Audit Market Concentration: Some Evidence from the Republic of North Macedonia

Conference Paper · February 2023

DOI: 10.4335/2023.3.6

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Audit Market Concentration: Some Evidence from the Republic of North Macedonia

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Abstract Audit market concentration has been thoroughly researched both globally and regionally. According to previous studies, the audit market is often dominated by the Big Four at the EU level, while in the region, the concentration is lower, indicating that it has oligopolistic features. This paper analyzes and measures the concentration of the audit market in Republic of North Macedonia, through Herfindahl-Hirschman index - HHI and concentration ratio - CR4, based on three independent variables: audit-related revenue, number of clients and number of employees. The research covers the period from 2014 to 2021 and it is concluded that at the beginning of the analyzed period (2014-2017), according to audit-related revenue, the audit market in Republic of North Macedonia had the characteristics of an oligopoly, but today it is nonconcentrated market and ranges from perfect competition to oligopoly. In terms of the number of employees and the number of clients, the results from our research show that audit market in Republic of North Macedonia is not concentrated.

Keywords: • audit market • concentration • big four • audit firms • Republic of North Macedonia

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https://doi.org/10.4335/2023.3.6 ISBN 978-961-7124-14-9 (PDF)
Available online at http://www.lex-localis.press.

1 Introduction

Concentration is ‘the combined market share of leading firms and indicates the degree of oligopoly’ (Schaen & Maijoor, 1997). It is calculated by a formula with the market share as an independent variable. The bigger the size of the suppliers and the smaller their presence on the market, the higher the concentration level. Strong concentration indicates oligopoly. Low concentration points out that the market is divided equally under a big number of suppliers.

Audit market concentration has been widely researched, both globally and regionaly, and there is evidence of market concentration in Serbia, Croatia, Slovenia, etc. However, in Republic of North Macedonia this market is not much researched and we believe that this paper is the only one that determines the concentration of audit firms in the country.

The concentration of different service or product markets is measured using several statistical methods, such as the Herfindahl-Hirschman index (HHI), Concentration ratios (CRn), Gini coefficient, Linda index, Hannah-Kay index, Hall Tideman index etc. In our paper to measure the concentration of the audit market we use the Herfindahl-Hirschman index (HHI) and Concentration ratio (CR_4).

The purpose of this paper is to determine whether the audit market in Republic of North Macedonia is concentrated, or whether it is a case of perfect competition or an oligopoly. Through an analysis of the market for the period from 2014 to 2021 and already established indices, the paper provides an answer as to whether the audit market in Republic of North Macedonia is concentrated in terms of audit related revenues, the number of employees in the audit firms and the number of clients.

The paper is composed of several parts as follows: Introduction, Literature Review, Audit Market Concentration Measures, Audit Market Concentration Analysis in Republic of North Macedonia, Results and Discussion, and finally a Conclusion summarizing the results obtained from the research.

2 Literature overview

The audit market concentration globally and regionally has been extensively researched. In general, the market, depending on the number of participants, i.e. competitors in a certain area, as well as their market share, can range from perfect competition to monopoly. In the literature (Garcia, Kutlu & Sickles, 2019; Hall et al., 1986, and Verma, 2022), for perfect competition it is stated that a small concentration of certain firms is required, which would lead the market of those services to be objectively divided between the concerned firms. But, if the market is dominated by a small number of certain firms that are concentrated, then it is an oligopoly, and in the case if only one firm is dominant then it is a monopoly.

Many authors (Le Vourc`h & Morand, 2011; Mijić et al., 2014, and Mališ & Brozović, 2015) emphasize the oligopolistic nature of the audit services market in Europe and the region, with the dominance of the firms that are part of the Big Four. Also, most scholars agree that the level of audit concentration in most European countries is very high (Mališ & Brozović, 2015). The latest CFO (2022) article continues to highlight the dominance of the Big Four, indicating that the audit market is most concentrated among the population of large accelerated filers, that are publicly held organizations with a worldwide public float of $700 million or more. According to them, The Big Four audit 88% of the large accelerated filers. Ernst & Young audits more than a quarter (28.4%) of them, with Deloitte (21.4%) in second place, according to Audit Analytics data, followed by PwC and KPMG (CFO, 2022). Boone (2011) states that oligopolistic dominance of the audit market by the Big 4 fosters complacency among auditors resulting in a more lenient and less skeptical approach to audits and lowers service quality.

