T I E S Ī B Z I N Ā T N E

Anatolijs Kriviņš

CHANGES OF THE CORRUPTION LEVEL
IN PUBLIC PROCUREMENT IN LATVIA

The problem of corruption in public procurement is a significant and urgent problem all over the world. To look for possible ways to solve this problem, first of all, it is necessary to measure the level of corruption is in a particular area. Since corruption is a latent phenomenon, it is not advisable to rely solely on official statistics. On the contrary, surveys of public procurement participants (suppliers) provide interesting and useful data. For the first time in 2012, the author tested a methodology developed specifically for this purpose, when responses from 100 respondents, who have participated in public procurement in Latvia, were received. In August 2021, based on the same methodology, the author conducted a topical study. The data obtained (responses from 102 respondents) allow not only to assess in more detail the current level of corruption in the public procurement, but also to trace its dynamics. The aim of the article is a comparative dynamic analysis of the assessments of corruption in public procurement by entrepreneurs participated in this process. In August 2021, the respondents' sample was formed by using the free access information at the home page of the Procurement Monitoring Bureau and home pages of the commissioning parties. One of the latest technologies for conducting the research – the on-line survey (on-line mode) was applied in order to find out the opinions of the entrepreneurs. During ten years (2012–2021) there have been practically no changes in the number of those respondents who believe corruption level in Latvian public procurement is medium: if in 2012 such responses were provided by 33% of respondents, then in 2021 – by 30.4%. At the same time, it should be admitted that there is a rather rapid increase (from 43% to 57.8%) in the number of those respondents who believe that corruption in Latvian public procurement is high or very high. In 2021, the obtained data show that 93.1% of the interviewed entrepreneurs had an impression that the commissioning party has been influenced by another applicant (81% in 2012). There remain less and less such respondents, who believe that no political influence is exerted upon public procurement in Latvia. For ten years this indicator decreased from 4% to 2%. It is a positive fact to note that during ten years we see a considerable increase (from 45% to 64.7%) in the numbers of such respondents who not ready to offer any illegal benefits to the commissioning party, if such an action would allow becoming the winner of the public procurement.

Key words: corruption, public procurement, bribe, political influence, Latvia.

Korupcijas līmeņa izmaiņas publiskajos iepirkumos Latvijā

Korupcijas problēma publiskajos iepirkumos ir nozīmīga un aktuāla problēma visā pasaulē. Lai meklētu problēmas iespējamos risinājumus, pirmkārt, ir jāsaprot, cik augsts ir korupcijas līmenis konkrētajā sfērā. Ņemot vērā to, ka korupcija ir latenta parādība, nebūtu lietderīgi paļauties vienīgi uz oficiālo statistiku. Turpretī, publiskā iepirkuma dalībnieku (piegādātāju) aptaujas sniedz interesantus un noderīgus datus. Pirmo reizi 2012. gadā autors aprobēja speciāli šim nolūkam izstrādātu metodiku, kad tika saņemtas 100 respondentu, kuri ir piedalījušies publiskajos iepirkumos Latvijā, atbildes. 2021. gada augustā, pamatojoties uz to pašu metodiku, autors veica aktuālu pētījumu. Iegūtie dati (102 respondentu atbildes) ļauj ne tikai detalizētāk aplēst pašreizējo korupcijas līmeni publisko iepirkumu sfērā, bet arī novērot minētā līmeņa dinamiku. Raksta mērķis ir uzņēmēju, kuri piedalās publiskajos iepirkumos Latvijā, sniegto viedokļu par korupcijas līmeni šajā sfērā, salīdzinoša dinamiska analīze. 2021. gada augustā respondentu izlase tika izveidota, izmantojot bezmaksas piekļuves informāciju Iepirkumu uzraudzības biroja mājas lapā un pasūtītāju mājas lapās. Lai uzzinātu uzņēmēju viedokli, tika izmantota viena no jaunākajām pētījuma veikšanas tehnoloģijām – tiešsaistes aptauja. Desmit gadu laikā (no 2012. gada līdz 2021. gadam) praktiski nav notikušas izmaiņas to respondentu skaitā, kuri uzskata, ka korupcijas līmenis Latvijas publiskajos iepirkumos ir vidējs – ja 2012. gadā šādu atbildi sniedza 33% respondentu, tad 2021. gadā – 30.4% respondentu. Vienlaikus jāatzīst, ka diezgan strauji (no 43% 2012. gadā līdz 57.8% 2021. gadā) pieauga to respondentu skaits, kuri uzskata, ka korupcija Latvijas publiskajos iepirkumos ir augsta vai ļoti augsta. 2021. gadā iegūtie dati liecina, ka 93.1% aptaujāto uzņēmēju radās iespaids, ka pasūtītāju ietekmējis cits pretendents (2012. gadā šāds iespaids bija 81% respondentu). Aizvien mazāk paliek tādu respondentu, kuri uzskata, ka Latvijā publiskie iepirkumi netiek politiski ietekmēti – desmit gadu laikā šis rādītājs ir samazinājies no 4% līdz 2%. Pozitīvs fakts, ka desmit gadu laikā mēs redzam ievērojamu pieaugumu (no 45% līdz 64.7%) to respondentu skaitā, kuri nav gatavi piedāvāt pasūtītājam kādus nelikumīgus labumus, ja šāda rīcība pat ļautu uzvarēt publiskajā iepirkumā.

Atslēgas vārdi: korupcija, publiskais iepirkums, kukulis, politiskā ietekme, Latvija.

