

THE IMPACT OF AUDITOR ROTATION, AUDIT FIRM ROTATION AND NON-AUDIT SERVICES ON EARNINGS QUALITY, AUDIT QUALITY AND INVESTOR PERCEPTIONS: A LITERATURE REVIEW

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Abstract

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This literature review evaluates 103 empirical research studies on the link between rotation and non-audit services on the one hand and their influence on earnings quality, audit quality and investor perceptions on the other hand. After the financial crisis 2008/09, regulators all over the world are aware of decreased stakeholder trust in earnings and audit quality. As a reaction, stricter rules on rotation and non-audit services by public interest entities (PIEs) have been implemented (e.g. in the European Union). However, the impact of these regulations on earnings and audit quality is still controversial. We briefly introduce the theoretical, normative and empirical audit framework that comprises an adequate structure of the state-of-the-art of empirical research in this field. We summarize the findings in each research area, while we split our rotation analysis in an audit firm and audit partner rotation and tenure and our dependent variables in earnings quality, audit quality and investor perception measures. Most of the cited studies are linked to earnings-related measures, especially abnormal accruals models. The mixed results can be explained by the different theoretical impacts of agency- and resource-based view. Finally, we will discuss the current limitations of the studies and give useful recommendations for future empirical research activities on this topic.

Keywords: Audit Partner Rotation, Audit Firm Rotation, Audit Tenure, Audit Quality, Earnings Management, Auditor Independence, Earnings Quality, Non-audit Services

1. INTRODUCTION

Empirical research on the impact of rotation and non-audit services on earnings and audit quality is one of the key research activities from an international perspective. As rotation and non-audit services may have a huge impact on auditor independence, several regulations have been conducted. In line with the US Sarbanes Oxley Act (SOX) of 2002 as a reaction to the famous Enron scandal, the European audit reform in 2014 can be classified as a consequence of the decreased stakeholder trust after the financial crisis 2008/09. Both the SOX and the EU regulation include a blacklist of non-audit services, which cannot be conducted parallel to PIE audit services. In contrast to the EU regulation, the SOX did not implement a mandatory audit firm rotation, but only a mandatory audit partner rotation. According to our underlying

research framework, audit partner and audit firm rotation together with tenure and non-audit services may have a great impact on 1) earnings quality 2) audit quality and 3) investor perceptions. In recent years, empirical audit research has placed a strong focus on these issues. While empirical research on rotation and non-audit services has been very famous during the last decades, the SOX and the EU regulation have increased the worldwide discussion about these topics. Despite the controversial discussion since the financial crisis of 2008/09, and the resulting increased significance of rotation and non-audit service regulations pursuant to the European audit regulation 2014, empirical studies have also been conducted in other judicial areas than the USA, such as the EU member states. Insofar, the SOX regulation has a great impact of audit reforms in other regimes by adopting these "best practice". This

issue is economically relevant, because audit regulation restricts the (self-)organization within the board of directors, audit committees and external auditors itself. Standard-setting bodies hold that the external auditor can contribute to capital market efficiency, as they ensure adequate quality for financial reporting. Ideally, such activities should go hand-in-hand with enhanced investor perceptions of the firm reputation.

The objective of this contribution is to evaluate 103 empirical quantitative (archival) studies on the influence of rotation and non-audit services on earnings quality, audit quality and investor perceptions. In view of the huge research activity on the US capital market, as well as the international regulatory impact of the SOX, only empirical studies with samples from 2004 or later will be included (post-SOX), but no analysis for the pre-SOX environments. In contrast to former literature reviews, we include both empirical studies on rotation and non-audit services because of the similar methodology and in view of the combined international discussion after the financial crisis.

The evaluation corresponds to the methodology of vote counting of previously established significances. This showed that up to the point of the review, most of the included studies have examined the impact on financial reporting quality in general, and specifically the impact on earnings quality. Most of the cited studies are linked with earnings-related measures, especially abnormal accruals. Other measures, e.g. investor perceptions, are only rarely used so far. It is not possible to draw a clear picture on the link between rotation and NAS on earnings quality, audit quality and investor perceptions in view of the mixed empirical results. This heterogeneity is due to the different perspectives in the literature, whereby a long auditor-client relationship (auditor tenure) and a combination of audit and non-audit duties may be linked with more auditor expertise on the one side and a possible decreased independence on the other side. We refer to the principal-agent theory and the resource-based view in order to point out these two different impacts of rotation and non-audit services on earnings quality, audit quality and investor perceptions.

