Mandatory rotation of audit firms and auditors in Greece

Abstract

Purpose - This paper aims to examine the question of whether the mandatory rotation of audit firms and auditors, which is part of the new European Audit Reform, is a desirable measure in Greece.

Design/methodology/approach - A comprehensive literature review of related studies from Europe and around the world was performed to study the issue. We conduct an empirical analysis focusing on auditors working in Greek audit firms and present the results of the responses from 115 members of the Institute of Certified Public Accountants of Greece.

Findings - Empirical findings provide mixed results with regard to the implications of mandatory rotation. Most of the respondents agree that mandatory rotation will increase the overall costs of the audit process. However, they also conclude that it will increase both auditor independence and resistance to the management of audited firms.

Practical implications - The findings of the study should be of interest to policymakers, regulators and audit firms in Greece and Europe.

Originality/value – This is the first study that investigates the effects of mandatory rotation on audit quality in Greece since the establishment of the new regulatory audit framework. The study focuses on auditors' views considering their decisive role in achieving audit quality. The conclusions of this study are generally in line with those indicated in the literature.

Keywords Audit, mandatory rotation.

Introduction

The eruption of the global financial crisis brought significant weaknesses of the European audit system into the spotlight, raising doubts about the accuracy of audited financial statements and auditor independence. In response to this situation, the European Commission and the European Parliament took action to improve the quality of audits of public interest entities[1] (PIEs). After a co-decision procedure in which multiple stakeholders were invited to participate, Regulation (537/2014) and Directive (2014/56/EU) came into effect in June 2016. The European Audit Reform aimed to improve external audit quality and thereby strengthen confidence in the reliability of financial statements. All member states were required to implement the new audit rules into their national legislation, but were given, however, flexibility regarding specific requirements of both the Regulation and the Directive. The member state options provide a degree of flexibility in meeting the new legislation demands, allowing member states to deviate from minimum harmonization of the statutory audit of PIEs.

Greece passed the new Greek Audit Law (4449/2017) in January 2017, finalizing the incorporation of the new EU audit legislation into its national regulatory framework. As far as the mandatory firm rotation for all PIEs[2] is concerned, Greece follows the minimum and maximum duration of the engagement period at 1 at 10 years, respectively, set by the EU[3]. Making use of its options, Greece allows an extension of audit engagement for up to a maximum of 10 years in the case of public tendering, while it does not privilege a joint audit extension. In general, there is consistency among EU member states regarding mandatory firm rotation, since in 23 member states, firm rotation is required after 10 years (Dekeyser and Simac, 2019). However, there are significant differences across member states regarding the options that allow

[1] More specifically, in 2010, the European Commission released a green paper entitled: 'Audit Policy: Lessons from the Crisis', while the European Parliament reacted to the Commission's 2010 green paper with its own report (available at: https://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P7-TA-2011-359).

[2] According to the Greek Audit Law, the definition of PIEs is identical to that provided by the EU legislation, referring to listed entities and entities with listed debt, credit institutions and insurance undertakings. Also, the Minister of Finance has the right to designate other entities as PIEs.

[3] For systemically important financial institutions, the maximum initial duration of engagement is 5 years.

the extension of an audit engagement. More specifically, 18 countries extend the engagement period once over four different periods where a tendering process is conducted, while 9 countries extend the period once over four different periods where there is a joint audit arrangement. With regard to mandatory partner rotation, the Greek Law requires key audit partners to rotate every 5 years, and they are then not able to participate in the audit of the same entity for at least 2 years. The majority of member states follow the EU guidelines, where the key audit partner rotation is mandated after 7 years, followed by a 3-year cooling-off period (Dekeyser and Simac, 2019). The US mandates rotation of the key audit partners after 5 years; however, it has adopted a different perspective in regard to audit firms, setting aside the mandatory rotation of the firm (Cameran *et al.* 2015).

Greek law dictates that the statutory audit should be carried out by auditors and audit firms in accordance with the international auditing standards adopted by the European Commission. The "international auditing standards" refer to the International Standards on Auditing (ISAs), International Standard on Quality Control (ISQC 1) and other related standards issued by the International Federation of Accountants (IFAC)[4]. To the best of our knowledge, no study has been performed investigating the effects of recent audit reform on audit quality in the Greek audit market. In light of the current developments in the audit regulatory framework, this paper focuses explicitly on the mandatory rotation of audit firms and key audit partners, examining their effects on audit quality.