Изменения уровня коррупции в публичных закупках в Латвии

Проблема коррупции в публичных закупках — серьёзная и актуальная проблема во всём мире. Для того, чтобы искать возможные пути решения этой проблемы, прежде всего необходимо понимать, насколько высок уровень коррупции в конкретной, отдельно взятой сфере. Поскольку коррупция является латентным явлением, опираться исключительно на данные официальной статистики не представляется целесообразным, а вот опросы самих участников публичных закупок (поставщиков) дают возможность получить интересные и полезные данные. Впервые в 2012 году автор апробировал методику, разработанную специально для этой цели, когда были получены ответы 100 респондентов, участвовавших в публичных закупках в Латвии. В августе 2021 года на основе той же методики автор провёл повторное исследование. Полученные данные (ответы 102 респондентов) позволяют не только более детально оценить нынешний уровень коррупции в сфере публичных закупок, но и проследить его динамику. Целью данной статьи является сравнительный динамический анализ оценок коррупции в публичных закупках в Латвии со стороны предпринимателей, участвующих в них. В августе 2021 года выборка опрашиваемых была сформирована на основе информации, находящейся в свободном доступе на домашней странице Бюро по надзору за закупками и на домашних страницах заказчиков. Для выяснения мнения предпринимателей применялась одна из новейших технологий проведения исследования — онлайн-опрос. За десять лет (2012—2021 годы) практически не изменилось количество респондентов, считающих, что уровень коррупции в публичных закупках в Латвии латвийских — средний (если в 2012 году такой ответ дали 33% респондентов, то в 2021 году —

30.4%). В то же время следует признать, что наблюдается заметный рост (с 43% в 2012 году до 57.8% в 2021 году) доли тех респондентов, которые считают, что уровень коррупции в публичных закупках в Латвии высок или очень высок. Полученные данные показывают, что в 2021 году у 93.1% опрошенных предпринимателей сложилось впечатление, что заказчик находился под влиянием другого претендента (в 2012 году этот показатель был равен 81%). Всё меньше остаётся таких респондентов, которые считают, что публичные закупки в Латвии не находятся под политическим влиянием. За десять лет этот показатель снизился с 4% до 2%. Следует отметить, что через десять лет после первого исследования наблюдается значительный рост (с 45% до 64.7%) доли тех респондентов, которые не готовы предложить заказчику какие-либо незаконные выгоды, даже если бы это позволило стать победителем публичной закупки.

Ключевые слова: коррупция, публичные закупки, взятка, политическое влияние, Латвия.

Introduction

The problem of corruption as such has always been on the list of international, global problems (e.g. World Bank 2021). It should be noted that the corruption threat affect all the world continents, and the problem of minimizing this threat is urgent in many countries and the world's regions: USA (Al-Hadi et al. 2021; Choudhury 2021), European Union (Vilks 2017; Bauhr, Charron 2020; Angelis et al. 2020; Feruni et al. 2020; Jaggi et al. 2021, Australia (Bleakley 2021), Brazil (Britto, Fiorin 2020; Saad-Filho, Boffo 2021), India (Chowdhury 2019; Mohammad, Husted 2021), Canada (Devlin, Frame 2019), Russia (Kazachkova, Kozlova 2020; Pavlova 2020), China (Kong et al. 2021; Ren et al. 2021) and others.

The problem of corruption has not lost its topicality also today. Several useful scientific articles regarding these problems have been published in 2021, such as: "Measuring corruption: a critical analysis of the existing datasets and their suitability for diachronic transnational research" (Bello, Villarino 2021), "Is a corruption crackdown really good for the economy? Firm-level evidence from China" (Chen et al. 2021), "Political corruption cycles in democracies and autocracies: evidence from microdata on extortion in West Africa" (Cooper 2021), "Campaign contributions, independent expenditures, and the appearance of corruption: public opinion vs. the supreme court's assumptions" (Debell, Iyengar 2021), "The impact of corruption and rent-seeking behavior upon economic wealth in the european union from a public choice approach" (Dinca et al. 2021), "Illegal drugs and public corruption: crack based evidence from California" (Flamini et al. 2021), "Corruption and cheating: evidence from rural Thailand" (Hubler et al. 2021), "Combatting corruption and collusion in UK public procurement: proposals for post-brexit reform" (Jones 2021), "Corruption and support for decentralization" (Kuhn, Pardos-Prado 2021), "Public corruption and pension underfunding in the American states" (Liu et al. 2021), "Criminal sanctions for the abuse of authority in corruption cases based on the values of justice and dignity: a comparative study of the fight against corruption in Indonesia and Japan" (Mandasari 2021), "Corruption consolidation in local governments: a grounded analytical framework" (Meza, Perez-Chiques 2021), "Public sector reforms and their

impact on the level of corruption: a systematic review" (Mugellini et al. 2021), "Experts and questions: exploring perceptions of corruption" (Pinkova, Jusko 2021), "Coercive pressures and anti-corruption reporting: the case of ASEAN countries" (Sari et al. 2021), "Corruption and whistleblowing: Beccaria and Montesquieu on secret crimes and secret accusations" (Sparling 2021).

In addition to this we must acknowledge that one of the most significant fields where the problem of corruption is particularly topical is the field of public procurement, for example opportunities for prevention of corruption in public procurement in electricity distribution companies (Anguelov 2019); combating corruption in the procurement by the press (Arifin et al. 2018); anti-corruption in aid-funded procurement (David-Barrett, Fazekas 2020); an analysis of favoritism in public procurement (David-Barrett, Fazekas 2020); to bribe or not in a procurement auction (Fan et al. 2021); a dynamic performance management approach to frame corruption in public procurement (Gnoffo 2021); competition in public procurement in the fight against corruption (Psota et al. 2020); data analysis for corruption indications on procurement of goods and services (Purwanto, Emanuel 2020); mapping corruption risks in public procurement (Sharma et al. 2019); quality manipulation and limit corruption in competitive procurement (Wang 2020); prototyping a smart contract based public procurement to fight corruption (Weingartner et al. 2021).

Research is also published that partly deals with corruption in Latvia. For instance, Corruption Perceptions Index by Transparency International (Transparency International 2020), research on corruption prevention at sector level in Eastern Europe and Central Asia (ACN (Anti-Corruption Network for Eastern Europe and Central Asia) 2017). However, none of these studies is devoted specifically to corruption in public procurement in Latvia. For example, in the presentation about large-scale study "Attitude towards corruption in Latvia" (Latv.: *Attieksme pret korupciju Latvijā*) (February 2021), out of 81 slides, only 9 slides can be attributed to the topic of corruption in public procurement (Korupcijas noversanas un apkarosanas birojs 2021). Furthermore, according to the survey, only 38% of the interviewed entrepreneurs participated in public procurement over the past 2 years (Korupcijas noversanas un apkarosanas birojs 2021). In turn, the research presented in this article is entirely devoted to a separate, special topic – corruption in public procurement in Latvia.