This literature review made several contributions to the present literature because it synthesizes a number of major new insights from the literature and offers a new and rich discussion of future research avenues. In contrast to former reviews on that topic, also non-US settings were included to stress the international relevance of that topic. Secondly, we only focus post-SOX studies because of the great regulatory changes in the audit environment. Furthermore, we include both rotation and non-audit services studies and present the main results of the empirical research via vote counting. The following review is aimed at researchers, regulators and practitioners alike. It provides starting points for future research activities in the context of investigating economic effects of external audit, while also raising practitioner awareness of the progress of audit regulations and their economic impact. The findings also provide an important impetus for the initiation of an impact assessment of the adjustments relating to the cooperation between audit committees and auditors (e.g. following the SOX and the EU audit reform) from a regulatory perspective.

This review is structured as follows: First, the audit framework is presented from a theoretical, normative and empirical perspective (chapter 2), followed by an appraisal of the empirical study findings (chapter 3), whereby an introductory presentation of the methodology (chapter 3.1) precedes a discussion of the impact on earnings quality (chapter 3.2), audit quality (chapter 3.3), and investor perception (chapter 3.4). Finally, the review considers restrictions of existing empirical research, and makes recommendations for future research activities (chapter 4).

2. AUDIT FRAMEWORK

2.1. Theoretical framework

According to the two-tier principal-agent theory based on Tirole (1986), external audits are an incentive to strengthen public trust in financial accounting. External audit is a monitoring and bonding instrument for management activities and is meant to motivate legally sound and orderly financial accounting (Chow, 1982). The audit constitutes an action delegated by the investors of a company in terms of a principal-agent relationship. It is made necessary by the investors' lack of time and professional resources and the rational apathy in the publicly owned firm (Watts and Zimmerman, 1983). The relationship between auditor and capital market is reflected in the gatekeeper function according to Kraakman (1986) and Coffee (2006). In addition, the auditor is meant to support the supervisory body or audit committee in supervising the management (assistant role).

Since, according to Antle (1982), the auditor is an economic agent, he can be attributed the classic agency conflicts of hidden characteristics, -information, -action and -transfers, resulting in the risks of adverse selection and moral hazard. The principal-agent theory assumes that the auditor may impair his ability and freedom to make a sound assessment. Adverse selection may be the result of an auditor's lack of qualifications on the one hand, or his bias towards the audited company on the other hand. In addition to this pre-contractual principal-agent conflict, post-contractual information asymmetries pose the danger of a moral hazard due to improper audits (shirking) and assessments. There is also the possibility of a moral hazard if the auditor and management collaborate. In such a case, the auditor might tolerate faulty financial accounting and grant an unqualified audit opinion in exchange for hidden transfer benefits. Since an auditor's compensation is not fully transparent for the capital market, incurring the risk of hidden actions, there is a danger of biased judgment by the auditor and untruthful reporting on the outcome of the audit.

The traditional agency models neglect auditor changes, with extreme cases allowing for indefinite mandates (Antle, 1982). The risks of an asymmetrical distribution of information in audits can be magnified through the low balling phenomenon. Low-balling indicates that the audit fees for the initial mandate as negotiated with the client do not cover the actual costs. This strategy can have a negative impact on auditor independence and lead to higher incentives to form a coalition with the management (DeAngelo, 1981). According to the basic model of

DeAngelo (1981), the first audit will cause start-up costs because the auditor will have to first familiarize himself with the business activities and environment of the company. Still, the auditor chooses a low balling strategy to crowd competitors out. These losses of the first audit represent a market entry barrier for competing auditor firms. These information and cost advantages are an additional market entry barrier in later audit cycles.

Based upon De Angelo's basic model (1981), the model of Beck et al. (1988) includes a combination of audit and consulting services. Non-audit duties can lead to an increased low balling effect when the auditor evaluates the financial accounting at the same time due to spillover effects. The absolute economic advantage of the auditor is greater than if he limited his services to audits if the sum of training costs for the consultant and the consulting costs are greater than the cost reduction through auditor training by means of knowledge transfer. Magee and Tseng (1990) add differences of opinion between client and auditor to the equation. Differences of opinion originate in a conflict about (non-)acceptance of a certain questionable accounting policy. The economic advantage of maintaining the auditing assignment due to positive transaction costs of the change is only incurring a restriction of independence if differences of opinion are of multi periodical nature, various types in the auditing industry regarding evaluation of accounting do exist, the client is unable to distinguish the type of the auditor, and the auditor himself knows his type only after the election.