Cameran *et al.* (2015) address the positive and negative implications of mandatory rotation on audit quality. On the one hand, mandatory rotation strengthens auditor independence, provides the auditee with a "new fresh look", reduces the economic dependence of the audit firm on the client, enhances the awareness of the audit firm and increases competition in the audit market. On the other hand, mandatory rotation increases switching costs for both the audit

[4] According to Greek Law, the international auditing standards are applicable provided that they are relevant to statutory audit; they have been approved by the Hellenic Accounting and Auditing Standards Oversight Board (HAASOB) and they have been published in the Official Government Gazette.

firm and the client, causes uncertainty at the beginning of cooperation until the new audit firm becomes familiar with the client and increases information costs for market participants, since they are not able to distinguish a voluntary change from a compulsory rotation. Empirical evidence fails to provide conclusive results for mandatory rotation and its effect on audit quality, since there are arguments both in favor (Firth *et al.* 2010; Ye *et al.* 2011; Ricken, 2016; Kingstone *et al.* 2017; Quick, 2017) and against rotation (Manry *et al.* 2006; Gul *et al.* 2007; Chi *et al.* 2009; Kwon *et al.* 2014; Elder *et al.* 2015).

In Greece, the Institute of Certified Public Accountants of Greece (SOEL) expressed a negative opinion on audit firm rotation on the basis that it reduces the effectiveness of auditing, undermines the auditor's credibility and authority, and increases the cost of information for auditors with regard to the audited company (SOEL, 2010). Taking into account the new regulatory framework in Greece (Audit Law 4449/2017) in response to the European Audit Reform, this is the first study aiming to investigate the implications of mandatory rotation on audit quality at the national level after recent developments.

The structure of the paper is as follows. The second section provides an extensive literature review of studies in Europe and around the world on the relationship between mandatory rotation and audit quality. The research methodology and the empirical analysis are presented in the third section, and the fourth section concludes the paper.

Literature review

Auditors play a crucial role in contributing to the reliability of the financial statements for which they report. Global financial stability is supported through high-quality reports, and audits can help build confidence in the quality of reporting (International Federation of Accountants, 2017). Audit quality is influenced, according to the literature, by a number of factors, such as the characteristics of the auditor, the audit firm and the audited company, the audit fee, the auditors' independence, and the rotation of audit firms and auditors (Simunic, 1980; Myers *et*

al. 2003; Tahinakis and Nicolaou, 2004; Stanley and DeZoort, 2007; Ettredge *et al.* 2014; Church *et al.* 2018; Jenkins and Stanley, 2019). According to Bradbury and Redmayne (2013) and DeAngelo (1981), audit quality depends on the size of the auditing firm. Boone *et al.* (2010) conclude that there is little difference in the actual audit quality between Big 4 firms[5] and non-Big 4 firms; however, there is a strong difference in the perception of quality control. The United States General Accounting Office (2004) survey on the mandatory rotation of audit firms, a thorough survey with a detailed questionnaire, concluded that many years of experience are needed to assess the effects of mandatory rotation on the audit quality and the independence of the auditor. Cameran *et al.* (2015) also studied the mandatory rotation of an audit firm, indicating that studies so far have not been able to demonstrate that benefits outweigh the cost of rotation.

The rotation of audit firms and auditors has been an issue for international researchers over the past decades (Arrunada and Paz-Ares, 1997; Jackson *et al.* 2008; Owusu-Ansah *et al.* 2010; Butcher *et al.* 2013). Both views in favor and against rotation are offered in the literature. Ewelt-Knauer *et al.* (2012) investigated studies around the world and concluded that rotation and no rotation are two important features, as both have significant advantages. Cameran *et al.* (2015) quote the advantages and disadvantages of mandatory rotation. The main benefits of mandatory rotation are related to auditors' independence and awareness and to the level of competition in the industry. The main shortcomings of mandatory rotation are the cost and uncertainty caused by a change of auditor. Wilson *et al.* (2018) suggest that increased audit tenure and auditor familiarity enhance trust, which, in turn, enhances the willingness of auditors to speak about fraud. Bleibtreu and Stefani (2018) argue that the objectives of mandatory rotation could be in direct conflict, and thus, the implementation of such a rule may cause unintended consequences.

[5] The Big 4 refers to the four largest accounting and auditing firms in the world, namely Deloitte Touche Tohmatsu, Ernst & Young, KPMG, and PricewaterhouseCoopers.

