

REFORMS AND COMPETITIVENESS IN THE UKRAINIAN AUDIT MARKET

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Abstract: Recent reforms in the Ukrainian audit market should have been activated the competitiveness in the market. This paper explores concentration in the Ukrainian audit market in order to analyze the efficiency of these reforms. In this study, the annual data from the Audit Chamber of Ukraine over the period 2007 – 2019 is used. Using various statistical methods and specific market concentration indicators, the present study finds the pieces of evidence in favor of high concentration of the Ukrainian audit market and the failure of the reforms. The situation with the competitiveness only gets worse after them. The results of the study provide suggestions for improving the situation concerning the rising of market integrity principles, qualification of auditors in Ukrainian firms, and strengthening monitoring of audit quality in B4 and mid-tier companies.

Key words: audit market, competition, concentration, reforms, audit.

DOI: 10.17512/pjms.2021.23.2.18

Article history:

Received February 17, 2021; *Revised* February 28, 2021; *Accepted* April 14, 2021

Introduction

Competitiveness is a cornerstone of the market economy. Any market cannot be efficient without proper counteraction between its participants (Vargas et al., 2019; Vnukova et al., 2020; Kolodiziev et al., 2021; Setyo et al., 2021). The audit market is not an exception. Still, it is one of the most concentrated markets. A high level of concentration provides a potential negative impact on audit quality and the reliability of companies' financial statements in the interests of users.

A recent example of the poor quality of audits conducted by the “Big 4” (B4) audit firms in the UK is the findings of the Financial Reporting Council (FRC), which is audited in particular. In 2018, KPMG, PwC, Deloitte and EY had audited 918 listed companies subject to the public interest. 40% of serious cases problems in these companies were identified (Marriage, 2018). Half of the audits were conducted by KPMG; among the companies, FTSE 350 did not meet the quality standards of FRC (FRC, 2018). Despite a slight decrease in audit market

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concentration, B4 remains the auditor for 97% of FTSE 350 companies, according to Oxera (2018).

Public Company Accounting Oversight Board (PCAOB) reported that in the USA, B4 companies are becoming “too big or too few to fail”, which creates additional regulatory pressure and threats of free competition in the market and audit quality. In particular, in the telecommunications sector, 92% of S&P 500 companies are audited by one of the B4, and in the energy, raw materials and IT sectors, the share of companies audited by two auditors from B4 is 75%.

According to estimates of competition level in the audit market in 2015-2018 in the EU, there is a consistently high level of concentration (ICAEW, 2021), and the share of B4 companies in the audit of public interest entities reaches 66% in 2018 (European Commission, 2021).

The audit market with high competitiveness is characterized by better quality standards, lower audit fees and higher reporting transparency. That is why audit market concentration is an urgent issue both to regulators worldwide and practitioners and scholars.

Ukrainian audit market is a fascinating and unique case because it allows seeing in almost real-time regime the efficiency of reforms in the audit market and their influence on the market concentration. Reforms in the Ukrainian audit market started in 1993 with the adoption of international standards of audit and system of quality control. But till 2016, these reforms cannot provide conditions for a competitive market. Meanwhile, the level of shadowing in the Ukrainian economy remains high (Bilan et al., 2020b), with an actual level near 30% by the official data, even considering a downward trend starting from 2015 (Mishchuk et al., 2020). Due to this reason, the need for audit market development is obvious too. Makarenko and Plastun (2016) provide pieces of evidence in favor of the quasi-competitive nature of the Ukrainian audit market.

Since 2017 another wave of reforms was realized in the Ukrainian audit market. The reform of the Ukrainian audit market carried out in 2017, started with the adoption of the Law “On audit of financial statements and auditing activities” 21.12.2017 № 2258-VIII that is consistent with the key areas of restructuring of the European audit market, initiated in 2014 with the EU Directive 2014/56 / EU and Regulation (EU) № 537/2014 adoption.

The emphasis in these reforms was placed on strengthening the responsibility of auditors for the quality of services provided, requirements for their independence, rotation, joint provision of audit and non-audit services, conducting a mandatory audit of public interest entities. Collectively, these areas of reform are designed not only to increase the transparency of corporate reporting of auditors’ clients but also to promote better and more competitive audit services, reducing market concentration.