2.2. Chances and risks of rotation and non-audit services

There has been a controversial discussion for many years, whether auditor rotation and the restriction of non-audit services have a positive or negative impact on earnings quality, audit quality and investor perceptions. The necessity of a statutory rotation is solely related to public interest entities (PIEs) because agency conflicts are characteristic in this group. A fundamental approach was presented by Burton and Roberts (1967). In PIEs, the assistant role of an auditor to support the audit committee becomes more and more important. Although a long-term contract between client and auditor seems sensible, the independence in appearance might be limited due to a special trust relationship between management and auditor in a long-term assignment. Burton and Roberts (1967) state that personal relationships between auditor and management, the combination of audit and non-audit duties, as well as the auditor's intention of maintaining the assignment, are determining factors towards reducing audit quality.

According to DeAngelo (1981) and Beck et al. (1988), quasi-rents according to low-balling - without compulsory rotation and with combined non-audit services - can lead to higher financial incentives to give up the independence of the auditor, if the probability of exposure by the investors is low. Insofar, low-balling which is connected with a lack of independence can be prevented by mandatory rotation and restricting non-audit services.

Furthermore, stricter and more relentless audit under rotation and concentrating on his audit duties is assumed, because the auditor intends to diminish the risk of having his successor complain

about his low performing upon review of previous years' audits. The avoidance of organizational blindness is also pointed out, as negatively influencing the audit efficiency, even under observation of independence. Hence, the auditor simply trusts his results from previous years instead of anticipating important changes in the company development and adjusting his auditing strategy.

The aforementioned advantages of mandatory rotation with regard to low-balling are not secured because of system-immanent disadvantages. An auditor change and the selection of two parties for audit and non-audit services incurs higher costs and fees which result in additional costs of the initial audit and transaction costs for the management. Especially long-term audit scheduling and following up on complaints or auditors' suggestions from previous audit periods would have to suffer under rotation. US studies show that the auditor's risk of liability is significantly higher in first or second audits than in the following periods. Since first audits tend to be of lower quality, negative responses of the capital market are to be expected upon a forced change of auditor. An investor cannot distinguish a voluntary or forced auditor change (opinion shopping of the management) from a regulative rotation, leading to increased cost of information. Therefore, for corporations which aim to offer high audit quality to the capital market, compulsory rotation in short intervals may be unfavorable (signaling, see Spence, 1973). Even a statutory long-term rotation cycle (e.g. more than nine years) cannot prevent the risk of hidden intention of management. The low auditor knowledge about the mandate's business risk in the first periods of the engagement will be also problematic, if he cannot gain knowledge spillovers from additional consulting services, e.g. tax consulting, that may have a great impact on his evaluation of financial reports.

Another important disadvantage of rotation and restriction of non-audit services may be an increased effect on audit market concentration, although the standard setters assume that audit market concentration will decrease after the SOX and EU reform. The international audit market for PIEs is dominated by the Big Four audit firms. According to De Angelo (1981), having the highest experience value in PIE audits, big audit firms are connected with a higher independence in appearance and have an extensive potential to offer a range of additional services. This oligopolization of the audit market crowds small and medium-sized audit firms out of the market. However, these difficulties cannot be prevented by rotation and non-audit service rules, since changes are made within the audit firm (internal rotation), between big audit companies (external rotation) or the engagement of two big audit firms for audit services and non-audit services. Furthermore, practical experience suggests frequent changes from small to larger audit companies. The overall impact of rotation and restriction of non-audit services is, from a theoretical point of view, not explicit, therefore, even with the auditor applying low balling, rotation and concentration on audit duties do not necessarily imply higher audit quality but the interruption or shortfall of learning and spillover effects can have an altogether negative effect on the quality of financial accounting and audit.