According to Le Vourc'h & Morand (2011) in Europe, 19 Member States are highly concentrated with a Herfindahl-Hirschmann Index (HH Index) above 2000, while only two states are moderately concentrated with an HH Index between 1000 and 2000 (i.e. France and Greece). The EU average for the HH Index is 3094. This fact is also supported with some reports by the European Commission (2010, 2021), which state persistent high concentration, as the Big Four still dominate the Public Interest Entities' statutory audit market in most Member States and where the market share measured by revenue and audit fees exceeds even 90%.

Indyk (2019) examines mandatory audit rotation and audit market concentration in Poland and comes to the conclusion that the biggest capital groups tend to appoint audit firm from the Big Four, and if they change firm, they choose another audit firm from the Big Four. The high number of short-term tenures (up to five years) suggests that Big Four firms have strong bargaining power and they benefit more from the rotation of the clients rather than from their retention. According to estimates by Gerakos and Syverson (2015), mandated rotation after ten years would result in losses to consumer surplus of about $2.7 billion, and rotation after four years would cause losses of $4.7–5.0 billion. A relationship with a client that is too long may cause anticipation of the outcome rather than unbiased assessment. Rotating audits might thereby guarantee "the new look" and a more analytical approach. Long ago, Hoyle (1978) made the case that requiring audit rotation would make audit firms more competitive because they would have to constantly work to recruit new clients. According to Italian experience, regular rotations may result in cheaper audit fees, which could bolster the case for more competition in the audit market (Ewelt-Knauer et al., 2012).

The opponents of mandatory audit rotation also offer empirical proof that auditors were not even subjected to the requirement for rotation (Carrera et al. 2007). Mandatory audit rotation may further increase market concentration because big businesses typically select one of the Big Four auditors when changing audit firms. Experience from South Korea implies that market competition will decline rather than grow (Ewelt-Knauer et al., 2012).

Willekens et al. (2020) discover that, even though industry leadership is not significantly correlated with audit quality, the favorable link between market share distance and audit quality only persists when the incumbent auditor is a market leader. These results imply that rather than industry specialization per se, audit quality is positively impacted by a market leader's industry market share supremacy over its competitors. In China, a study on the relationship between audit market concentration and audit quality with an empirical study has been done, with which Minghui and Zhenggang (2003) stated that the concentration and audit quality presents a u-function relationship in China's audit market, and point out it necessary to construct "oligopoly" to enhance the audit quality and international competitiveness of Certified Public Accountants and the listed company in China. Song (2021) demonstrate that audit quality declines as audit market concentration rises, and that this inverse relationship between audit market concentration and audit quality only changes when audit committees include certified accountants, other accounting experts like chief financial officers and controllers, or finance experts (excluding finance professors).

Furthermore, the audit market concentration is researched from different aspects by determining several independent variables that could have impact on it. Mijić et al. (2014) with their research analyze the market of audit services in Serbia through the operating revenues of the audit firms, net earnings, the number of employees and the number of clients and reveal that the audit market in Serbia is oligopolistic when market share is measured by operating revenue of audit firms and that the "Big Four" audit firms have a dominant position in the audit market in Serbia. When other measures of market concentration are taken into consideration, such as net earnings, number of employees and number of audit clients, the "Big Four" is not so dominant (Mijić et al., 2014). Furthermore, Mališ and Brozović (2015) in addition to those variables consider the concentration through the total assets and revenues of audit clients and conclude that the audit market in Croatia for listed companies is moderately to highly concentrated, with a decrease in the five-year period (i.e., 2013 compared to 2008). The paper of Zaman Groff and Salihović (2016) is also significant, with which they make an analysis of concentration in the audit services market in Slovenia and point out high concentration of the Big Four audit firms for the segment of listed companies (4-year CR_4 average 70,2%, 4-year average HHI 1.842,1), but on the other hand, the market is unconcentrated for the segment of non-listed companies (4-year CR_4 average 42 %, 4-year average HHI 703,6).