This study is devoted to the assessment of the concentration level in the Ukrainian audit after implementation of EU Directive 2014/56 /EU and Regulation (EU) № 537/2014 into national practice. It is a logical continuation of the previous study by

Makarenko and Plastun (2016) and is an attempt to investigate the competitive parameters of the Ukrainian audit market after its reform based on a number of specific parameters and metrics (Kneysler et al., 2019).

Literature Review

Audit market concentration: the views of regulators and scientists

Promoting free competition in audit markets has been the focus of regulators for a long time. The negative impact of audit market concentration on the audit quality and the audit services fee, systemic market risk is outlined in EC Green Paper (2010), Oxera (2006; 2018) and OECD (2010). There is a piece of evidence that increasing the audit companies' concentration can lead to an increase in remuneration for services rendered. Instead, the Government Accountability Office (GAO, 2003; 2008) also provides conclusions on the lack of evidence of the negative impact of audit market concentration.

Following the reform of the audit market in the EU, the conclusions of regulators on the degree of audit market concentration and the need to ensure a competitive basis for the provision of audit services (ICAEW, 2021; European Commission, 2021) are gaining considerable weight. As a result, the audit market transparency is discussed by some researchers (Caridad et al., 2020) as it has been proved that companies can have differences in ratings while comparing several agencies' evaluations.

Similar emphases are contained in scientific sources published before the start of reforms in the EU audit market (Boone et al., 2012; Casterella et al., 2004; Francis et al., 2005, and Dunn et al., 2011) and after their implementation (Gerakos and Syverson, 2015; Gunn et al., 2019; and Bengoriz et al., 2020).

Some papers, in contrast, indicate a lack of connection between the concentration processes in the audit market and the quality of audit services (Numan and Willekens, 2012; Newton et al., 2013; Harris, 2017; Ohlsson and Carlsson, 2018; Hallman et al., 2020; Willekens et al., 2020; and Aggreh, 2019). The absence of the obvious dependencies may be caused by the lack of high-skilled professionals, which is one of the typical obstacles for the Ukrainian companies' development (Bilan et al., 2020a).

Hallman et al. (2020) state that there is no evidence that the concentration of the local audit market is related to competitive bidding. Ohlsson and Carlsson (2018) state that companies prove the lack of relationship between market concentration and audit quality on the example of Swedish. In the study of Aggreh (2019) the relationship between these parameters is not statistically significant in all cases.

To sum it up, before and after the reform, there are apologists for tougher regulatory measures to increase audit market competition and curb the expansion of B4 to ensure the quality of audit services. In this study, it considers the negative impact of audit market concentration processes on its quality and emphasizes the need to assess the role of such regulatory measures in promoting market competition.

In Ukraine, systematic studies of the audit market and its reform are presented in a limited number of scientific papers. Systematic coverage of market transformation under the influence of regulatory measures in the context of promoting audit quality is presented in the works of Redko (2009, 2020) and Shendryhorenko and Shevchenko (2018). Studying the parameters of the audit market in Ukraine, its and concentration are presented by Petrakov (2013) who substantiates the quasi-competitiveness of the audit market in Ukraine based on the theory of Baumol (1982). Kochin (2020), Shulga (2019) focus their research on the study of the audit market after its reform. At the same time, the quantitative assessment of the audit market in Ukraine from the standpoint of its competitive structure and the definition of the role of market reforms in these works is insufficient.

Concentration in the Ukrainian audit market: regulatory aspect and conjuncture review

The focus of EU Directive 2014/56/EU and Regulation (EU) № 537/2014 on strengthening the competitiveness of the European audit services market, their quality and restoring the confidence of users of financial statements in financial markets is manifested in stimulating the development of second-tier audit firms, small and medium audit firms. The new Law “On Auditing Financial Statements and Auditing Activities” adopted in Ukraine in 2017 has a similar focus.

Clearing the market from audit micro-companies in Ukraine, which demonstrate low-quality standards and violations of professional ethics, is a necessary step towards reforming auditing activities in line with high auditing quality standards in the EU Directive. However, the effect of the introduction of the new law may be reversed and lead to further consolidation of the audit services market and narrowing of competition in it.