The aim of this study is a comparative dynamic (diachronous) analysis of the assessments of corruption in public procurement in Latvia by entrepreneurs involved in this process. The study reveals whether the perception of the level of corruption in public procurement has changed – how much the opinion of entrepreneurs today differs from what was measured 10 years ago. Based on the data obtained, it is possible to judge whether the situation in public procurement in Latvia has improved or worsened in the area of combating corruption.

In this article, the author presents the obtained factual material, which allows not only to assess in more detail the current level of corruption in the public procurement, but also to trace its dynamics. The main goal is to identify the level of the problem and provide up-to-date statistical material that can be used by both other researchers and representatives of the public sector – for example, parliamentarians and employees of the Corruption Prevention and Combating Bureau.

The novelty of the research mainly lies in three aspects. Firstly, for the research the author has chosen a specific topic of national importance, to which insufficient attention is paid – in Latvia there are no studies of this kind. Secondly, for the study, only those entrepreneurs were selected who relatively recently actually participated in public procurement in Latvia. Thirdly, the novelty of the study consists in comparing the results in the context of a ten-year period from 2012 to 2021. It should be noted that the main idea of the article is only a generalization and the most neutral presentation of the results obtained. In turn, carrying out a detailed analysis of the data obtained is not included in the scope of this article, because the work was carried out not on the basis of a hypothesis, but on the basis of research questions. Research methods are described in the next section of the article.

Methodology and data

In modern science the question on how to lower the level of corruption has been solved to large extent, yet determining the corruption level still remains a considerable challenge when regarded from the methodological point of view.

It is known that it is very difficult to empirically measure the level of corruption in public procurement, let alone the change in the level of corruption in public procurement over time. Interesting conclusions in this aspect are presented in the report "Identifying and Reducing Corruption in Public Procurement in the EU. Development of a methodology to estimate the direct costs of corruption and other elements for an EU – evaluation mechanism in the area of anti-corruption" (2013) conducted by PwC and Ecorys for the European Commission. The European Union, while acknowledging the significance of the situation, states the necessity of finding adequate solutions, yet it does not propose clear directions of activity. Public procurement is mentioned as a priority and a critical domain in which corruption should be defined and measured – a methodology should be developed in order to measure the costs of corruption or provide close estimates of this cost in public procurement in certain sectors of the economy which are in the scope of EU Cohesion Policy (PwC, Ecorys 2013).

The development of methodology for determining the corruption level is considerably hindered by the lack of the generally adopted definition of corruption (e.g., Feldman 2018; Maguchu 2018; Rose 2018; Sparling 2018) and latency of corruption itself (Bachurin 2017; Reznik et al. 2017). In these conditions the statement that the public procurement sector by itself contains significant risks (threats) of corruption has become an axiom. Scientific papers and studies are mostly focused on issues of corruption prevention and fighting it: they analyse the legal regulation of conducting public procurements within the context of anti-corruption; they study what schemes are used by dishonest participants of public procurements, attention is paid to the possibilities of improving mechanisms of control and punishment, etc.

At the same time the fundamentally significant issue regarding the methodology of determining the corruption level remains without sufficient attention and the very topicality of the problem is usually justified by references to individual precedents of

corruption, or by general assumptions that the element of corruption in public procurement is already established historically across the whole world and, despite the counteraction, the level of corruption in public procurement remains rather high.

By postulating that the corruption level in public procurement is high, scientists usually use international indices, legal statistics, number of taken criminal proceedings, discourse in the press, as well as sociological polls in the corresponding groups (the ones involved in the process of public procurement) of respondents in rare cases.

Unfortunately, renowned international sources – Global Corruption Barometer, Bribe Payers Index, Global Corruption Report, National Integrity System assessments, Ease of Doing Business Index, Global Integrity Report, Global Competitiveness Report, International Country Risk Guide, Worldwide Governance Indicators: Control of Corruption un Worldwide Corruption Index by Gallup, Press Freedom Index; Economic Freedom Index; Open Budget Index; Failed States Index; Worldwide Governance Indicators: Voice and Accountability; Foreign Direct Investment, Net Inflows (as % of GDP); Legatum Prosperity Index (Economic Competitiveness, Corruption Perceptions Index by Transparency International, do not aim to establish how high the corruption level is in the field of public procurement in particular, not even speaking about such data across countries.

For instance, as it is indicated in the study "Identifying and Reducing Corruption in Public Procurement in the EU", when compared to common convictions about corruption in the different Member States and with perception indices like the Corruption Perception Index of Transparency International, the top three Member States – especially Bulgaria and Romania – might appear remarkable (PwC, Ecorys 2013). However, also here it is difficult to tell based on the empirical evidence how true these convictions are when it comes to public procurement in these countries (the comprehensive methodology presented in chapters 7 to 10 only does not allow yet for such conclusions), and even when corruption levels in public procurement in these countries are high: it is not known whether these practices are introduced because (or despite) of these apparent or alleged high levels of corruption, or whether a proper implementation or functioning of the positive policies and practices is lacking (or a combination of both).

Also the official statistics regarding the number of the taken criminal proceedings cannot be valued unequivocally. When analysing this indicator, every researcher will have to face a dilemma – whether the great number of the taken criminal proceedings regarding corruptive offences presents the distribution of corruption in the country or it shows that the public authorities work efficiently.

Sociological surveys covering usual inhabitants are able to help in determining the corruption level in areas where these inhabitants may act as bribers – for instance, in medicine, traffic police, and education system, but they are completely powerless in the segment of public procurement. In turn, a sociological survey for identifying corruption in the field of public procurement must be conducted among such subjects who may develop corruptive experience, i.e. among procurement organizers (officials) or among participants of public procurement (suppliers). The author rather critically views the usefulness of officials' polls as, even when experiencing sufficient level of

anonymity, only few officials would want to provide answers that could corrupt the overall image of the officialdom.