The research on the audit market concentration is very broad and has existed since almost 30 years ago until today. Some older papers (Loft & Sjoefors, 1993, and Lenz & Bauer, 2004) demonstrated high ratios of audit market concentration. Also, many authors analyze and offer empirical evidence on the correlation of the audit market concentration with the audit fees (Eshelman & Lawson, 2017; Huang et al., 2016; Feldman, 2006, and

Pearson & Trompeter, 1994). All these authors have proven the positive relation between audit market concentration and audit fees. Gunna et al. (2019) indicate that audit fees charged to relatively complex clients are higher when the audit market is more heavily concentrated within the Big Four group of auditors.

The audit market concentration has also been examined from the aspect of audit quality. In a significant study by Francis et al. (2012) in which they examine the audit market concentration in 42 countries, conclude that both Big Four audits and non-Big Four audits are of higher quality in those countries where the Big Four conduct a higher percentage of total audits. These results suggest that Big Four dominance, by itself, does not harm audit quality. An interesting conclusion is reached by Van Raak et al. (2019) who state that market concentration can have a net beneficial effect on quality in the large-client segment, as it helps audit firms to achieve economies of scale in audit technology and resources. Their research proves that competition can be improved by facilitating client mobility rather than by reducing market concentration.

3 Audit Market Concentration Measures

Measuring the levels of audit concentration was the subject of many studies done by regulators and individual researchers (Mališ & Brozović, 2015). Commonly used measures of concentration, but also recommended from The Organisation for Economic Co-operation and Development (1993), are the following two methods:

- Herfindahl-Hirschman Index (HHI) and
- Concentration ratio (CRn)

The first one, The Herfindahl-Hirschman Index (HHI) represents an index that measures the market concentration of an industry (CFI, 2020). The Herfindahl-Hirschman Index is the sum of squares of the market shares of all audit firms:

$$\text{HHI} = \sum_{i=1}^{n} (MS_i)^2$$

where: S_i is the market share of the firm i in the market, *n* is the number of firms.

Owing to squaring market shares, the HHI is dominated by large audit firms and only significantly influenced by small carriers. It rates from 1/n (in case of minimal concentration and equal share of all suppliers) to 10,000 (which indicates a complete concentration). The European legislation uses the HH Index to assess horizontal mergers and thus isolates three ranges of post-merger HH Index levels (Le Vourc'h & Morand, 2011):

1. non concentrated markets if the HH Index is below 1000,
2. moderately concentrated markets if the HH Index is between 1000 and 2000, and

3. highly concentrated markets if the HH Index is above 2000

The second one, Concentration ratio (CRn) refers to the ratio of the market shares of a particular company in relation to the entire market size (The Business Professor, 2022). This ratio also measures the size of a company or firm in comparison to the size of the whole market.

$$CR_n = \sum_{i=1}^{n} S_i$$

where: *n* is the number of firms, *Si* is the market share.

Concentration ratios range from 0 to 100 percent. Audit market concentration is mostly measured by concentration ratio CR_4, since there are four largest audit firms ("Big Four"). The following scale can be used for interpretation of CR_4 (Le Vourc`h & Morand, 2011):

1. 0% - means perfect competition (no concentration).
2. between 0% to 50% - this category ranges from perfect competition to oligopoly (low concentration).
3. between 50% and 80% - an industry in this range is likely an oligopoly (medium concentration).
4. between 80% and 100% - this category ranges from highly concentrated oligopoly to monopoly (high concentration)
5. 100% means an extremely concentrated oligopoly (total concentration).

Various independent variables can be used in HHI and CRn methods. Based on the literature and research on the concentration of the audit market in the countries of the region, in our research as independent variables have been included: revenues from audit services, the number of employees, and the number of clients.