Such rules, based on the relevant provisions of Directive 2014/56 / EU and Regulation (EU) № 537/2014, include:

procedural requirements for performing assurance engagements: limiting the statutory audit duration, appointing and changing the engagement partner, rotating audit firms and conducting joint audits;

system requirements: reform in the system of public and professional audit oversight, audit quality control and inspection, separation of audit and non-audit services, insurance of auditor’s civil liability, formation of audit committees and tender selection procedures for auditors;

qualification requirements: supplementing the register of auditing entities with a section that includes entities that have the right to conduct a statutory audit of financial statements and a statutory audit of financial statements of public interest entities, the procedure for their certification and improvement of qualification requirements and independence requirements.

High qualification requirements are determined by the multiplicity of audit objectives covering different areas in business activity (Krismiaji and Surifah, 2020; Suprianto et al., 2019).

An overview of the impact of these reforms in the audit market on its quantitative parameters is presented in Table 1 and Fig. 1. They illustrate a narrowing audit market competition in Ukraine.

Table 1. Aggregate data on the audit companies' differentiation by the volume of services rendered in Ukraine in 2010-2019

| Volume of services rendered (UAH ths.) | Number of auditing entities, units | | | | | | | | | |
|--|------------------------------------|------|------|------|------|------|------|------|------|------|
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Volume not specified | 167 | 161 | 172 | 147 | 160 | 127 | 92 | 76 | 70 | 69 |
| From 0,1 to 100,0 | 756 | 581 | 486 | 419 | 337 | 228 | 181 | 149 | 178 | 102 |
| From 100,1 to 200,0 | 341 | 330 | 275 | 238 | 183 | 136 | 126 | 115 | 93 | 86 |
| From 200,1 to 300,0 | 237 | 198 | 155 | 153 | 121 | 106 | 98 | 81 | 70 | 101 |
| From 300,1 to 400,0 | 143 | 113 | 106 | 95 | 94 | 92 | 81 | 57 | 57 | 58 |
| From 400,1 to 500,0 | 152 | 119 | 85 | 78 | 67 | 43 | 69 | 66 | 37 | 41 |
| From 500,1 to 1000,0 | 162 | 175 | 173 | 162 | 154 | 151 | 152 | 174 | 191 | 167 |
| From 1000,1 to 10000,0 | 74 | 107 | 148 | 150 | 146 | 175 | 188 | 208 | 233 | 270 |
| More than 10 000,0 | 8 | 8 | 9 | 10 | 10 | 13 | 15 | 18 | 20 | 22 |
| Total | 2040 | 1792 | 1609 | 1452 | 1272 | 1071 | 1002 | 944 | 949 | 916 |

Against the background of a reduction in the total number of audit entities, such a narrowing is manifested in a constant reduction in the share of audit entities with relatively small volumes of services provided (up to UAH 500,000), from 37% to 11% of all entities.

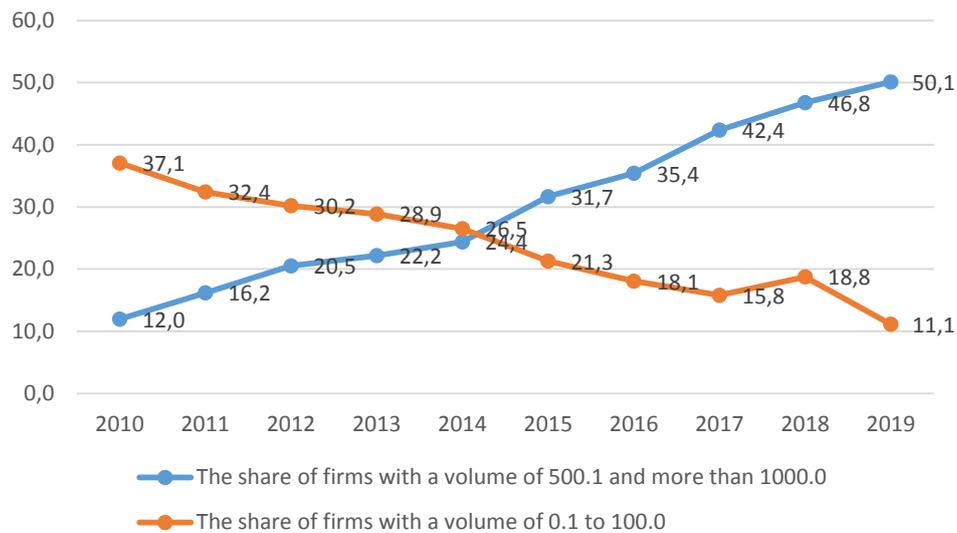


Figure 1: Share of audit firms with minimum and maximum volumes of audit services rendered (thousand UAH) for 2010-2019 in Ukraine, % (compiled by the authors according to ACU (2010-2019))