On the contrary, polls of participants of public procurement (suppliers) provide interesting and useful data. For the first time in 2012 the author has approbated methodology developed particularly for this goal, and its results were demonstrated when presenting his Doctoral Thesis (Krivins 2014) and and previously in international scientific journals (e.g. Krivinsh 2013). In 2021, the research sample was made by 102 entrepreneurs, who have participated in public procurement in Latvia. Both in 2012 and in 2021, research questions were raised, which allow to unobtrusively and comprehensively estimate the level of corruption in the sensitive sector – public procurement, namely:

1. In your opinion, what is the level of corruption in public procurement in Latvia?
2. If the commissioning parties always apply the principle of equal treatment in regard to all applicants?
3. When participating in public procurement, did you have an impression that the customer was probably influenced by another applicant?
4. Has the customer's action during a public procurement ever made you think that the customer's representatives tried to extort bribes?
5. Are you ready to offer any illegal benefits to the commissioning party, if such an action would allow becoming the winner of the public procurement?
6. In your opinion, if someone offered illegal benefits to the customer's representatives, would such benefits be accepted?
7. How much (in percents) public procurement in Latvia in your opinion has been performed in bad faith?
8. Do you think that public procurement in Latvia are politically influenced?

EU Member States do not collect statistics concerning instances of corruption and corruption levels in a unified way. Both the EU documentation and several scientific studies contain repeated indications of the necessity to study the corruption trend: It is however to be recommended to improve and periodically repeat the benchmark of the EU Member States: when more empirical data becomes available on corruption levels and how these evolve over time. It should be admitted that only regular (periodical) measures of corruption level can ensure systemic control of corruption level, allows to observe the trends of process dynamics, accumulate information regarding particular periods of time that improves evaluation accuracy in individual parameters.

When determining the study periodicity, it should be taken into account that too frequent studies in the segment of corruption are not suitable. If in marketing, for instance, studies can be conducted every month, but data definitely need to be renewed after a year, then changes in the entrepreneurs' perception regarding the level of corruption in public procurements require certain time.

If the country does not experience fast and crucial changes (e.g. there is no financial or demographical crisis, the state has not changed its geopolitical orientation or legal regulation, etc.), also changes in the perception of corruption will not be rapid. In other words, the greater is the measurement range, the greater fluctuation relief will be seen in the aspects under study.

Research results and discussion

In 2021, considering the aforementioned assumptions, the author has conducted the second poll of entrepreneurs with identical questions. Table 1 presents the data acquired in 2021 if compared to the data from 2012.

The 2021 survey sample was made by entrepreneurs (n = 102), who have participated in public procurement in Latvia. The sample was formed by using the free access information at the home page of the Procurement Monitoring Bureau and home pages of the commissioning parties. One of the latest technologies for conducting the research – the on-line survey (on-line mode) was applied in order to find out the opinions of the entrepreneurs.

Table 1

The main parameters of the survey samples, %, Latvia, 2012 and 2021

Parameters	2012, n = 100	2021, n = 102	Changes, +/-
1	2	3	4
How often does your company participate in public procurement?			
– almost every month	80.0	82.4	+2.4
– several times a year	17.0	15.7	-1.3
– not more than once in a year	3.0	1.9	-1.1
When participating in public procurement, your company mainly offers to customers:			
– services to commissioning parties	41.0	29.4	-11.6
– goods	34.0	32.4	-1.6
– construction work	25.0	38.2	+13.2
Division of respondents according to their legal status:			
– Ltd (limited liability company)	87.0	79.4	-7.6
– JSC (joint stock company)	10.0	10.8	+0.8
– other	3.0	9.8	+6.8
Where is your enterprise registered?			
– Riga	59.0	58.8	-0.2
– Vidzeme	13.0	13.7	+0.7
– Kurzeme	9.0	9.8	+0.8
– Zemgale	14.0	10.8	-3.2
– Latgale	5.0	6.9	+1.9
The number of employees in the companies of the interviewed entrepreneurs:			
– 1	1.0	3.9	+2.9
– 2–5	8.0	6.9	-1.1
– 6–15	26.0	36.3	+10.3
– 16–50	32.0	28.4	-3.6
– 51–100	9.0	9.8	+0.8
– more than 100 employees	23.0	14.7	-8.3

Sequel to Table 1 see on the next page

Sequel to Table 1

1	2	3	4
How many years does your company operate on the market?			
– more than 10 years	65.0	80.4	+15.4
– 4–10 years	28.0	9.8	-18.2
– 2–3 years	5.0	7.8	+2.8
– less than a year	2.0	2.0	0.0

Source: elaborated by the author based on the own research data.

Table 2

The main survey results, %, Latvia, 2012 and 2021

Respondents' answers	2012, n = 100	2021, n = 102	Changes, +/-
1	2	3	4
The level of corruption in the public procurement of the Republic of Latvia is:			
– very high	14.0	9.8	-4.2
– high	29.0	48.0	+19.0*
– medium	33.0	30.4	-2.6
– low	16.0	6.9	-9.1
– corruption in this sector does not exist	8.0	4.9	-3.1
If the commissioning parties always apply the principle of equal treatment in regard to all applicants?			
– always apply	5.0	3.8	-1.2
– usually apply	27.0	27.5	+0.5
– apply in approximately a half of procurement	34.0	31.4	-2.6
– usually do not apply	27.0	25.5	-1.5
– never apply	7.0	11.8	+4.8
When participating in public procurement, did you have an impression that the customer was probably influenced by another applicant?			
– never	9.0	6.9	-2.1
– very seldom	11.0	4.9	-6.1
– sometimes	39.0	51.0	+12.0*
– often	27.0	33.3	+6.3
– almost always	14.0	3.9	-10.1*
Has the customer's action during a public procurement ever made you think that the customer's representatives tried to extort bribes?			
– never	44.0	41.1	-2.9
– very seldom	29.0	32.4	+3.4
– sometimes	19.0	25.5	+6.5
– often	7.0	1.0	-6.0
– almost always	1.0	0.0	-1.0