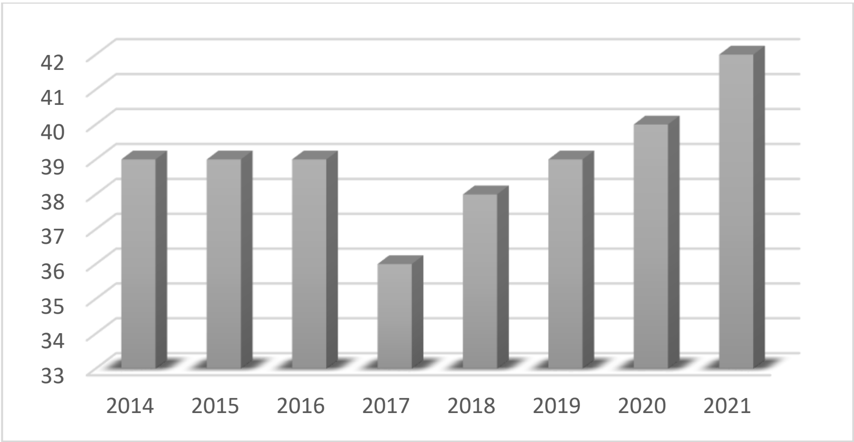
4 Audit Market Concentration Analysis in Republic of North Macedonia

The Government of North Macedonia, at the suggestion of the Minister of Finance, in order to promote and oversight audits, established the Council for Advancement of Oversight of the Audit of the Republic of North Macedonia (herein after: CAOA), as an independent and autonomous regulatory body with public authorizations established in Audit Law (Official Gazette, 2010). According to the CAOA (2022) latest updated data in October 2022 in Republic of North Macedonia there are: 28 Licensed Audit Firms and 13 Licensed Certified Auditors - Sole Proprietor and 228 Licensed Certified Auditors.

The values contribute to the achievement of the goals of the CAOA, appreciating that this is achieved by strengthening the internal organization and increasing the efficiency and effectiveness in the audit work. The role that CAOA has for the development of domestic audit practice is indisputable, as well as the role in establishing cooperation with foreign and international organizations.

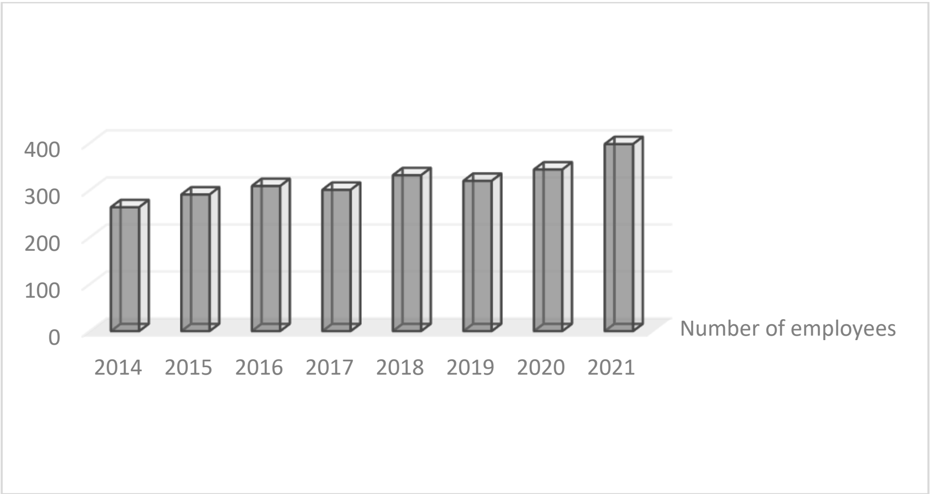
The audit market in Republic of North Macedonia begins to be regulated by the Law on Audit, originally adopted in 1997, and then a new Law on Audit was adopted in 2010. According to the available information and Transparency Reports published by the CAOA, figure 1 gives the number of audit firms in Republic of North Macedonia from 2019 to 2021.

Figure 1: Number of Audit Firms in Republic of North Macedonia (2014 – 2021)



It can be noted that there is a positive trend from 2017 till 2021, that is, the number of audit firms is growing. The increase in the number of audit firms is reflected in the increase in the number of employees (see figure 2).

Figure 2: Number of employees in the audit firms in Republic of North Macedonia (2014 – 2021)



The number of employees in 2014 is the smallest and amounts to 264 employees in audit firms, while in 2021 that number is the largest and amounts to 398 employees.