The illustrations show the consolidation of the market in favour of large audit firms, including B4 and mid-tier companies operating in more valuable segments of the Ukrainian audit market (from UAH ths. 500,000), and the frequency of which is steadily increasing. In recent years, it exceeds half of all services provided by all companies in the market.

This determines the purpose and importance of the study -- to assess the level of concentration of the audit market in Ukraine before and after the adoption of the Law "On Auditing Financial Statements and Auditing".

Data and Methodology

Annual data from the Audit Chamber of Ukraine (<http://www.apu.com.ua/pro-apu>) was used in the present study. The data was collected for the period of 01.01.2007 to 31.12.2019. Competitiveness of the Ukrainian audit market was assessed based on the following indicators: number of reports provided to the Audit Chamber of Ukraine (ACU); number of orders; actual size of the provided services; average costs per order; number of orders per company; average income per company.

These indicators were analysed in the regional breakdown. It includes 26 regions of Ukraine. Data for temporary occupied territories (Crimea and parts of the Donetsk and Lugansk regions) were used until 2014 (last year when they were an actual part of Ukraine).

Considering the above, the following hypotheses have been tested:

H1: Ukrainian audit market was highly concentrated before reforms.

H2: Ukrainian audit market is more competitive after reforms.

Different methods and techniques were used to test the hypotheses. The methods and techniques used in this study are average analysis, non-parametrical Kruskal-Wallis test, Kolmogorov-Smirnov test for normality, ANOVA analysis, specific indicators used to analyse the competitiveness of the market (Comprehensive concentration index (CCI), Herfindahl-Hirschman Index - HHI), Lorenz curve, Rosenbluth index, Entropy index, Gini coefficient, Lerner index, concentration ratios etc. (Plastun et al., 2018).

Average analysis was used to provide preliminary estimations of market competitiveness. Next statistical tests were used to find whether detected differences are statistically significant. For the case of normal data distribution, ANOVA analysis was used (parametrical tests). Kolmogorov-Smirnov test was used for normality to define the data type of distribution. The data distribution was not normal, so Kruskal-Wallis tests (non-parametric) were used. Kruskal-Wallis test was used instead of the standard Mann-Whitney test because of the large number of the analysed groups (26).

The Null Hypothesis (H0) is as follows: data belong to the same general population. If the null hypothesis is rejected, evidence favoring statistically significant differences in the analyzed groups of data will be provided. This means analysed groups of data belong to different populations. In this case, it can be concluded that the market is not freely competitive.

If the null hypothesis is rejected, the next step of analysis will be followed, i.e., specific indicators to analyse the competitiveness of the market are calculated.

Empirical Results

The authors start with the normality tests in order to define the type of statistical tests (parametrical or non-parametrical). To do this, Kolmogorov-Smirnov test is applied. The results are presented in Table 2.

Table 2. “Normality” test of the data: before and after reforms

| Parameter | Number of reports provided to the ACU, units | Number of orders, units | Actual size of the provided services, '000 UAH | Average costs per order, '000 UAH | Number of orders per company, units | Average income per company, '000 UAH |
|---------------------------------------|--|-------------------------|--|-----------------------------------|-------------------------------------|--------------------------------------|
| Before reforms | | | | | | |
| Kolmogorov-Smirnov test statistic (D) | 0,31 | 0,32 | 0,42 | 0,33 | 0,17 | 0,24 |
| p value | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Null hypothesis | rejected | rejected | rejected | rejected | rejected | rejected |
| Conclusion | Data are not normally distributed | | | | | |

| After reforms | | | | | | |
|---------------------------------------|-----------------------------------|----------|----------|----------|-------------------------------|-----------------------------------|
| Kolmogorov-Smirnov test statistic (D) | 0,35 | 0,34 | 0,44 | 0,22 | 0,13 | 0,26 |
| p value | 0,00 | 0,00 | 0,00 | 0,00 | 0,30 | 0,00 |
| Null hypothesis | rejected | rejected | rejected | rejected | not rejected | rejected |
| Conclusion | Data are not normally distributed | | | | Data are normally distributed | Data are not normally distributed |

As can be seen, data are not normally distributed (with the only exception: case of the “number of orders per company, units” after reforms), and therefore non-parametric tests should be applied. The absence of differences in results for the pre-reform and post-reform data sets have evidenced indirectly in favor of the absence of significant changes in data sets due to reforms.