Several studies favor the mandatory rotation of auditors. Davis *et al.* (2000) conclude that many years auditing the same company have a negative influence on audit quality either because auditors want to retain their client or because they begin to act as "members" of the company. Ye *et al.* (2006) conclude that the long-term tenure of an auditor in a company negatively affects that auditor’s independence. Fairchild (2008), using game theory, draws the contradictory conclusion that as the auditor's tenure grows, he becomes familiar with the company’s information and can more easily identify mistakes, omissions, or even fraud, while at the same time, he also acquires familiarity with the company's management, which prevents him from conducting a thorough audit. Because of this, the researcher concludes that there is a point to regulating the rotation of an auditor as soon as he begins to lose his independence and begins to reduce the audit quality. Imhoff (2003) proposes the mandatory rotation of auditors every three years to strengthen the auditor's independence. Lennox *et al.* (2013) studied the impact of the mandatory rotation of auditors on audit quality in China and found that mandatory rotation leads to higher audit quality, with the audit quality being improved before rotation. Similarly, Firth *et al.* (2010) provide evidence in favor of the mandatory rotation of auditors in less developed countries with weak legal frameworks, such as China. Ye *et al.* (2011), in their Australian survey, conclude that the audit firm's tenure has a negative correlation with the auditor's tendency to issue a continuing view. Quick (2017), in his research on bank managers and institutional investors in Germany, concludes that there is a negative impact of rotation on the ongoing audits and independence of the auditor. Kingstone *et al.* (2017), assessing the impact of the mandatory rotation of an audit firm on audit quality in Zimbabwe, concludes that there is a strong positive linear relationship between the mandatory rotation of the audit firm and audit quality and that there is a strong negative correlation between audit duration and audit quality. Arel *et al.* (2006) investigated 105 northeast US auditors with an average level of experience of up to 14 years and conclude that rotation is more likely to modify their audit report compared to those in a situation where a continuing

relationship is expected. Considering the market reaction to audit firm rotation in Korea, Kim *et al.* (2019) find that mandatory rotation decreases the cost of equity capital by enhancing auditor independence and skepticism. Ricken (2016), in his research in the Netherlands on auditors working in Big 4 firms, concludes that rotation has a positive effect on the audit approach and the work attitude in the last year before rotation, and improves the behavior in interpersonal relationships with employees in the audited firm. Casterella and Johnston (2013), summarizing the recent literature on the mandatory rotation of audit firms, found that no safe conclusions could be drawn about the effectiveness of the mandatory rule.

Arguing against the mandatory rotation of auditors, many studies with a common denominator indicate that because auditors are not prepared to lose their reputation and credibility for no reason, the quality of the audit should be stable and not affected by tenure. Manry *et al.* (2006), using data from real US audits by three major international audit firms, find that audit quality seems to increase with the auditor's increased tenure. Reid and Carcello (2017) further corroborate this argument by assessing the market reaction to events related to mandatory rotation. They find that investors react negatively (positively) to events that increase (decrease) the likelihood of rotation, while the reaction is stronger on dates that increase the likelihood of rotation of a Big 4 audit firm. Geiger and Raghunandan (2002), with the help of multivariate analysis, conclude that there is an inverse relationship between audit tenure and audit failures. Vanstraelen (2000) concludes that the long-term tenure of an auditor in a company adversely affects the audit quality, observing that the auditor is more likely to issue a negative audit report in the first two years of his tenure; however, he still does not favor the rotation of auditors because there are negative impacts but advocates the creation of alternative measures to ensure audit quality and the independence of the auditor. Myers *et al.* (2003) argue that the rotation of auditors creates high audit costs and reduces audit quality, as the auditor needs time to become acquainted with the company. Low audit quality during the first three years after a change in auditor is also identified by Johnson *et al.* (2002) in their study. Carcello

and Nagy (2004) are unable to find evidence that an auditor is more likely to issue fraudulent financial information given a longer tenure. Ghosh and Moon (2004) conclude that imposing mandatory limits on an auditor's tenure may impose additional costs on the audited company. Gul *et al.* (2007), studying 4,720 US companies, conclude that the correlation between the fee and the independence of the auditor depends on his tenure and that high fees have a negative impact on his independence when the audit is of short duration and the audited company is small. Chi *et al.* (2009) and Ruiz-Barbadillo *et al.* (2009) also conclude that there is no need for rotation. Jackson *et al.* (2008) studied the impact of the mandatory rotation of audit firms on audit quality in Australia, concluding that, given the additional costs associated with the rotation of auditors, there is little benefit, if any, from the obligatory rotation of the audit firm. Elder *et al.* (2015) used audit firm rotation data and audit quality measures from Florida, US, and find that rotation policies are indirectly linked to the highest audit quality. Kwon *et al.* (2014) study the issue in South Korea by comparing no mandatory periods until 2006 and the mandatory rotation of audit firms after 2006 with selective implementation. After 2006, when the audit firms were required to rotate, the audit quality did not change significantly compared to the period up to 2006. In addition, control costs and hours increased significantly. Similarly, the empirical research of Cameran *et al.* (2016) fails to provide evidence for mandatory rotation in Italy.

Empirical analysis

The choice of auditors

The rationale behind the mandatory rotation rule is that it is considered to be an effective means of safeguarding and/or improving audit quality. Audit quality relates to the credibility and reliability of the financial statements reported by firms, and it is defined as the ability of the auditor to discover material misstatements in the financial statements and his willingness to issue an audit report based on the audit findings (DeAngelo, 1981; Langli and Willekens,

2018). Many stakeholders collect valuable information from financial statements to support their decision-making processes. It is clear that the quality of financial information is particularly important for various stakeholders, such as audit professionals, boards of directors and businesses, policymakers and regulatory bodies, financial analysts and loan officers. Considering that mandatory rotation is thought to be a key mechanism to enhance the quality of audited financial statements, all related parties have an interest in that matter.