The analysis of the audit market in Republic North Macedonia is measured by the Herfindahl-Hirschman Index and concentration ratio CR_4 in the 2014 to 2021 year. Independent variables in the research through which the concentration is measured are: Audit-related revenue, Number of employees and Number of clients.

The analysis of the concentration of the audit market should provide an answer to the following research question:

- *Is the audit market in Republic of North Macedonia concentrated?*

Table 1: Audit-related revenue, Number of Employees and Number of Clients of "Big Four, International Network and Domestic Audit Firms in Republic of North Macedonia (2014 – 2021)

Independent Variables	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**
Audit-related revenue (in EUR)								
Big Four	2,109,303	2,525,704	2,415,769	2,451,187	2,402,846	2,431,399	2,627,203	2,449,691
International Network	987,083	1,065,368	1,176,484	1,325,949	1,407,342	1,495,431	1,414,830	1,459,691
Other (domestic) audit firm	1,053,671	1,172,838	1,221,279	1,213,523	1,375,654	1,539,528	1,661,953	1,926,634
Total audit-related revenue	4,150,057	4,763,909	4,813,532	4,990,659	5,185,842	5,466,358	5,703,986	5,836,016
Number of clients								
Big Four	167	205	189	202	189	202	180	157
International Network	281	294	350	389	360	379	370	247
Other (domestic) audit firm	594	763	714	732	809	833	891	975
Total number of clients	1042	1262	1253	1323	1358	1414	1441	1379

Number of employees								
Big Four	90	103	114	111	111	104	119	131
International Network	80	91	95	94	111	109	117	123
Other (domestic) audit firm	94	97	100	96	110	107	108	144
Total number of employees	264	291	309	301	332	320	344	398

Table 1 presents the values of the independent variables for the observed period. The data are provided by the transparency reports published on the CAOA's website, and according to the research needs, they are divided into three groups: Big Four, International Network and Other (Domestic) audit firms.

5 Results and Discussion

The obtained results of the measurement with the two indices (HHI and CR_4) are given in extended.

Table 2: Concentration of Audit Market in Republic of North Macedonia (2014 – 2021)

Audit Market Concentration Indices	**Independent Variables**		
	Audit-related revenue	**Number of clients**	**Number of employees**
HHI 2014	928	504	619
HHI 2015	961	494	654
HHI 2016	888	525	679
HHI 2017	876	538	688
HHI 2018	845	503	659
HHI 2019	799	517	683
HHI 2020	800	482	709
HHI 2021	707	481	739
CR_4 2014	50.83%	16.03%	34.09%
CR_4 2015	53.02%	16.24%	35.40%
CR_4 2016	50.19%	15.08%	36.89%
CR_4 2017	49.12%	15.27%	36.88%
CR_4 2018	46.33%	13.92%	33.43%
CR_4 2019	44.48%	14.29%	32.50%
CR_4 2020	46.06%	12.49%	34.59%
CR_4 2021	41.98%	11.39%	32.91%

Measurement of market concentration according to audit related revenue by concentration ratio CR_4 indicated that the audit market in Republic of North Macedonia in the 2014-2017 period was moderately concentrated and that it had the characteristics of an oligopoly (see figure 4). From 2017 to 2021, the percentage of CR_4 already falls below 50%, which means that the concentration is decreasing. According to the HHI, in the entire analyzed period, the audit services market according to this independent variable is not concentrated, that is, it represents perfect competition. This is due to the fact that in Republic of North Macedonia, as a relatively small market, there are a large number of audit firms (in 2021 a total of 41), which comprise the firms of the Big Four, audit firms from the International Network and domestic audit firms.