Next, the researchers have performed a simple average analysis. It provides preliminary estimations of the inequality in the Ukrainian audit market. The results show significant geographical inequalities in the Ukrainian audit market. Kyiv and Kyiv region dominate the market with much higher values than the results from the other regions. This is true for most of the analyzed indicators, except “Number of orders per company”, which is distributed more or less evenly.

In order to confirm preliminary conclusions from the average analysis, non-parametric Kruskal-Wallis tests for difference are performed. The results obtained in the test are presented in Table 3.

Table 3. Kruskal-Wallis test*

| Parameter | Number of reports provided to the ACU, units | Number of orders, units | Actual size of the provided services, '000 UAH | Average costs per order, '000 UAH | Number of orders per company, units | Average income per company, '000 UAH |
|-----------------|--|-------------------------|--|-----------------------------------|-------------------------------------|--------------------------------------|
| Before reforms | | | | | | |
| Adjusted H | 276,28 | 278,48 | 341,48 | 191,60 | 243,06 | 201,12 |
| d.f. | 24 | 24 | 24 | 24 | 24 | 24 |
| P value | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |
| Critical value | 36,41 | 36,41 | 36,41 | 36,41 | 36,41 | 36,41 |
| Null hypothesis | rejected | rejected | rejected | rejected | rejected | rejected |
| After reforms | | | | | | |
| Adjusted H | 71,03 | 68,92 | 72,46 | 64,58 | 8,10 | 71,58 |
| d.f. | 24 | 24 | 24 | 24 | 24 | 24 |
| P value | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 | 0,00 |

| | | | | | | |
|-----------------|----------|----------|----------|----------|----------|----------|
| Critical value | 36,41 | 36,41 | 36,41 | 36,41 | 1.96 | 36,41 |
| Null hypothesis | rejected | rejected | rejected | rejected | rejected | rejected |

Note: For the case of number of orders per company, units for the after reforms data ANOVA analysis applied because these data are normally distributed

According to the results, data from different regions belong to the different general populations. This is indirect evidence in favor of insufficient competitiveness in the Ukrainian audit market.

Further, pieces of evidence related to the competitiveness of the Ukrainian audit market are generated based on the analysis of specific indicators of market concentration, including Concentration ratios (CR1 and CR4), Rosenbluth Index, Hirschman Index, Comprehensive concentration index (CCI), Entropy index and Gini coefficient. An overview of these indicators is presented in Table 4.

Table 4. Market concentration indicators: overview

| Indicator | Short description | Interpretation |
|---|--|---|
| Concentration ratio | This ratio measures the level of market control of the largest market participants. It shows the degree of market concentration. | 0% - no concentration -- means perfect competition; 0%-50% - low concentration -- market competition ranges from perfect competition to an oligopoly; 50%-80% - medium concentration -- usually, it is typical for the oligopoly; 80%-100% - high concentration -- market ranges from an oligopoly to a monopoly; 100% - total concentration -- the market is a monopoly. |
| Hirschman Index (HHI) | Herfindahl–Hirschman Index (HHI) measures the size of market participants related to the whole market. | 0 – no concentration; 0 - 0,1 – low concentration; 0,10 - 0,18 – medium concentration; > 0,18 – high concentration. |
| Rosenbluth Index | This index is based on the market share and the rank of market participants. | It ranges from 1/n to 1. The higher the index is, the more monopolized the market is. |
| Comprehensive concentration index (CCI) | Reflects both relative dispersion and absolute magnitude of the biggest market participant share | CCI ranges from 0 to 1. The higher the CCI is, the less competitive is market. |
| Entropy index | Index measures the distribution of market values among market participants. | The lower the values are, the higher the market concentration is. |
| Gini coefficient | The Gini coefficient measures the inequality among values of a frequency | Ranges from 0 to 1. From perfect competition (0) to monopoly (1). |

| | | |
|--------------|---|---|
| | distribution (for example, market shares). | |
| Lerner index | Index estimates the power of a single market participant. The idea of this index is as follows: the more prices in the market differ from the marginal costs, the less competitive the market is. | Ranges from 0 to 1. The higher the index is, the greater the market power is. Lerner index equals 0 (means any market participant has no market power) in a perfectly competitive market. |

Summary of the results is provided in Table 5.

