	10	-.03*
61–70%	8	9	9	-.01

71–80%	9	15	12	-.06***
81–90%	6	14	10	-.08***
91–100%	2	6	4	-.04***
Average assessment (for respondents)	38	52	46	

*** p<0.01, ** p<0.05, * p<0.10
Note: The last column shows the difference between shares of procurers' and suppliers' who have chosen the corresponding answer. Stars correspond to p-value of the two-sided t-test.

To understand why so many customers and even suppliers adhere to this strategy, a question regarding the reasons for the strategy of contracting predetermined suppliers was included. The answers to this question showed that many suppliers accept the strategy of "predetermined choice" and even support it. Procurers' key reasons for using this strategy in both surveys were related to attempts to ensure the supply of high-quality goods and guaranteed contract delivery (see Table 5), i.e. those indicators that procurers and suppliers consider the main indicators of public procurement efficiency. Overall, 58% of suppliers admitted that the "predetermined choice" strategy is underpinned by the desire to ensure the supply of high-quality goods and 61% stated that it is done to secure guaranteed contract delivery. Further, 55% of suppliers mentioned the existence of informal engagements between procurers and suppliers as an important reason for "predetermined choice."

Tab. 5. Share of respondents mentioning the following reasons as the most significant for procurers using the strategy of concluding contracts (agreements) with predetermined suppliers (respondents could choose no more than three options)**.**

Reason	*Procurers (%)*	*Suppliers (%)*	*Total (%)*	*Difference*
Desire to secure guaranteed contract delivery	86	61	71	.25***
Desire to ensure delivery of high-quality goods	85	58	70	.27***
Informal engagements with suppliers	12	55	36	-.43***
Attempt to avoid dump prices	20	23	22	-.03
Imperfect approaches to requirements and bid assessment criteria	18	22	21	-.04*

Lack of competition from other honest suppliers for the needed goods/works/ services	25	15	19	.1***
Instructions/recommendations of superior authorities	14	20	18	-.06***
Other	1	5	4	-.04***

*** p<0.01, ** p<0.05, * p<0.10
Note: The last column shows the difference between shares of procurers' and suppliers' who have chosen the corresponding answer. Stars correspond to p-value of the two-sided t-test.

Despite continuous attempts to improve public procurement legislation, the share of suppliers naming "imperfection of the established approaches to bid evaluation criteria and requirements" among the reasons for the "predetermined choice" strategy was quite significant (22%). In the "other" option, many respondents also mentioned corruption and shadow paybacks and procurers' laziness and reluctance to build new connections and seek alternative suppliers for fear of a blind bargain.

The findings indicate the growth of problems in the public procurement system and also demonstrate that the existing system of regulation actually ousts honest players into the "gray" zone, where they find themselves forced to violate formal rules to ensure efficient procurement results. This leads to more breaches being detected during regulatory audits and the subsequent imposition of fines. Specifically, among 81% of procurers, who told about audits conducted by regulators in 2018–2019, 54% stated that these audits revealed violations, and 34% stated that fines had to be paid. Nevertheless, the above data show that such intensity of control has no impact whatsoever on procurement quality.

Public procurement in the emergency setting of the COVID-19 pandemic

The spread of COVID-19 in Russia has been recognized as a *force majeure* by the government. On April 24, 2020, Russian President Vladimir Putin signed a Federal Law softening public procurement requirements for the remainder of 2020. Additionally, cases and procedures for emergency public procurement from a single-source supplier were approved until the end of 2020.

Given these measures, a simplification of the procurement procedure and mitigation of regulatory control was expected during the second stage of the survey. It was also assumed that

the entire situation caused by the current crisis could improve the public procurement system's efficiency due to the need for the prompt and high-quality supply of required goods/works/services.

To test this assumption, a question concerning the different situations that respondents encountered most often during the COVID-19 pandemic (from March to September 2020) was included. These assumptions, however, were not confirmed (Table 6). Most procurers and suppliers (46% and 56%, respectively) mentioned the postponement of procurement procedures and defaulting on contract execution deadlines (43% and 49%, respectively) despite the fact that procurement was at that time an important factor supporting economic demand. Moreover, both groups complained of a lack of clarity in applying new legislative provisions in an emergency setting. Finally, 43% of procurers expressed concern over price increases in procurement during the COVID-19 pandemic.