Sequel to Table 2

1	2	3	4
Are you ready to offer any benefits to the commissioning party, if such an action would allow becoming the winner of the public procurement?			
– yes	4.0	4.9	+0.9
– more 'yes' than 'no'	5.0	2.0	-3.0
– more 'no' than 'yes'	9.0	5.9	-3.1
– readiness to offer some benefit depends of the significance of the procurement	14.0	9.8	-4.2
– no	45.0	64.7	+19.7*
– it depends from the situation or other circumstances	23.0	12.7	-10.3*
In your opinion, if someone offered illegal benefits to the customer's representatives, would such benefits be accepted?			
– never	12.0	7.8	-4.2
– very seldom	7.0	15.7	+8.7
– sometimes	23.0	33.3	+10.3*
– often	18.0	25.5	+7.5
– almost always	8.0	4.9	-3.1
– such benefits would be accepted depending on situation or other circumstances	32.0	12.8	-19.2*
In your opinion, how much public procurement in Latvia has been performed in bad faith?			
– unit weight of all procurements, %	41.0	43.0	+2.0
Do you think that public procurement in Latvia are politically influenced?			
– yes	21.0	15.7	-5.3
– more 'yes' than 'no'	30.0	16.7	-13.3*
– more 'no' than 'yes'	12.0	7.8	-4.2
– it depends of the significance of the procurement	33.0	57.8	+24.8*
– no	4.0	2.0	-2.0

* Differences are statistically significant at 0.01 level (2-tailed).

Source: elaborated by the author based on the own research data.

According to the results of this research, in 2021, 57.8% of the entrepreneurs who participated in the survey indicated, that the level of corruption in the public procurements in Latvia is high or very high (correspondingly 48% and 9.8%), 30.4% of the respondents reported that the level of corruption is medium, 6.9% of the respondents said that the level of corruption in the field of public procurement is low, 4.9% of the interviewed entrepreneurs expressed the belief that corruption in this sector does not exist.

In response to the question, if the commissioning parties always apply the principle of equal treatment in regard to all applicants, the interviewed entrepreneurs gave the following answers: always apply – 3.8%, usually apply – 27.5%, apply in approxi-

mately a half of procurements – 31.4%, usually do not apply – 25.5%, never apply 11.8%.

Only 6.9% of those respondents who reported that while participating in public procurement they have never felt that the commissioning party has been influenced by another applicant. Very seldom such an impression had 4.9% of the respondents, sometimes – 51%, often – 33.3%, almost always – 3.9% of respondents.

Although 41.1% of respondents indicated that action of commissioning party while performing public procurement never suggested that representatives of the commissioning party tried to force the applicant to give a bribe to the commissioning party, still 58.9% of respondents had such an impression (including 32.4% – very seldom; sometimes – 25.5%, often – 1%).

Only 64.7% of entrepreneurs are not ready to offer any benefits to the commissioning party, if such an action would allow becoming the winner of the public procurement. Unequivocally positive response was given by 4.9% of the respondents, 2% gave answer "more 'yes' than 'no'", 5.9% of the respondents answered "more 'no' than 'yes'", 9.8% of the respondents replied that their readiness to offer some benefit depends of the significance of the procurement, 12.7% of the interviewed entrepreneurs indicated that it depends from the situation or other circumstances.

When evaluating readiness of commissioning party's representatives to receive special benefits, 12.8% of respondents hold a view that such benefits would be accepted depending on situation or other circumstances, 33.3% of respondents assume that benefits would be accepted sometimes, 25.5% of the respondents consider that benefits would be accepted often, 7.8% of respondents indicated that representatives of the commissioning party would never accept the benefits, 4.9% of the respondents assume that representatives of the commissioning party would accept the benefits almost always, 15.7% of respondents hold a view that representatives of the commissioning party would accept the benefits very seldom.

Important results have been acquired by summarizing the replies of respondents to the question "In your opinion, how much public procurement in Latvia has been performed in bad faith?" The weighted average evaluation shows that 43% of public procurement has been performed in bad faith.

98% of the respondents indicated that the sphere of public procurement in Latvia is politically influenced. Answering the question "Do you think that public procurement in Latvia are politically influenced?" 15.7% of respondents replied in the affirmative way; the answer "More 'yes' than 'no'" was chosen by 16.7% of respondents; the answer "It depends on the significance of the procurement" – by 57.8% of respondents; the answer "More 'no' than 'yes'" – by 7.8% of respondents; only 2% of respondents expressed the belief that no political influence is exerted upon public procurement in Latvia.

During the period under study (2012–2021) there have been practically no changes in the number of those respondents who believe that corruption level in Latvian public procurement is medium. If in 2012 such responses were provided by 33% of respondents, then in 2021 – by 30,4%. At the same time, it should be admitted that there is a rather rapid increase (from 43% to 57.8%) in the number of those respondents

who believe that corruption in Latvian public procurement is high or very high. From the data obtained in 2021 it can be seen that the said increase was due to the respondents who in 2012 believed that the corruption in this sector was low or even non-existent.

A very significant aspect is the fact that in 2021 none of respondents believed that the customer's representatives tried to extort bribes "almost always". Obviously, in 2021 these respondents prefer the statement "never" (41.1%), or other response variants: very seldom (32.4%), sometimes (25.5%) or often (1%). In 2021, the obtained data shows that 93.1% of the interviewed entrepreneurs had an impression that the commissioning party has been influenced by another applicant (81% in 2012).

A small decrease (from 44% in 2012 to 41.1% in 2021) is noted in the number of such respondents who believe that action of commissioning party while performing public procurement never suggested that representatives of the commissioning party tried to force the applicant to give a bribe to the commissioning party. There remain less and less such respondents, who believe that no political influence is exerted upon public procurement in Latvia. During ten years this indicator has decreased from 4% to 2%.

It is a positive fact to note that during ten years we see a considerable increase (from 45% to 64.7%) in the numbers of such respondents who not ready to offer any illegal benefits to the commissioning party, if such an action would allow becoming the winner of the public procurement.

Conclusions

This study analyzed a significant problem – the corruption level and its changes in the field of public procurement in Latvia. To solve the problem, the author has used his own methodology, which allows to comprehensively assess the changes of the corruption level in the sensitive sector – public procurement.