Financial analysts and loan officers may assume that a long-term relationship between an audit firm and a company helps auditors to better understand the business and associated risks of the client, leading to better audit quality (Geiger *et al.* 2005). However, it can create a closeness between the two parties, resulting in reduced reliability and quality of the audit (Gates *et al.* 2007). Mandatory firm rotation enhances audit impartiality since it affects independence in appearance and in fact (Dopuch *et al.* 2003). A mandatory rotation may increase the cost of information for market participants, as they will be unable to distinguish a voluntary change (for example, due to opinion shopping) from a compulsory rotation (Ewelt-Knauer *et al.* 2013).

Policymakers and regulators believe that increased audit tenure creates excessive familiarity between the auditor and the auditee, generating eagerness to please the client and excessive reliance on prior reports. Regulators are also concerned about supplier concentration in the audit market since more than 90% of listed firms are audited by the Big 4 in the US, UK and EU (Francis *et al.* 2010). As a result, regulators across the world are introducing mandatory rotation to increase competition and auditor independence, although there are distinctive differences across countries regarding the duration of the engagement period.

Boards worry that a long-lasting relationship with a single firm may harm the quality of the auditing. In the course of time, members of the audit team may begin to unconsciously feel that they are part of the client management team, which in turn undermines their independence. In addition, the advent of a new audit firm provides companies with an opportunity for a "fresh

look", since the newcomers will start from the beginning, critically assessing all areas of the financial statements (Cameran *et al.* 2015). However, mandatory rotation raises concerns about the availability of qualified audit teams and the effectiveness of the collaboration between the (new) auditors and the employees of the audit client.

Auditors generally believe that mandatory rotation prevents the development of a trustful relationship with internal audit committees and board members. As time passes, they get to know better the industry and the business model of the auditee, which in turn improves their ability to effectively and efficiently carry out audit tasks (Solomon *et al.* 1999; Wilson *et al.* 2018). They also argue that in a mandatory rotation regime, the risk of audit failure increases until the auditors obtain specific knowledge about their client (Geiger and Raghunandan, 2002; Johnson *et al.* 2002). In addition, mandatory firm rotation has a negative effect on the attractiveness of the audit profession. Audit firms become uncertain about future audit capacity needs when they are not able to target specific client segments. Thus, they cannot organize their human capital or invest in its further specialization (Catanach and Walker, 1999). The lack of highly skilled and specialized auditors and the ability of companies to hire audit firms with uncertain industry-specific expertise make it possible, in turn, that audit quality will be lowered.

The above arguments form the framework for the assessment of the effects of mandatory firm rotation on audit quality. Clearly, each stakeholder has its own views with regard to the application of a mandatory rule and its impact on audit quality. Nevertheless, we should emphasize that audit quality is directly related to financial statements and, more specifically, to whether the auditor is able to detect and refer to any material misstatements that may exist in them. For this reason, this study opts to focus on auditors to assess the effect of mandatory rotation on audit quality.

Methodology

The empirical analysis of this study is realized through the distribution of a questionnaire that was sent in electronic form via e-mail after the approval of the director of the Institute of Certified Public Accountants of Greece (SOEL). To attempt to minimize response bias, all emails were sent with a request for careful reading of the questions and the sincere completion of the questionnaire. The questionnaire was sent to all members of SOEL (approximately 875 members) spanning from December 2017 to February 2018. A total of 115 valid questionnaires were collected. The questions' content is based on the United States General Accounting Office (2004) and Said and Khasharmeh (2014). Likert or Likert-type rating questions and three open-ended questions were used. The questionnaire consisted of 16 questions: the first 5 refer to the respondents' demographics, the 6th to the 11th questions concern the firm in which the respondent works, and the 12th to the 16th questions concern the viewpoint of the respondent on the subject under consideration. To analyze the questionnaire responses, the statistical package SPSS 19 (Statistical Package for the Social Sciences) was used. The questionnaire incorporates three questions that measure the same feature. The reliability estimate with Cronbach's α is in all cases very satisfactory.

Description statistics

The demographic data of the respondents are indicated in Table 1. The majority of the respondents were 35 to 45 years old, with an average age of 42.39 years old. Most of them are male, had worked at their current position on average for 11.78 years and are highly educated. Thus, the respondents are experienced in their current work environment. Additionally, most of them are auditors.

[Insert Table 1 here]

The firm employment data for the respondents are indicated in Table 2. The majority of the respondents work in a Greek audit firm, other than a Big 4 firm, with more than 91 employees.