Very few respondents mentioned positive changes introduced by the new public procurement regulations (only 20% of procurers and 17% of suppliers selected at least one positive situation). For example, simplification of procurement procedures, which was one of the main purposes of the amendments introduced, was cited by only 13% of procurers and 7% of suppliers, and the loosening of government control and faster receipt of government funds to procurers/government support was mentioned extremely rarely, both by procurers and suppliers.

Regarding the other questions, no significant changes were observed (see the Appendix). Procurement efficiency was again characterized as low, and the main public procurement problems were still acute. Suppliers' responses in the second stage were practically the same as those in the first stage.

Tab. 6. Which of the following situations did you encounter most often in your activities during the COVID-19 pandemic (from March to September 2020)? (Choose no more than three options)

Situation	*Procurers (%)*	*Suppliers (%)*	*Total (%)*	*Difference*
Postponement of procurement procedures	46	56	51	-.1*
Lack of clarity in applying new legal provisions in an emergency setting	47	29	48	.18***
Default on the contract execution	43	49	46	-.06

deadlines				
Increase in the number of noncompetitive procurement procedures	33	27	30	.06
Growth of procurement prices	43	13	27	.3
Increase in the number of conflicts during contract (agreement) delivery	14	20	17	-.06
Simplification of procurement procedures	13	7	10	.06*
Faster receipt of government funds to procurers/government support	7	7	7	0
Loosening of government control	2	6	4	-.04*

*** p<0.01, ** p<0.05, * p<0.10

Note: The last column shows the difference between shares of procurers' and suppliers' who have chosen the corresponding answer. Stars correspond to p-value of the two-sided t-test.

Therefore, despite the legislative initiatives, the survey results show that participants' experience of the public procurement system in the current year was rather negative. One possible explanation for this is the bias of the sample of suppliers toward small businesses, which were hit harder than everyone else by the recent situation. Simultaneously, in the opinion of regulators, in a situation of a dramatic fall in demand and an economic crisis, public procurement should be one of the ways of mitigating plummeting economic demand and one of the tools for supporting small and medium business. However, procurers' right to make procurements from a single-source supplier was extended in Russia until the end of 2020, potentially leading to a decrease in the level of competition during auctions, first of all, among small companies, many of which could not run their businesses due to lockdown.

Conclusion and recommendations

This paper has studied the perception of public procurement efficiency from the perspective of procurers and suppliers, based on a survey conducted in Russia in 2020. One of the objective limitations of the survey data used is their type (cross-sectional) and respondents' subjective assessments. The limitations also include the small size of the sample and its bias towards more experienced respondents. However, the limitation regarding the number of contracts was introduced to ensure qualified respondents in the sample who, due to their

experience and competencies, could effectively assess public procurement system issues. Traditionally, the limitations of online surveys include the bias towards respondents with Internet access; however, as all public procurement procedures in Russia are carried out electronically, this was not a limitation.

Respondents saw the main goals of optimal procurement regulation as "efficiency of procurement for a particular procurer" and "anti-corruption." However, the responses to other questions showed that these goals remained unachieved. While respondents considered the supply of high-quality goods and timely contract delivery as the main criteria for procurement efficiency, the most frequently named problem in the Russian public procurement system was the supply of low-quality goods/works/services.

Based on the responses, one of the most widely used ways of overcoming this problem is the strategy of "predetermined choice" (when the procurer chooses the supplier before conducting the procurement procedure). Moreover, both procurers and suppliers acknowledged that the choice of this strategy by the procurer is often caused by the need to ensure the supply of high-quality products and guaranteed contract delivery. Against this backdrop, procurement participants' good- and bad-faith actions become practically undistinguishable. Thus, strict regulatory control does not help solve the problems encountered by procurers.

The survey findings overall match the procurers' and suppliers' opinions in other developing countries. For example, in Slovakia, as in Russia, frequent legislative amendments have been introduced, leading to excessive transaction costs, while the problem of corruption and unethical conduct in public procurement remains (Grega et al., 2019). According to the results of another survey, 84% of 300 Slovakian firms admitted that the practice of preparing customized public contracts for a predetermined supplier is widespread (Eurobarometer, 2014). In the Czech Republic, 57% of suppliers participating in public procurement admitted that over half of public procurements are subjected to many types of manipulations; over one-third of respondents named favoritism and corruption as the main reasons for such manipulation of public contracts (OTIDEA, 2016).