The main findings of the study are as follows: over the last ten years, the commitment of entrepreneurs not to engage in corrupt transactions has increased, as well as the distrust of entrepreneurs that other market participants will act in good faith. The data concerning positive improvements are undoubtedly related to the changes and innovations that took place in Latvia during this period.

Positive trends can be explained by the increase in public awareness (generational change, social advertising, awareness of one's rights) – these factors affect various areas of corruption risk. It might seem that it depends on the general perception of society: the Corruption Perceptions Index (CPI), which ranks countries by their perceived levels of public sector corruption, shows that the situation in Latvia as a whole has improved – from 49 points in 2012 to 57 points in 2020.

However, it should be noted that the author's study did not survey the general public, but a special group of respondents-entrepreneurs who participate in public procurement. Accordingly, the causes of the perception of corruption here could be deeper and more specific. In the period from 2012 to 2021, large-scale digitalization

and centralization of the public procurement process has taken place in Latvia. The Electronic Procurement System (EPS) currently provides four subsystems (e-orders, e-auctions, e-tenders, e-certificates), which significantly increase transparency in public procurement and effectively resolved old problems previously associated with the maintenance and circulation of paper documents. It is absolutely logical that digitalization also physically separates entrepreneurs and officials, which significantly reduces the risk of bribes extort. This conclusion is confirmed by the data obtained and this trend was expected.

Latvia demonstrates its willingness and ability to fight corruption in public procurement. Regulatory improvements have been made, such as Whistleblowing Law, which aims to promote whistleblowing on violations in public interests and ensure the establishment and operation of whistleblowing mechanisms, and also due protection of whistleblowers. It is also possible to name a legally binding document as the Cabinet´s of Ministers Regulations No. 630 "Regulations Regarding the Basic Requirements for an Internal Control System for the Prevention of Corruption and Conflict of Interest in an Institution of a Public Person", adopted on October 17, 2017. The recently established Prosecution Office for Investigation of Criminal Offences Committed in State Authority Service is already operational.

At the same time, the author's research shows that in Latvia there is no direct correlation between the perception of corruption in the whole society and the perception of corruption among entrepreneurs in a separate specific public procurement sector. The data obtained in 2021 show that 93.1% of the interviewed entrepreneurs have the impression that the customer has been influenced by another applicant. In drawing conclusions from these data, it should be borne in mind that this is not about specific facts, but about a certain impression, a suspicion. Therefore, the results of innovations created in Latvia cannot be overestimated. It must be acknowledged that the solutions implemented in the period from 2012 to 2021 are not the most powerful.

Unfortunately, legislative initiatives have not resulted in a significant increase in trust among entrepreneurs. According to the author, this phenomenon is mainly related to the unbelief of entrepreneurs that the solutions offered by the state are really aimed at improving the situation, and not only at creating such an impression. The author of the study concludes that the most significant problem is that in 2021, only 2% of entrepreneurs believe that public procurement in Latvia is not politically influenced. It is in this segment that Latvia should look for solutions to improve the situation – the close link between the political and private sectors must be broken.

Latvia is looking for and finding new solutions, such as structured publication of data describing the performance of procurement contracts; digital tool for procurement risk assessment; public procurement monitoring by means of the Integrity Pact. However, we will only be able to assess the impact of these solutions in the future.

References

ACN (Anti-Corruption Network for Eastern Europe and Central Asia). (2017) *Corruption Prevention at Sector Level in Eastern Europe and Central Asia: Cases of Education, Extractives and Police by Anti-Corruption Network for Eastern Europe and Central Asia.* Available: https://www.knab.gov.lv/lv/media/16/download (accessed on 1.12.2021).

Al-Hadi A., Taylor G., Richardson G. (2021) Are corruption and corporate tax avoidance in the United States related? *Review of Accounting Studies.* DOI: https://doi.org/10.1007/s11142-021-09587-8

Anguelov K. (2019) Opportunities for prevention of corruption in public procurement in electricity distribution companies in Bulgaria. *Proceedings of the 16th Conference on Electrical Machines, Drives and Power Systems, ELMA 2019.* DOI: https://doi.org/10.1109/ELMA.2019.8771508

Arifin Z., Handayani E., Virdaus S. (2018) Combating corruption in the procurement by the press. *IOP Conference Series: Earth and Environmental Science,* Vol. 175, Iss. 1. DOI: https://doi.org/10.1088/1755-1315/175/1/012131

Bachurin D. (2017) Criminological assessment of the extent of bureaucratic-corruption non-economic distribution in the Russian Federation. *Russian Journal of Criminology,* Vol. 11, Iss. 3, pp. 503–519. DOI: https://doi.org/10.17150/2500-4255.2017.11(3)

Bauhr M., Charron N. (2020) The EU as a savior and a saint? corruption and public support for redistribution. *Journal of European Public Policy,* Vol. 27, Iss. 4, pp. 509–527. DOI: https://doi.org/10.1080/13501763.2019.1578816

Bello Y., Villarino J. (2021) Measuring corruption: a critical analysis of the existing datasets and their suitability for diachronic transnational research. *Social Indicators Research,* Vol. 157, Iss. 2, pp. 709–747. DOI: https://doi.org/10.1007/s11205-021-02657-z

Bleakley P. (2021) The trouble with squads: Accounting for corruption in Australia's specialist policing units. *Criminal Justice Studies,* Vol. 34, Iss. 1, pp. 115–133. DOI: https://doi.org/10.1080/1478601X.2020.1763985

Britto D., Fiorin S. (2020) Corruption and legislature size: Evidence from Brazil. *European Journal of Political Economy,* Vol. 65. DOI: https://doi.org/10.1016/j.ejpoleco.2020.101940

Chen Z., Jin X., Xu X. (2021) Is a corruption crackdown really good for the economy? Firm-level evidence from China. *Journal of Law, Economics, and Organization,* Vol. 37, Iss. 2, pp. 314–357. DOI: https://doi.org/10.1093/jleo/ewaa014

Choudhury S. (2021) Regulation and corruption: evidence from the United States. *Oxford Bulletin of Economics and Statistics,* Vol. 83, Iss. 4, pp. 897–934. DOI: https://doi.org/10.1111/obes.12414