[Insert Table 2 here]

The services that auditors provide to the audited company (except audit) are mainly accounting, taxation and internal control services. Regarding the years auditing the firm, the majority of the sample replies that it was from 1 to 9 years at 43.5% (see Table 3).

[Insert Table 3 here]

Most of the respondents replied that the audit firms where they are employed do not have an internal policy for mandatory rotation (38.3%), while the percentage of respondents responding "Don't know" or who do not reply is quite high (29.6%). Moreover, most companies have a policy on mandatory auditor rotation (54.8%) (see Table 4).

[Insert Table 4 here]

For the question of whether to impose a mandatory rotation of audit firms or auditors with a differentiating factor whether the company is in a public or private sector, the majority of the respondents reply that mandatory rotation should be imposed, with the percentages being much higher for companies of the public sector (see Table 5).

[Insert Table 5 here]

Approximately one out of three respondents (33.9%) believe that the allowable upper limit of the mandatory audit tenure for the audit firm should be 4 to 6 years, while there is a high percentage (27%) who believe that the upper limit of this period should be more than 10 years. The majority (47%) believes that the equivalent upper limit of the auditor's mandatory audit tenure should be 4 to 6 years, followed by a 27% who believe in a threshold of 3 years. Regarding the question of when the auditing firm and the auditor should be allowed to compete again for audit services, responses converge to a time period of up to 3 years for both companies (51.3%) and auditors (53%) (see Table 6). There was no significant difference with regard to the respondents' characteristics according to *t*-tests or ANOVA applied to the variables.

[Insert Table 6 here]

Moreover, the questionnaire includes eleven questions/views against the mandatory rotation of audit firms and auditors. It is worth noting the following results: the majority of the respondents (more than 65%) 'agrees' or 'totally agrees' that the mandatory rotation will increase the auditor's cost because the beginning of an audit requires the auditor to invest physical and mental effort to become familiar with the transactions and accounting systems of the new customer; it will increase the time spent by the auditor to become familiar with the accounting procedures applied by the new client and his internal audit system, and thus the audit cost will increase; and the respondents believe that there are other factors that drive auditors to independence, such as maintaining their good reputation and providing good service to their clients. Regarding the eleven questions/views in favor of the mandatory rotation of audit firms and auditors, it is worth mentioning the following results: the majority of the respondents (more than 54%) 'agrees' or 'totally agrees' that the mandatory rotation will probably lead to lower audit fees and company profitability; the auditor's independence is a key priority for both auditors and audited companies; the audit firm will be more independent and objective in

providing its services; it will lead to an increase in the auditor's resistance to the company's management; and it will reduce the influence of the management of the audited companies on the auditors.

For the final question on whether there should be a mandatory rotation of the audit firm after a specified number of years, the majority of the respondents (68.2%) respond positively, while almost one out of five (24.3%) respond negatively.

Compare means

Because 1 to 5 points were given in the five scaled answers, 'I totally disagree' to 'I totally agree', we receive a score for each question/view against or in favor of the mandatory rotation of audit firms and auditors. Eleven overall questions/views mean a minimum possible score of 11 and a maximum possible score of 55 per respondent; we list the results in Tables 8 and 9. In summary, from the data in Table 7, it seems that the questions/views against mandatory rotation have a higher average, a smaller range and a smaller standard deviation than the corresponding ones in favor of the mandatory rotation. Therefore, the questions/views of the respondents are slightly against mandatory rotation.

[Insert Table 7 here]

In Table 8, the mean, standard deviation and statistical significance of each question/view are indicated. There is a statistically significant relationship against mandatory rotation, with questions/views having a p-value of less than 0.05 (test value = 3.4 and $\alpha = 5\%$).

[Insert Table 8 here]

In Table 9, the mean, standard deviation and statistical significance of each question/view are indicated. There is a statistically significant relationship in favor of mandatory rotation with questions/views having a p-value of less than 0.05 (test value = 3.166 and $\alpha = 5\%$).

[Insert Table 9 here]

Independent tests

The view against or in favor of mandatory rotation is not statistically dependent on occupational employment, as shown by the crosstabs, except for three questions/views against mandatory rotation presented below (Tables 10-12), where the *p*-value is less than 0.05.

[Insert Table 10 here]

[Insert Table 11 here]

[Insert Table 12 here]

The view against or in favor of mandatory rotation does not depend statistically on the length of the respondent's experience in the current position, as shown by the crosstabs, except for the two questions/views in favor of the mandatory rotation presented below (Tables 13-14), where the p-value is less than 0.05.