The survey findings indicated inconsistency among the procurement efficiency criteria used by procurers and suppliers in their everyday activities and the goals on which the entire procurement regulation system is currently focused. The results suggest that, despite the importance of fighting corruption and increasing competition, procurement regulation should primarily be aimed at ensuring the ultimate efficiency, in the form of high-quality goods/works/services and the timely execution of contracts.

The COVID-19 pandemic has effectively put public procurement regulation efficiency on trial. The need for emergency treatment has forced regulators to allow the simplification of procurement procedures to expedite delivery. However, recent experience in various countries, including Russia, have shown that, while emergency procurement procedures are necessary for prompt response, they also pose significant risks to efficiency. Based on the survey findings, despite legislative measures reducing the rigidity of public procurement procedures, most respondents cited only the new regulation's negative effects. Overall, their perceptions of procurement efficiency compared to the "pre-lockdown" period have not improved, which can be explained by the Russian public procurement regulation's lack of clarity.

Despite dissatisfaction with the existing procurement regulation system, most procurers and suppliers perceive the public contract as a significant and quite sustainable financial resource, and they are interested in open access to this market. However, there is presently no procurers' or suppliers' organization in the public procurement sphere to represent their interests in dialogue with regulators, capable of voicing and promoting their proposals regarding procurement system changes. There are also no efficient mechanisms to regularly monitor the perspectives and assessments of direct participants in the procurement process. Meanwhile, such consideration of the market players' preferences and development of effective incentives for contract delivery therefore remain an outstanding problem in developing the public procurement system.

Regulatory changes should be clear and understandable to all public procurement participants, should not be excessively rigid, and should not generate additional costs. A reasonable option would be to use the Regulatory Impact Assessment's (RIA) procedures used in international practice during regulatory changes for private business.[8] The spread of RIA to public sector organizations would make it possible to improve the quality of regulation by striking the necessary balance between the interests of the regulators, procurers, and suppliers, whose functions include the production of public goods and the provision of social services to the population. The introduction of RIA procedures would help to avoid problems of regulations' excessive rigidity and lack of clarity, ultimately ensuring greater public procurement efficiency based on understanding the needs of the regulator and public procurement participants.

[8] In Russia, RIA procedures have been used since 2010 to evaluate the drafts of the new federal regulations governing enterprises' activities. However, no such mechanism exists in the public sector

References

Accounts Chamber of the Russian Federation (ACRF) (2020). *Report on the results of the expert and analytical event "Monitoring the development of the system of public and corporate procurement in the Russian Federation in 2019"* [in Russian]. ACRF.

Baldi, S., & Vannoni, D. (2017). The impact of centralization on pharmaceutical procurement prices: The role of institutional quality and corruption. *Regional Studies, 51*(3), 426–438.

Bawole, J. N., & Adjei-Bamfo, P. (2020). Public procurement and public financial management in Africa: Dynamics and influences. *Public Organization Review, 20*(2), 301–318.

Besley, T. (2006). *Principled agents? The political economy of good government*. Oxford University Press.

Boas, T. C., Hidalgo, F. D., & Richardson, N. P. (2014). The spoils of victory: Campaign donations and government contracts in Brazil. *The Journal of Politics, 76*(2), 415–429.

Bosio, E., Djankov, S., Glaeser, E. L., & Shleifer, A. (2020). *Public procurement in law and practice* (No. w27188). National Bureau of Economic Research.

Bovis, C. (2012). *EU public procurement law*. Edward Elgar.

Buor, J. K. (2019). Appraising the interactions between public-sector procurement policy and disaster preparedness. *International Journal of Disaster Risk Reduction, 36*, e101120.

Russian Ministry of Finance (2020). *Consolidated analytical report on the results of monitoring purchases, goods, services to meet state and municipal needs in accordance with Federal Law No. 44-FZ dated 05.04.2013 by the end of 2019* [in Russian]. Russian Ministry of Finance.

Coviello, D., & Gagliarducci, S. (2017). Tenure in office and public procurement. *American Economic Journal: Economic Policy, 9*(3), 59–105.

Coviello, D., & Mariniello, M. (2014). Publicity requirements in public procurement: Evidence from a regression discontinuity design. *Journal of Public Economics, 109*, 76–100.

Coviello, D., Moretti, L., Spagnolo, G., & Valbonesi, P. (2018). Court efficiency and procurement performance. *The Scandinavian Journal of Economics, 120*(3), 826–858.