Figure 3: HHI according to audit-related revenue, number of clients and number of employees (2014-2021)

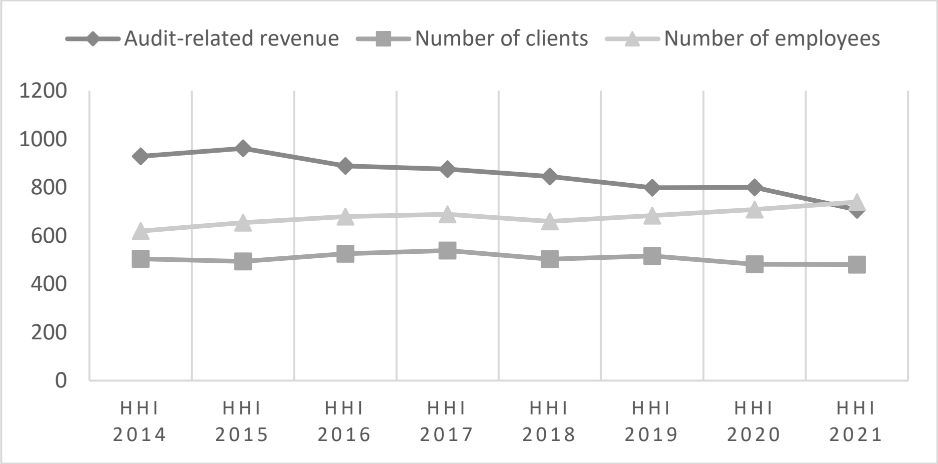
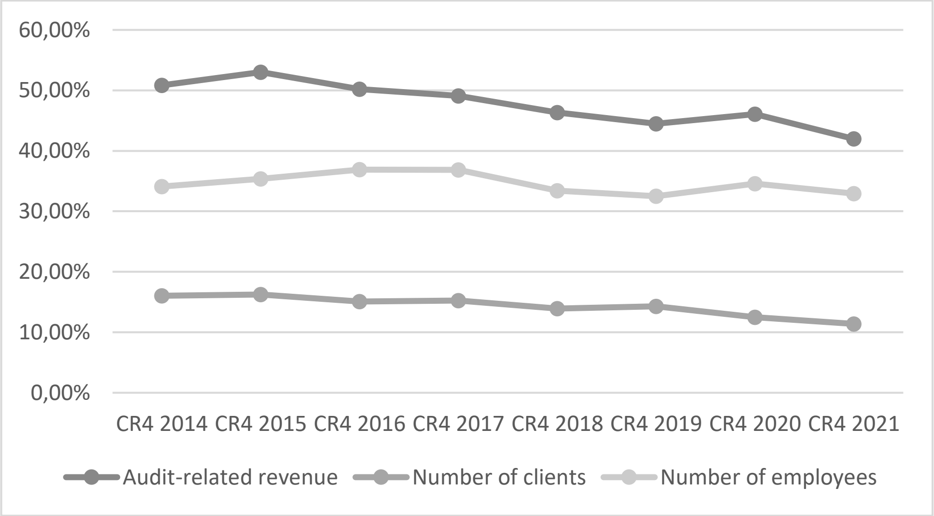


Figure 4: CR4 Index according to audit-related revenue, number of clients and number of employees (2014-2021)



For the other two independent variables, the number of employees and the number of clients, and according to the two indexes HHI and CR_4 in the entire analyzed period

(2014-2021), the audit market in Republic of North Macedonia is not concentrated and has the characteristics that range from perfect competition to oligopoly (see table 2, figures 3 and 4). From the analysis, it can be noted that the number of employees divided into the three categories (Big Four, International Network and Domestic Audit Firms) is relatively the same in each category, while in the number of clients, the largest number of clients belong to the category of domestic audit firms, and the smallest number to the Big Four. The result is logical and can be pointed out is that Big Four audit firms earn the most for an audit engagement, where they have the highest amount of revenue and the lowest number of clients, due to the size of the client. From a practical point of view, this is shown through the increasing number of newly opened auditing companies, as well as the larger number of authorized auditors compared to previous years. The existence of competition in the audit market is a good indicator and a challenge that must constantly keep auditors awake in their continuous improvement in order to carry out the highest quality, most effective, and most efficient audit possible.

6 Conclusions

This research contributes to increase the existing literature in the field of audit markets, especially for Republic of North Macedonia. With a detailed analysis of the concentration of the audit market in Republic of North Macedonia, through defined independent variables related to audit-related revenue, number of employees and number of clients, the results in the paper indicate that from the aspect of audit-related revenue the audit market in Republic of North Macedonia from 2014 to 2017 was medium concentrated, but in terms of the number of employees and the number of clients, the audit market is non concentrated, that is, it ranges from perfect competition to oligopoly.