[Insert Table 13 here]

[Insert Table 14 here]

The view against or in favor of mandatory rotation is statistically dependent on whether there should be a mandatory rotation of the audit firm after a specified number of years, as expected, with the exception of the following questions/views: (a) the marketing cost of the audit process is the cost of trying to win new customers or retain the old ones, (b) the additional marketing cost that may result from the mandatory rotation of audit firms will pass to the companies through higher audit fees, (c) the time spent by the auditor to get acquainted with the accounting procedures applied by the new client and to become familiar with the internal audit system of the company will increase the cost of the audit process, (d) the difficulty of the audit and the degree of complexity associated with it have a significant impact on setting of the audit fees, (e) there are other factors that drive auditors to independence, such as maintaining their good reputation and providing good service to their customers, (f) the auditor's independence is a key priority for both auditors and the audited companies and (g) there is a risk of auditor familiarization, but there is no danger of audit firm familiarization if the rotation of audit companies is not applicable.

Additionally, views against or in favor of mandatory rotation have a linear relationship with the view on whether there should be a mandatory rotation of the audit firm after a specified number of years (ANOVA analysis). Finally, the correlation analysis of the viewpoint against or in favor of mandatory rotation with years of employment in the current firm show that there is no correlation and there is similarly no correlation with whether auditors provide services in addition to audits.

Conclusions

The audit literature does not lead to safe conclusions with regard to the effect of mandatory rotation on audit quality. From a theoretical and practical perspective, the arguments in favor of mandatory rotation are the strengthening of audit independence, the realization of a 'fresh look' of the audited firm, the reduction of economic dependence and the enhancement of

industry competition. Nevertheless, mandatory rotation may cause increased switching costs, uncertainty and information costs.

This empirical study focuses on Greece in the aftermath of the new regulatory framework established after the European Audit Reform to provide insights into the effect of the mandatory rotation rule on audit quality. We focus on a particularly experienced sample of employees with a high educational level, with the majority being auditors and senior executives. Most audit firms have internal policies for the mandatory rotation of auditors, but not necessarily for the firm. Respondents believe that mandatory rotation should be imposed, especially for public sector companies, with the allowable audit limit being 4-6 years.

Regarding questions/views against or in favor of the mandatory rotation of audit companies and auditors in general, the results provide partial evidence against mandatory rotation. Most respondents agree that mandatory rotation will increase the overall cost of the audit process and the workload of internal auditors and managers, which is in line with the literature (i.e., Myers *et al.* 2003; Ghosh and Moon, 2004; Jackson *et al.* 2008). At the same time, they agree with the view that under the mandatory rotation regime, the audit firm will be more independent and objective in providing its services, that mandatory rotation will lead to an increase in the auditor’s resistance to the company's management, and that it will reduce the impact of the audited companies' management on the auditors. These findings corroborate the results of previous studies in the field (i.e., Davis *et al.* 2000; Imhoff, 2003; Ye *et al.* 2006; Fairchild, 2008).

The majority of respondents agree with the view that there are other factors that drive auditors to independence, such as maintaining their good reputation and providing good services to their clients. Similar to other studies (DeAngelo, 1981; Bradbury and Redmayne, 2013; Church *et al.* 2018; Jenkins and Stanley, 2019), they also agree with the view that the auditor's independence is a key priority for both auditors and audited companies.

These conclusions are in line with those indicated in the literature for Europe and other countries, as mandatory rotation is accompanied by strong advantages as well as disadvantages (Cameran *et al.* 2015). This illustrates that mandatory rotation may serve as a double-edged sword, and the implementation of such a rule should be done with caution, considering the particularities of each country on the economic, legal, business and ethical level. As Bleibtreu and Stefani (2018) suggest, different institutional parameters can support alternative decisions regarding the implementation of mandatory rotation.

Limitations of this study constitute areas for future research and should be acknowledged. The results of this study are limited to the perceptions of auditors. Therefore, the results may not be generalized to other stakeholders, such as boards of directors and businesses, policymakers and regulatory bodies, financial analysts and loan officers. Future research could explore whether views of other parties are different from the opinions of auditors. Additionally, the results could be compared with those for other European countries after the incorporation of the European Audit Reform into national law. Finally, it would be interesting to repeat this study, following up on the results of the implementation of mandatory rotation over a longer period of time.

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References

Arel, B., Brody, R. and Pany, K. (2006) Findings on the Effects of Audit Firm Rotation on the Audit Process under Varying Strengths of Corporate Governance. Advances in Accounting 22: 1-27.

Arrunada, B. and Paz-Ares, C. (1997) Mandatory rotation of company auditors: A critical examination. International Review of Law and Economics 17: 31-61.

Bleibtreu, C. and Stefani, U. (2018) The effects of mandatory audit firm rotation on client importance and audit industry concentration. The Accounting Review 93(1): 1-27.

Boone, J., Khurana, I. and Raman, K. (2010) Do the Big 4 and the Second-tier firms provide audits of similar quality?. Journal of Accounting and Public Policy 29(4): 330-352.

Bradbury, M. and Redmayne, N. (2013) Audit Effort and Pricing Differences among the Large Audit Firms: Evidence from a Public Sector Setting. International Journal of Auditing 18(1): 90-100.