De Silva, D. G., Kosmopoulou, G., & Lamarche, C. (2009). The effect of information on the bidding and survival of entrants in procurement auctions. *Journal of Public Economics, 93*, 56–72.

Detkova, P., Podkolzina, E., & Tkachenko, A. (2018). Corruption, centralization and competition: Evidence from Russian public procurement. *International Journal of Public Administration, 41*(5/6), 414–434.

Di Tella, R., & Schargrodsky, E. (2003). The role of wages and auditing during a crackdown on corruption in the city of Buenos Aires. *Journal of Law and Economics, 46*(1), 269–292.

Eurobarometer (2014). *Businesses' attitudes towards corruption in the EU* (Survey Flash Eurobarometer 374). https://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_374_en.pdf

European Commission (2015). *The EU Single Market: Single Market Scoreboard*, http://ec.europa.eu/internal_market/scoreboard/performance_per_policy_area/public_procurement/index_en.html

Folliot Lalliot, L., & Yukins, C. R. (2020). COVID-19: Lessons learned in public procurement. Time for a new normal? *Concurrences, 3*, 46-58.

Gallego, J. A., Prem, M., & Vargas, J. F. (2020). Corruption in the times of pandemia. SSRN. https://doi.org/10.2139/ssrn.3600572 3600572

Goldman, E., Rocholl, J., & So, J. (2013). Politically connected boards of directors and the allocation of procurement contracts. *Review of Finance, 17*(5), 1–32.

Guccio, C., Lisi, D., & Rizzo, I. (2019). When the purchasing officer looks the other way: On the waste effects of debauched local environment in public works execution. *Economics of Governance, 20*(3), 205–236.

Guccio, C., Pignataro, G., & Rizzo, I. (2014). Do local governments do it better? Analysis of time performance in the execution of public works. *European Journal of Political Economy, 34*, 237–252.

Grega, M., Orviska, M., Nemec, J., Lawson, C. (2019). Factors determining the efficiency of Slovak public procurement. *NISPAcee Journal of Public Administration and Policy, 12*(1), 43–68.

Hurst, D., Sharpe, S., & Yeager, V. A. (2017). Administrative preparedness strategies: Expediting procurement and contracting cycle times during an emergency. *Public Health Reports, 132*(3), 294–297.

Ibrahim, M., Bawole, J. N., Obuobisa-Darko, T., Abubakar, A. B., & Kumasey, A. S. (2017). The legal regime and the compliance façade in public procurement in Ghana. *International Journal of Public Sector Management, 30*(4), 370-390.

Kacandolli-Gjonbalaj, D., Shiroka-Pula, J., Berisha-Shaqiri, A., Osmani, M. (2018). The efficiency of public procurement in the Republic of Kosovo: An econometric approach. *Ekonomika (Economics), 97*(2), 70–90.

Lacetera, N., Larsen, B. J., Pope, D. G., & Sydnor, J. R. (2016). Bid takers or market makers? The effect of auctioneers on auction outcome. *American Economic Journal: Microeconomics, 8*(4), 195–229.

Lengwiler, Y., & Wolfstetter, E. (2006). *Corruption in procurement auctions* (Governance and the Efficiency of Economic Systems, Discussions Paper No. 90, January). www.sfbtr15.de/dipa/90.pdf

Mironov, M., & Zhuravskaya, E. (2016). Corruption in procurement and the political cycle in tunneling: Evidence from financial transactions data. *American Economic Journal: Economic Policy, 8*(2), 287–321.

Moszoro, M., Spiller, P. T., & Stolorz, S. (2016). Rigidity of public contracts. *Journal of Empirical Legal Studies, 13*(3), 396–427.

Milosavljević, M., Dobrota, M., & Milanović, N. (2019). A New Approach to the Evaluation of Public Procurement Efficiency among European Countries. *European Review*, 27(2), 246–259.

Neupane, A., Soar, J., & Vaidya, K. (2014). An empirical evaluation of the potential of public E-procurement to reduce corruption. *Australasian Journal of Information Systems, 21*, 21–44.

OECD (2011). *Public procurement in the EU: Legislative framework, basic principles and institutions*. OECD Publishing.

OECD (2016). *Brief 21: public procurement: performance measurement*. www.sigmaweb.org/publications/Public-Procurement-Policy-Brief-21-200117.pdf

OECD (2017). *Size of public procurement* (Government at a Glance 2017). OECD Publishing.