Table 5 – Market concentration analysis: the case of 2019

| Indicator | Number of reports provided to the ACU | Number of orders | Actual size of the provided services |
|---|---------------------------------------|--------------------------------|--------------------------------------|
| Concentration ratio (CR1) | Dominating companies | Dominating companies | Dominating companies |
| Concentration ratio (CR4) | Dominating companies | Dominating companies | Dominating companies |
| Hirschman Index (HHI) | High concentration | High concentration | High concentration |
| Rosenbluth Index | Low concentration | Low concentration | Medium concentration |
| Comprehensive concentration index (CCI) | Medium concentration | Medium concentration | High concentration |
| Entropy index | Monopoly or oligopoly presence | Monopoly or oligopoly presence | Monopoly or oligopoly presence |
| Gini coefficient | Medium concentration | Medium concentration | Low concentration |

As can be seen, the level of regional competitiveness in the Ukrainian audit market is very low—these results evidence in favor of the highly concentrated nature of the Ukrainian audit market.

In order to see the evolution of competition in the Ukrainian audit market caused by reforms, the authors have compared average values of the market concentration indicators for pre-reform data (2007-2017) and post-reform data (2018-2019). The results are presented in Table 6.

Table 6. Market concentration analysis: before and after reforms

| Indicator | Number of reports provided to the ACU | | Number of orders | | Actual size of the provided services | |
|-----------|---------------------------------------|---------------|------------------|---------------|--------------------------------------|---------------|
| | Before reforms | After reforms | Before reforms | After reforms | Before reforms | After reforms |
| | | | | | | |

| | | | | | | |
|---|------|------|------|------|------|------|
| Concentration ratio (CR1) | 0,42 | 0,50 | 0,43 | 0,48 | 0,77 | 0,82 |
| Concentration ratio (CR4) | 0,62 | 0,65 | 0,62 | 0,67 | 0,88 | 0,9 |
| Hirschman Index (HHI) | 0,2 | 0,27 | 0,22 | 0,26 | 0,61 | 0,67 |
| Rosenbluth Index | 0,12 | 0,14 | 0,12 | 0,17 | 0,41 | 0,57 |
| Comprehensive concentration index (CCI) | 0,43 | 0,41 | 0,45 | 0,41 | 0,78 | 0,8 |
| Entropy index | 0,09 | 0,08 | 0,09 | 0,08 | 0,04 | 0,03 |
| Gini coefficient | 0,47 | 0,43 | 0,49 | 0,48 | 0,73 | 0,63 |

As can be seen for most cases, the situation worsens: the level of competitiveness has decreased.

These conclusions are confirmed by the Lerner Index analysis. It is very close to 1. According to Lerner index interpretation, the Ukrainian audit market is highly monopolized (marginal costs are extremely low compared with the prices in the market, which is possible only in market monopoly), and the situation gets worse after reforms.

Additional pieces of evidence are provided using visual interpretation of the inequality (Lorenz curve). Lorenz curve represents the market inequality in the form of a chart. On the x-axis, the cumulative percentage of companies is presented. On the y-axis, the cumulative percentage of market share is presented. A market of perfect competition is characterized by the bisector from the start of coordinate system. Deviation from this bisector visualizes market inequality.

In case of the Ukrainian audit market actual lines are very far from the ideal distribution (low competitiveness with high inequality), and the situation has worsened after reforms.

To sum up, the highly concentrated nature of the Ukrainian audit market and dominance of the Big 4 audit companies have not been changed after reforms. The surprising fact is that situation gets even worse. From the point of competitiveness, the authors find strong evidence in favor of reforms' failure.

Conclusions and policy implications

Regulatory measures to improve the quality of auditing and the level of competition in its market in the EU (2014) and Ukraine (2017), as shown by the analysis of reporting and statistical sources, did not yield significant positive results.