Butcher, K., Harrison, G. and Ross, P. (2013) Perceptions of Audit Service Quality and Auditor Retention. International Journal of Auditing 17(1): 54–74.

Cameran, M., Negri, G. and Pettinicchio, A. (2015) The Audit Mandatory Rotation Rule: The State of the Art. Journal of Financial Perspectives 3(2): 1-29.

Cameran, M., Prencipe, A. and Trombetta, M. (2016) Mandatory Audit Firm Rotation and Audit Quality. European Accounting Review 25(1): 35-58.

Carcello, J. and Nagy, A. (2004) Audit Firm Tenure and Fraudulent Financial Reporting. Auditing: A Journal of Practice and Theory 23(2): 55–70.

Casterella, J. and Johnston, D. (2013) Can the academic literature contribute to the debate over mandatory audit firm rotation?. Research in Accounting Regulations 25(1): 108-116.

Catanach Jr, A. and Walker, P. (1999) The international debate over mandatory auditor rotation: A conceptual research framework. Journal of International Accounting, Auditing and Taxation 8(1): 43-66.

Chi, W., Huang, H., Liao, Y. and Xie, H. (2009) Mandatory audit partner rotation, audit quality and market perception: Evidence from Taiwan. Contemporary Accounting Research 26(2): 359-391.

Church, B., Jenkins, J. and Stanley, J. (2018) Auditor independence in the United States: Cornerstone of the profession or thorn in our side?. Accounting Horizons, 32(3): 145–168.

Davis., L. et al (2000) Auditor Tenure, Auditor Independence and Earnings Management. Boston College, Boston, US. Working paper.

DeAngelo, L. (1981) Auditor size and audit quality. Journal of Accounting and Economics 3(3): 183-199.

Dekeyser, S. and Simac, I. (2019) EU Statutory Audit Reform: Impact on Costs, Concentration and Competition. Study for the Committee on Economic and Monetary Affairs, Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, Luxembourg.

Dopuch, N., King, R. and Schwartz, R. (2003) Independence in appearance and in fact: An experimental investigation. Contemporary Accounting Research 20(1): 79-114.

Elder, R., Lowensohn, S. and Reck, J. (2015) Audit Firm Rotation, Auditor Specialization and Audit Quality in the Municipal Audit Context. Journal of Governmental & Nonprofit Accounting 4: 73–100.

Ettredge, M., Fuerherm, E. and Li, C. (2014) Fee pressure and audit quality. Accounting, Organizations and Society 39: 247-263.

Ewelt-Knauer, C., Gold, A. and Pott, C. (2012) What do we know about mandatory audit firm rotation?. ICAS: 1-49.

Ewelt-Knauer, C., Gold, A. and Pott, C. (2013) Mandatory audit firm rotation: A review of stakeholder perspectives and prior research. Accounting in Europe 10(1): 27-41.

Fairchild, R. (2008) Auditor tenure, managerial fraud and report qualification: A behavioural game-theoretic approach. International Journal Behavioural Accounting and Finance 1(1): 23–37.

Firth, M., Rui, O. and Wu, X. (2010) How Do Various Forms of Auditor Rotation Affect Audit Quality? Evidence from China. The International Journal of Accounting 47(2012): 109–138.

Francis., J. et al (2010) Big Four Audit Market Competition and Earnings Quality around the World. University of Missouri, Columbia, US. Working paper.

Gates, S., Lowe, D. and Reckers, P. (2007) Restoring public confidence in capital markets through auditor rotation. Managerial Auditing Journal 22(1): 5-17.

Geiger, M. and Raghunandan, K. (2002) Auditor Tenure and Audit Reporting Failures. Auditing: A Journal of Practice & Theory 21(1): 67-78.

Geiger, M., North, D. and O'Connell, B. (2005) The auditor-to-client revolving door and earnings management. Journal of Accounting, Auditing & Finance 20(1): 1-26.

Ghosh, A. and Moon D. (2004) Auditor Tenure and Perceptions of Audit Quality. The Accounting Review 80(2): 585-612.

Gul, F., Jaggi, B. and Krishman, G. (2007) Auditor Independence: Evidence on the Joint Effects of Auditor Tenure and Nonaudit Fees. A Journal of Practice & Theory 26(2): 117-142.

Imhoff, E.A.Jr. (2003) Accounting Quality, Auditing and Corporate Governance. Accounting Horizons: 117-128.

Jackson, A., Moldrich, M. and Roebuck, P. (2008) Mandatory audit firm rotation and audit quality. Managerial Auditing Journal 23(5): 420-437.

Jenkins, J. and Stanley, J. (2019) A Current Evaluation of Independence as a Foundational Element of the Auditing Profession in the United States. American Accounting Association, 13(1): 17-27.