Further research could elaborate the concentration of audit firms for the segment of listed companies or in the segment of non-listed companies in Republic of North Macedonia. There is also room for research on the concentration in the audit market, whether it affects audit fees and quality of statutory audits provided in Republic of North Macedonia. An international study, comparing concentration levels, audit fees and audit quality in different countries could serve as a high quality platform for audit market concentration related policy recommendations.

References:

Boone, J. P., Khurana, K. I., and Raman, K. K., (2011) Audit Market Concentration and Auditor Tolerance for Earnings Management, *Contemporary Accounting Research*, 29(4), pp. 1171-1203, https://doi.org/10.1111/j.1911-3846.2011.01144.x.

Carrera, N., Gómez-Aguilar, N., Humphrey, C. & Ruiz-Barbadillo, E. (2007) Mandatory audit firm rotation in Spain: A policy that was never applied, *Accounting, Auditing & Accountability Journal*, 20(5), pp. 671-701, https://doi.org/10.1108/09513570710779009.

CFI (2020) *Herfindahl-Hirschman Index (HHI)*, available at: https://corporatefinanceinstitute.com/resources/knowledge/finance/herfindahl-hirschman (October 24, 2022).

CFO (2022) *The Big Four Continue to Dominate Auditing: Weekly Stat*, available at: https://www.cfo.com/accounting-tax/auditing/2022/06/auditing-big-four-market-share-sec-registrants-accounting/#:~:text=The%20Big%20Four%20audit%2088 (November 12, 2022).

Eshelman, J.D. & B.P. Lawson. (2017) Audit market structure and audit pricing, *Accounting Horizons*, 31(1), pp. 57-81, https://doi.org/https://doi.org/10.2308/acch-51603.

European Commission (2010) *Green Paper – Audit Policy: Lessons from the crisis*, available at: http://ec.europa.eu/internal_market/consultations/docs/2010/audit/green_paper_audit_en.pdf (November 3, 2022).

European Commission (2021) *Report from the Commission to the European Parliament, the Council, the European Central Bank and the European systemic risk board*, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0029&rid=2 (October 25, 2022).

Ewelt-Knauer, C., Gold, A. & Pott, C. (2012) *What do we know about mandatory audit firm rotation*? (Institute of Chartered Accountants of Scotland), available at: https://assets.publishing.service.gov.uk/media/5329dbc1ed915d0e5d0000c1/icas_mafr_report.pdf (October 29, 2022).

Feldman, E. R. (2006) A basic quantification of the competitive implications of the demise of Arthur Andersen, *Review of Industrial Organization*, 29(3), pp. 193–212, https://doi.org/10.1007/s11151-006-9117-5.

Francis, R. J., Michas, N. P. & Seavey, E. S. (2012) Does Audit Market Concentration Harm the Quality of Audited Earnings? Evidence from Audit Markets in 42 Countries*, *Contemporary Accounting Research*, 30(1), pp. 325-355, https://doi.org/10.1111/j.1911-3846.2012.01156.x.

Garcia, D., Kutlu, L. & Sickles, R. C. (2019) Market Structures in Production Economics, In: Ray, S. C., Chambers, R. G. & Kumbhakar, S. C. (eds.) *Handbook of Production Economics* (New York: Springer), vol 1, pp. 1-48.

Gerakos J. & Syverson C. (2015) Competition in the audit market: Policy implications, *Journal of Accounting Research*, 53(4), pp. 725-775, https://doi.org/10.1111/1475-679X.12087.

Gunna, L. J., Kawadab, S. B. & Michas, N. P. (2019) Audit market concentration, audit fees, and audit quality: A cross-country analysis of complex audit clients, *Journal of Accounting and Public Policy*, 38(6), https://10.1016/j.jaccpubpol.2019.106693.

Hall, E. R., Blanchard J. O. & Hubbard, R. G. (1986), Market Structure and Macroeconomic Fluctuations, *Brookings Papers on Economic Activity*, 1986(2), pp. 285-338, https://doi.org/10.2307/2534476.

Hoyle, J. (1978) Mandatory auditor rotation : The arguments and an alternative, *Journal of Accountancy*, 145(5), pp. 69-78.