Chowdhury A. (2019) Anti-corruption movement: a story of the making of the aam admi party and the interplay of political representation in India. *Politics and Governance,* Vol. 7, Iss. 3, pp. 189–198. DOI: https://doi.org/10.17645/pag.v7i3.2155

Cooper J. (2021) Political corruption cycles in democracies and autocracies: evidence from micro-data on extortion in West Africa. *Quarterly Journal of Political Science,* Vol. 16, Iss. 3, pp. 285–323. DOI: https://doi.org/10.1561/100.00019175

David-Barrett E., Fazekas M. (2020) Anti-corruption in aid-funded procurement: is corruption reduced or merely displaced? *World Development,* Vol. 132. DOI: https://doi.org/10.1016/j.worlddev.2020.105000

David-Barrett E., Fazekas M. (2020) Grand corruption and government change: an analysis of partisan favoritism in public procurement. *European Journal on Criminal Policy and Research,* Vol. 26, Iss. 4, pp. 411–430. DOI: https://doi.org/10.1007/s10610-019-09416-4

De Angelis I., de Blasio G., Rizzica L. (2020) Lost in corruption. Evidence from EU funding to southern Italy. *Italian Economic Journal,* Vol. 6, Iss. 2, 355–377. DOI: https://doi.org/10.1007/s40797-020-00123-2

Debell M., Iyengar S. (2021) Campaign contributions, independent expenditures, and the appearance of corruption: Public opinion vs. the Supreme court's assumptions. *Election Law Journal: Rules, Politics, and Policy,* Vol. 20, Iss. 3, pp. 286–300. DOI: https://doi.org/10.1089/elj.2019.0610

Devlin R., Frame S. (2019) Economic corruption, political machinations and legal ethics: correspondents' report from Canada. *Legal Ethics,* Vol. 22, Iss. 1–2, pp. 94–102. DOI: https://doi.org/10.1080/1460728x.2019.1692474

Dinca G., Dinca M., Negri C., Barbuța M. (2021) The impact of corruption and rent-seeking behavior upon economic wealth in the European Union from a public choice approach. *Sustainability (Switzerland),* Vol. 13, Iss. 12. DOI: https://doi.org/10.3390/su13126870

Fan X., Chen Y., Tang C. (2021) To bribe or not in a procurement auction under disparate corruption pressure. *Production and Operations Management,* Vol. 30, Iss. 5, pp. 1220–1245. DOI: https://doi.org/10.1111/poms.13232

Feldman I. (2018) Care and suspicion: Corruption as definition in humanitarian relations. *Current Anthropology,* Vol. 59, Iss. 18, pp. 160–170. DOI: https://doi.org/10.1086/695695

Feruni N., Hysa E., Panait M., Radulescu I., Brezoi A. (2020) The impact of corruption, economic freedom, and urbanization on economic development: Western Balkans versus EU-27. *Sustainability (Switzerland),* Vol. 12, Iss. 22, pp. 1–22. DOI: https://doi.org/10.3390/su12229743

Flamini A., Jahanshahi B., Mohaddes K. (2021) Illegal drugs and public corruption: crack based evidence from California. *European Journal of Political Economy,* Vol. 69. DOI: https://doi.org/10.1016/j.ejpoleco.2021.102005

Gnoffo S. (2021). A dynamic performance management approach to frame corruption in public procurement: a case study. *Journal of Public Procurement,* Vol. 21, Iss. 1, pp. 75–96. DOI: https://doi.org/10.1108/JOPP-08-2020-0063

Hubler O., Koch M., Menkhoff L., Schmidt U. (2021) Corruption and cheating: evidence from rural Thailand. *World Development,* Vol. 145. DOI: https://doi.org/10.1016/j.worlddev.2021.105526

Jaggi B., Allini A., Ginesti G., Macchioni R. (2021) Determinants of corporate corruption disclosures: Evidence based on EU listed firms. *Meditari Accountancy Research,* Vol. 29, Iss. 1, pp. 21–38. DOI: https://doi.org/10.1108/MEDAR-11-2019-0616

Jones A. (2021) Combatting corruption and collusion in UK public procurement: proposals for post-brexit reform. *Modern Law Review,* Vol. 84, Iss. 4, pp. 667–707. DOI: https://doi.org/10.1111/1468-2230.12626

Kazachkova Z., Kozlova E. (2020) Monitoring as a tool for improvement of modern regional anti-corruption policy in Russia. *Journal of Advanced Research in Law and Economics,* Vol. 11, Iss. 1, pp. 80–90. DOI: https://doi.org/10.14505/jarle.v11.1(47).11

Kong D., Shu Y., Wang Y. (2021) Corruption and corporate social responsibility: evidence from a quasi-natural experiment in China. *Journal of Asian Economics,* Vol. 75. DOI: https://doi.org/10.1016/j.asieco.2021.101317

Korupcijas noversanas un apkarosanas birojs. (2021) *Attieksme pret korupciju Latvija.* Sabiedribas un uznemumu aptaujas, 2021. gada februaris. Available: https://www.knab.gov.lv/lv/media/1862/download (accessed on 1.12.2021). (In Latvian)

Krivins A. (2014) *Korupcijas noversana un apkarosana publisko iepirkumu joma.* Promocijas darbs. Riga: Rigas Stradina universitate. (In Latvian)

Krivinsh A. (2013) The analysis of the state of corruption in the public procurements of the Republic of Latvia. *International Journal of Multidisciplinary Thought*, Vol. 3, Iss. 2, pp. 399–403. Available: http://www.universitypublications.net/ijmt/0302/index.html (accessed on 1.12.2021).