The limitations of this study on the impact of audit market reform on its concentration in Ukraine are existed because of insufficiently long time after the reform. However, 7 years of EU experience show that market concentration processes intensify even after the reform.

Reforms in the Ukrainian audit market provided in 2017 are supposed to transform it into more competitive. This paper aims to see whether competition in the

Ukrainian audit market has increased. To do this, annual data from the Audit Chamber of Ukraine over the period of 2007-2019 is used. Two hypotheses are tested in this research: Ukrainian audit market was highly concentrated before reforms (H1); Ukrainian audit market is more competitive after reforms (H2). The calculations of concentration level are based on the analysis of the following indicators in the regional breakdown: number of reports provided to the ACU; number of orders; actual size of the provided services; average costs per order; number of orders per company; average income per company.

Using geographic (regional) research approach based on a variety of statistical methods, including average analysis, non-parametrical Kruskal-Wallis test, Kolmogorov-Smirnov test for normality, ANOVA analysis, as well as specific market concentration indicators (concentration ratios, Herfindahl-Hirschman Index, Comprehensive concentration index, Rosenbluth index, Gini coefficient, Lorenz curve, Entropy index, Lerner index,), pieces of evidence in favor of increasing of concentration in the Ukrainian audit market and failure of the reforms are found. The situation with competitiveness only gets worse after reforms.

One of the ways to reform the audit market, which has an ambiguous impact on its market concentration, is to strengthen the qualification requirements for auditors, including some auditors who have the right to conduct statutory audits of public interest entities. On the one hand, stricter qualification requirements create the basis for improving the competence of auditors and the quality of their services (Santosa et al., 2020). On the other hand, they indirectly contribute to market consolidation and redistribution of existing public interest companies favoring B4 companies, mid-tier companies and the largest Ukrainian audit companies.

It is believed that promoting the development of domestic auditing entities with an emphasis on improving the quality of audit services provided, the level of qualification and education of their staff is a key step in ensuring market competition. ESG disclosure can be another aspect of market competition (Plastun et al., 2019) as well as corporate governance (Walid and Soliman, 2020)

In addition, the process of monitoring the quality control of audit services in the market should be intensified, and in particular, be even more stringent for B4 and mid-tier companies. The scale of errors of these companies has a more devastating effect on the audit quality as a whole and the confidence of users of financial statements.

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REFORMY I KONKURENCYJNOŚĆ NA UKRAIŃSKIM RYNKU AUDYTÓW

Streszczenie: Ostatnie reformy na ukraińskim rynku audytorskim powinny pobudzić konkurencyjność na rynku. Niniejszy artykuł bada koncentrację na ukraińskim rynku audytorskim w celu analizy skuteczności tych reform. W niniejszym opracowaniu wykorzystano dane roczne Izby Obrachunkowej Ukrainy za lata 2007 – 2019. Korzystając z różnych metod statystycznych i określonych wskaźników koncentracji rynku, niniejsze badanie znajduje dowody na korzyść wysokiej koncentracji ukraińskiego rynku audytorskiego i niepowodzenia reform. Sytuacja z konkurencyjnością tylko się po nich pogarsza. Wyniki badania dostarczają propozycji poprawy sytuacji w zakresie podnoszenia zasad uczciwości rynku, kwalifikacji biegłych rewidentów w firmach ukraińskich oraz wzmocnienia monitoringu jakości badania w firmach B4 i mid-tier. .

Słowa kluczowe: rynek audytu, konkurencja, koncentracja, reformy, audyt.

乌克兰审计市场的改革和竞争力

摘要:乌克兰审计市场最近的改革应该已经激活了市场竞争力。本文探讨了乌克兰审计市场的集中度，以分析这些改革的效率。在本研究中，使用了乌克兰审计署在 2007 年至 2019 年期间的年度数据。本研究使用各种统计方法和具体的市场集中度指标，发现了有利于乌克兰审计市场高度集中和改革失败的证据。在他们之后，竞争力的情况只会变得更糟。研究结果为改善乌克兰公司市场诚信原则、审计师资格以及加强对 B4 和中型公司审计质量的监控等方面的情况提供了建议。

关键词: 审计市场, 竞争, 集中, 改革, 审计。