Huang, T.-C., Chang, H. & Chiou, J.-R. (2016) Audit Market Concentration, Audit Fees, and Audit Quality: Evidence from China, *Auditing: A Journal of Practice and Theory*, 35(2), pp. 121-145, https://doi.org/10.2308/ajpt-51299.

Indyk, M. (2019) Mandatory audit rotation and audit market concentration - evidence from Poland, *Economic and Business Review*, 5(19), pp. 90-111, https://10.18559/ebr.2019.4.5.

Le Vourc`h, J. & Morand, P. (2011) *Study on the Effects of the Implementation of the Acquis on Statutory Audits of Annual and Consolidated Accounts Including the Consequences on the Audit Market* (Paris: European Commission).

Lenz, H. & Bauer, M. (2004) Pruefungs- und Beratungshonorare von Abschlusspruefern deutscher boersennotierter Aktiengesellschaften, *Die Wirtschaftspruefung*, 57(12), pp. 985-998.

Loft, A. & Sjoefors, A. (1993) Audit concentration in Sweden and Denmark, In: Artsberg, K., Loft, A. & Yard, S. (eds.) *Accounting Research in Lund* (Lund: University Press), pp. 155-175.

Mijić, K., Jakšić D. & Vuković, B. (2014) Concentration of the audit market: Evidence from Serbia, *Economic Themes*, 52(1), pp. 115-126, https://10.1515/ethemes-2014-0008.

Minghui, L. & Zhenggang, X. (2003) The Empirical Analysis of China's audit market concentration and audit the quality, *Journal of Accounting Research*, 7, pp 37-41.

Official Gazette (2010) *Audit Law, 158/10, 135/11*, available at: https://finance.gov.mk/wp-content/uploads/2009/05/Audit-law.pdf (September 19, 2022).

Organisation for Economic Co-operation and Development (1993) *Glossary of Industrial Organization Economics and Competition Law* (Europe: OECD), available at: https://www.oecd.org/regreform/sectors/2376087.pdf (September 12, 2022).

Pearson, T. & Trompeter, G. (1994) Competition in the market for audit services: The effect of supplier concentration on audit fees, *Contemporary Accounting Research*, 11(1), pp. 115-135.

Schaen, M. & Maijoor, S. (1997) The Structure of the Belgian Audit Market, *International Journal of Auditing*, 1(2), pp. 151-162, http://dx.doi.org/10.1111/1099-1123.00019.

Sever Mališ, S. & Brozović, M. (2015) Audit Market Concentration – Evidence from Croatia, *Ekonomski Vjesnik/Ecoviews*, 28(2/2015), pp. 339-356.

Song, B. (2021) The Relation of Audit Quality to Audit Market Concentration and the Composition of Audit Committee Financial Expertise, *Academy of Accounting and Financial Studies Journal*, 25(6).

The Business Professor (2022) *Concentration Ratio – Explained,* available at: https://thebusinessprofessor.com/en_US/economic-analysis-monetary-policy/concentration-ratio-definition (November 4, 2022).

Van Raak. J., Peek, E., Meuwissen, R. & Schelleman, C. (2019) The effect of audit market structure on audit quality and audit pricing in the private-client market, *Journal of Business Finance & Accounting*, 47(3-4), pp. 456-488, https://10.1111/jbfa.12414.

Verma, E. (2022) *Market Structure: Definition, Types, Features and Fluctiations*, available at: https://www.simplilearn.com/market-structures-rar188-article#:~:text=Market%20structure%20refers%20to%20the,monopolistic%20markets%2C%20and%20monopolistic%20competition (October 7, 2022).

Willekens, S., Dekeyser, S., Bruynseels, L. & Numan, W. (2020) Auditor Market Power and Audit Quality Revisited: Effects of Market Concentration, Market Share Distance, and Leadership, *Journal of Accounting, Auditing and Finance*, 38(1), https://doi.org/10.1177/0148558X209662.

Zaman Groff, M. & Salihović, A. (2016) Audit market concentration for the segments of listed and non-listed auditees in Slovenia, *Journal of Economics and Business*, 19/2016(1), pp. 31-49.