Johnson, E., Khurana, I. and Reynolds, J. (2002) Audit firm tenure and the quality of financial reports. Contemporary Accounting Research 19(4): 637-660.

Kim, S., Kim, S., Lee, D. and Yoo, S. (2019) How Investors Perceive Mandatory Audit Firm Rotation in Korea. Sustainability 11(4): 1089.

Kingstone, G., Gerald, W., Dzidzai, C., Elizaberth, S. and Nyasha, K. (2017) Mandatory Audit Firm Rotation and Audit Quality in Zimbabwe. Research Journal of Finance and Accounting 8(6): 34-41.

Kwon, S., Lim, Y. and Simnett, R. (2014) The Effect of Mandatory Audit Firm Rotation on Audit Quality and Audit Fees: Empirical Evidence from the Korean Audit Market. Auditing: A Journal of Practice & Theory 33(4): 167-196.

Langli, J. and Willekens, M. (2018) The Economics of Auditor Regulation. In Forefront, Looking Ahead. Universitetsforlaget, pp. 159–176.

Lennox, C., Xı, W. and Zhang, T. (2013) Change for Change's Sake: Does Mandatory Partner Rotation Improve Audit Quality?. Proceedings of the conference "The MIT Asia Conference in Accounting": pp. 1-50.

Manry, D., Mock, T. and Turner, J. (2006) Does Increased Audit Partner Tenure Reduce Audit Quality?. Journal of Accounting, Auditing and Finance 23(4): 553-572.

Myers, J., Myers, L. and Omer, T. (2003) Exploring the term of the auditor-client relationship and the quality of earnings: A case for mandatory auditor rotation?. The Accounting Review 78(3): 779-799.

Owusu-Ansah, St., Leventis, St. and Caramanis, C. (2010) The pricing of statutory audit services in Greece. Accounting Forum 34(2): 139-152.

Reid, L. and Carcello, J. (2017) Investor reaction to the prospect of mandatory audit firm rotation. The Accounting Review 92(1): 183-211.

Ricken, S. (2016) Mandatory Audit Firm Rotation in a Big 4 audit firm. Radboud University, Nijmegen, The Netherlands.

Ruiz-Barbadillo, E., Gomez-Aguilar, N. and Carrera, N. (2009) Does mandatory audit firm rotation enhance auditor independence? Evidence from Spain. Auditing: A Journal of Practice & Theory 28(1): 113–135.

Quick, R. (2017) Do Audit Firm Rotation, Auditor Retention and Joint Audits Matter? – An Experimental Investigation of Bank Directors' and Institutional Investors' Perceptions. Proceedings of 2017 UF International Conference on Assurance and Governance.

Said, K. and Khasharmeh, H. (2014) Mandatory Audit Firm Rotation and Audit Costs: A Survey of Auditing Firms in Bahrain. Journal of Finance and Accounting 2(6): 116-128.

Simunic, D. (1980) The Pricing of Audit Services: Theory and Evidence. Journal of Accounting Research 18(1): 161-190.

SOEL (2010), Answers of the SOEL to the questions raised in the European Commission's green paper on audit policy, https://circabc.europa.eu/d/d/workspace/SpacesStore/d5644fb3-8fe3-4257-ab3a-3128874f9e2f/Institute%20of%20Certified%20Public%20Accountants%20of%20Greece%20(SOEL)%20el.pdf, accessed 5 January 2018 (in Greek).

Solomon, I., Shields, M. and Whittington, O. (1999) What do industry-specialist auditors know?. Journal of accounting research 37(1): 191-208.

Stanley, J. and DeZoort, F. (2007) Audit firm tenure and financial restatements: An analysis of industry specialization and fee effects. Journal of Accounting and Public Policy 26(2): 131-159.

Tahinakis, P. and Nicolaou, A. (2004) An empirical analysis on the independence of the Greek certified auditor-accountant. Accounting Business and the Public Interest Journal 3(1): 32-47.

United States General Accounting Office (2004) Mandatory audit firm rotation study - Study Questionnaires, Responses and Summary of Respondents' Comments, https://www.gao.gov/new.items/d04217.pdf, accessed 2 December 2017.

Vanstraelen, A. (2000) Impact of renewable long-term audit mandates on audit quality. The European Accounting Review 9(3): 419-442.

Ye, P., Carson, E. and Simnett, R. (2006) Threats to Auditor Independence: The Impact of Non-Audit Services, Tenure and Alumni Affiliation. School of Accounting University of NSW, Sydney NSW 2052.

Ye, P., Carson, E. and Simnett, R. (2011) Threats to Auditor Independence: The Impact of Relationship and Economic Bonds. Auditing: A Journal of Practice & Theory 30(1): 121-148.

Wilson, A., McNellis, C. and Latham, C. (2018) Audit firm tenure, auditor familiarity and trust: Effect on auditee whistleblowing reporting intentions. International Journal of Auditing 22(2) :113-130.