Kuhn T., Pardos-Prado S. (2021) Corruption and support for decentralisation. *European Journal of Political Research,* Vol. 60, Iss. 3, pp. 625–647. DOI: https://doi.org/10.1111/1475-6765.12420

Liu C., Mikesell J., Moldogaziev T. (2021) Public corruption and pension underfunding in the American States. *American Review of Public Administration,* Vol. 51, Iss. 6, pp. 449–466. DOI: https://doi.org/10.1177/0275074021992891

Maguchu P. (2018) The law is just the law: analysing the definition of corruption in Zimbabwe. *Journal of Financial Crime*, Vol. 25, Iss. 2, pp. 354–361. DOI: https://doi.org/10.1108/JFC-06-2017-0055

Mandasari S. (2021) Criminal sanctions for the abuse of authority in corruption cases based on the values of justice and dignity: a comparative study of the fight against corruption in Indonesia and Japan. *Journal of Legal, Ethical and Regulatory Issues,* Vol. 24, Iss. 6, pp. 1–13. Available: https://www.abacademies.org/articles/criminal-sanctions-for-the-abuse-of-authority-in-corruption-cases-based-on-the-values-of-justice-and-dignity-a-comparative-study-o-11443.html (accessed on 1.12.2021).

Meza O., Perez-Chiqués E. (2021) Corruption consolidation in local governments: a grounded analytical framework. *Public Administration,* Vol. 99, Iss. 3, pp. 530–546. DOI: https://doi.org/10.1111/padm.12698

Mohammad S., Husted B. (2021) Innovation, new ventures, and corruption: evidence from India. *Journal of Business Venturing Insights,* Vol. 16. DOI: https://doi.org/10.1016/j.jbvi.2021.e00256

Mugellini G., Della Bella S., Colagrossi M., Isenring G., Killias M. (2021) Public sector reforms and their impact on the level of corruption: a systematic review. *Campbell Systematic Reviews*, Vol. 17, Iss. 2. DOI: https://doi.org/10.1002/cl2.1173

Pavlova E. (2020) Corrupt governance: self-defeating anti-corruption rhetoric and initiatives in Russia. *New Perspectives,* Vol. 28, Iss. 2, pp. 205–222. DOI: https://doi.org/10.1177/2336825 X20911513

Pinkova A., Jusko J. (2021) Experts and questions: exploring perceptions of corruption. *Politics in Central Europe*, Vol. 17, Iss. e 2, pp. 317–345. DOI: https://doi.org/10.2478/pce-2021-0014

Psota V., Chyzhevska L., Osychka O., Zaika S., Koval N. (2020) Competition in public procurement in the fight against corruption: analysis of an example of Ukraine. *Intellectual Economics,* Vol. 14, Iss. 1, pp. 89–112. DOI: https://doi.org/10.13165/IE-20-14-1-06

Purwanto A., Emanuel A. (2020) Data analysis for corruption indications on procurement of goods and services. *Proceedings of the 3rd International Conference on Information and Communications Technology, ICOIACT 2020,* pp. 56–60. DOI: https://doi.org/10.1109/ICOIACT 50329.2020.9331959

PwC, Ecorys. (2013) Identifying and Reducing Corruption in Public Procurement in the EU. Development of a methodology to estimate the direct costs of corruption and other elements for an EU – evaluation mechanism in the area of anti-corruption. Available: https://media.hot news.ro/media_server1/document-2013-10-1-15701758-0-raportul-final-olaf.pdf (accessed on 1.12.2021).

Ren S., Hao Y., Wu H. (2021) Government corruption, market segmentation and renewable energy technology innovation: Evidence from China. *Journal of Environmental Management,* Vol. 300. DOI: https://doi.org/10.1016/j.jenvman.2021.113686

Reznik O., Klochko A., Pakhomov V., Kosytsia O. (2017) International aspect of legal regulation of corruption offences commission on the example of law enforcement agencies and banking system of Ukraine. *Journal of Advanced Research in Law and Economics,* Vol. 8, Iss. 1, pp. 169–177. DOI: https://doi.org/10.14505/jarle.v8.1(23).19

Rose J. (2018) The meaning of corruption: testing the coherence and adequacy of corruption definitions. *Public Integrity,* Vol. 20, Iss. 3, pp. 220–233. DOI: https://doi.org/10.1080/10999922.2017.1397999

Saad-Filho A., Boffo M. (2021) The corruption of democracy: corruption scandals, class alliances, and political authoritarianism in Brazil. *Geoforum,* Vol. 124, pp. 300–309. DOI: https://doi.org/10.1016/j.geoforum.2020.02.003

Sari T., Cahaya F., Joseph C. (2021) Coercive pressures and anti-corruption reporting: the case of ASEAN countries. *Journal of Business Ethics,* Vol. 171, Iss. 3, pp. 495–511. DOI: https://doi.org/10.1007/s10551-020-04452-1

Sharma S., Sengupta A., Panja S. (2019) Mapping corruption risks in public procurement: uncovering improvement opportunities and strengthening controls. *Public Performance and Management Review,* Vol. 42, Iss. 4, pp. 947–975. DOI: https://doi.org/10.1080/15309576.2018.1535984

Sparling R. (2018) Impartiality and the definition of corruption. *Political Studies,* Vol. 66, Iss. 2, pp. 376–391. DOI: https://doi.org/10.1177/0032321717722360

Sparling R. (2021) Corruption and whistleblowing: Beccaria and Montesquieu on secret crimes and secret accusations. *Eighteenth Century,* Vol. 61, Iss. 4, pp. 413–431. DOI: https://doi.org/10.1353/ECY.2020.0034

Transparency International. (2020) *Corruption Perceptions Index by Transparency International.* Available: https://www.transparency.org/en/cpi/2020/index/nzl (accessed on 1.12.2021).

Vilks A. (2017) Evaluation of corruption prevalence in the context of the development of the Latvian economy. *Proceedings of the International Scientific Conference "Society. Integration. Education".* Vol. IV, pp. 427–435. DOI: https://doi.org/10.17770/sie2017vol4.2387

Wang H. (2020) Quality manipulation and limit corruption in competitive procurement. *European Journal of Operational Research,* Vol. 283, Iss. 3, pp. 1124–1135. DOI: 10.1016/j.ejor.2019.11.053

Weingartner T., Batista D., Kochli S., Voutat G. (2021) Prototyping a smart contract based public procurement to fight corruption. *Computers,* Vol. 10, Iss. 7. DOI: https://doi.org/10.3390/computers10070085

World Bank. (2021) *Combating Corruption.* Available: https://www.worldbank.org/en/topic/governance/brief/anti-corruption (accessed on 1.12.2021).