OECD (2020). *Stocktaking report on immediate public procurement and infrastructure responses to COVID-19*. http://www.oecd.org/coronavirus/policy-responses/stocktaking-report-on-immediate-public-procurement-and-infrastructure-responses-to-covid-19-248d0646/

OTIDEA (2016). *Public procurement 2010–2015: Expert Report mapping the area of public procurement in the Czech Republic*. OTIDEA.

Patil, K. (2017). Public procurement policy for small and medium enterprises in developing countries. *International Journal of Public Sector Management, 30*(4), 391–410.

Plaček, M., Nemec, J., Ochrana, F., Schmidt, M., & Půček, M. (2020a). Analysis of factors of overpricing in public procurement: A study for low-performing EU countries. *International Journal of Public Administration, 43*(4), 350–360.

Plaček, M., Nemec, J., Pucek J. M., Ochrana, F., & Schmidt, M. (2020b). The factors causing delays in public procurement: The Czech Republic versus the UK. *Public Money & Management, 40*(2), 131–139.

PwC (2011). *Public procurement in Europe: Cost and effectiveness. A study on procurement regulation prepared for the European Commission*. Publications Office of the EU.

Rose-Ackerman, S. (1999). *Corruption and government: Causes, consequences, and reform*. Cambridge University Press.

Sanchez-Graells, A. (2020). Procurement in the time of COVID-19. *Northern Ireland Legal Quarterly, 71*(1), 81–87.

Schultz, J., & Søreide, T. (2008). Corruption in emergency procurement. *Disasters, 32*(4), 516–536.

Titl, V., & Geys, B. (2019). Political donations and the allocation of public procurement contracts. *European Economic Review, 111*, 443–458.

Tkachenko, A., & Esaulov, D. (2020). Autocratic governors in public procurement. *European Journal of Political Economy, 61*, e101825.

Tkachenko, A., Yakovlev, A., & Rodionova, Y. (2018). Organizational forms and incentives in public procurement: Natural experiment at a large public sector organization in Russia. *International Journal of Public Administration, 41*(14), 1157–1168.

Transparency International (2011). *E-procurement reduces opportunities for corruption and bribery*. Transparency International.

UNCITRAL (2011). *Model law on public procurement.* http://uncitral.org/uncitral/uncitral_texts/procurement_infrastructure.html

World Bank Group (2016). *Benchmarking public procurement 2016: Assessing public procurement systems in 77 economies*. World Bank Group.

Warren, P. L. (2014). Contracting officer workload, incomplete contracting, and contractual terms. *The RAND Journal of Economics, 45*(2), 395–421.

Yakovlev A., O. Balaeva, & Tkachenko A. (2018). Estimation of procurement costs incurred by public customers: a case study of a Russian region. *Journal of Public Procurement, 18*(1), 68–87.

Tab. 1A. The sample structure of the two survey stages (Suppliers)

Characteristics	*Description*	*1st stage*	*2nd stage*
Gender	1 – Male, 0 – Female (mean)	0,6	0,6
Age	In years (mean)	42,7	43,1
Procurement experience	In years (mean)	9,2	9,3
Experience with complex procurement procedures	1 – Yes, 0 – No (mean)	0,7	0,7
Position	Specialist (manager) (%)	20,4	24,8
	Division head (%)	22,0	24,8
	Department head/ deputy CEO (%)	57,6	50,4
Size	Micro-enterprise (%)	66,2	61,6
	Small enterprise (%)	20,6	22,1
	Medium and big enterprise (%)	13,2	16,3
Contracts	Annual average in million RUB in 2018-2019 (mean)	18,1	18,7

Source: *drawn up by the authors*

Tab. 2A. The sample structure of the two survey stages (Procurers)

Characteristics	*Description*	*1st stage*	*2nd stage*
Gender	1 – Male, 0 – Female (mean)	0,3	0,3
Age	In years (mean)	42,0	41,7
Procurement experience	In years (mean)	8,0	8,1
Experience with complex procurement procedures	1 – Yes, 0 – No (mean)	0,5	0,5
Position	Specialist (manager) (%)	41,6	47,6
	Division head (%)	35,3	31,2
	Department head/ deputy CEO (%)	23,1	21,2
Subordination level	Federal (%)	21,1	20,9
	Reginal (%)	33,3	34,5
	Municipal (%)	45,6	44,6
Contracts	Annual average in million RUB in 2018-2019 (mean)	20,6	18,3

Source: *drawn up by the authors*

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