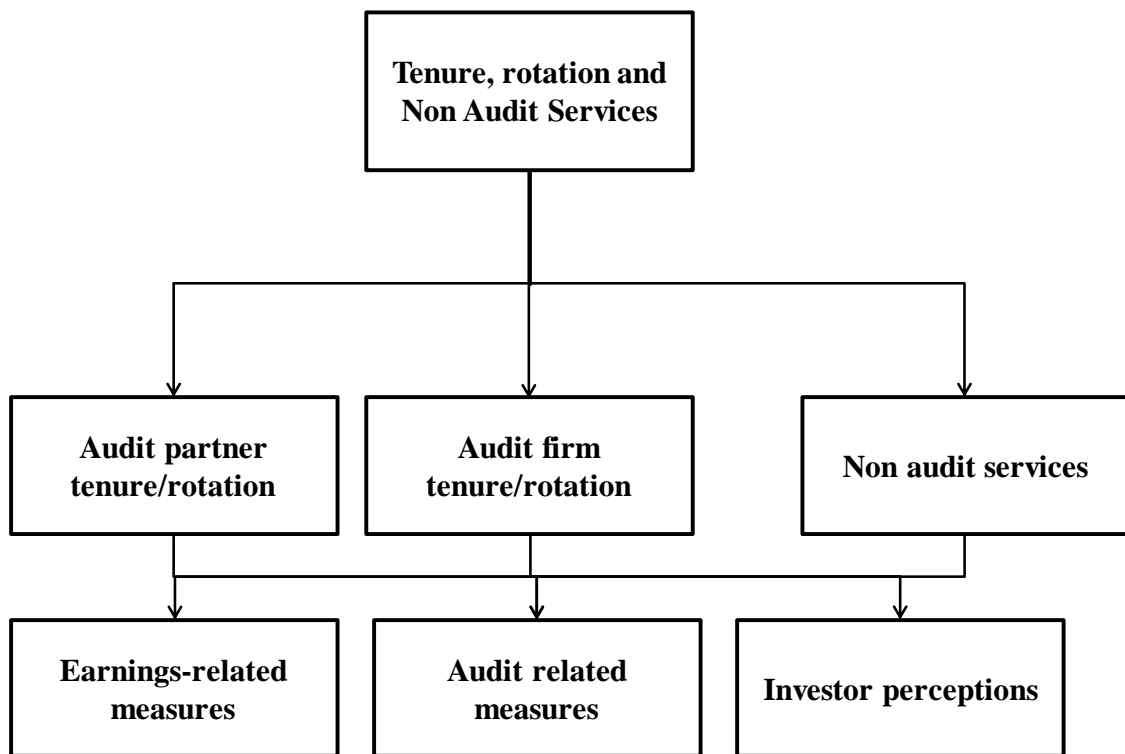
2.3. Research framework

For of this literature review, a research framework is useful to structure the main strengths of research (figure 1). With this, the impact of rotation and non-audit services is stressed for the main contents of this literature review. While audit partner rotation (internal rotation) represents an auditor change within the audit firm, audit firm rotation (external rotation) is connected with a replacement of the whole audit firm. Audit partner rotation has been implemented in many regimes also before the financial crisis 2008/09 (e.g. SOX, EU). The SOX did not lead to a mandatory audit firm rotation rule, so that audit firms with PIE mandates on the US-American capital market only have to follow audit partner rotation. According to the EU audit reform 2014, a compulsory audit firm rotation was implemented after 10 years in principle. However, the European member states had the possibility to increase the tenure by two key voting rights. The ten-year-tenure can be increased by additional ten years after a public announcement and by additional fourteen years after the implementation of a joint audit. In contrast to these differences, the SOX and EU

regulations on non-audit services are quite similar. A “black list” of non-audit services were introduced that cannot be conducted parallel to audit services, e.g. legal services, general management or tax. A key exception of this strict regulation can be found for tax consulting services. Under specific conditions, e.g. by a review and approval of tax consulting duties by the audit committee, these services are allowed parallel to financial audit. This easement was also implemented as member state voting right by the EU audit regulation. Many countries, e.g. Germany, chose this voting right because of the long tradition of combined tax and audit services. In view of these huge regulations, we choose audit firm rotation, audit partner rotation, rotation and non-audit services as your main independent variables for our literature review. As for our analysis of non-audit services, non-audit fees or non-audit fee ratio is included principally.

We separate our dependent variables into three main categories in line with former literature reviews: 1) earnings-related measures 2) audit-related measures and 3) investor perceptions (see table 1).

Figure 1. Research framework



4. REVIEW OF AUDIT TENURE AND ROTATION RESEARCH

4.1. Selection of included studies

The empirical studies included in this literature review are established by comparing international databases (web of science, google scholar, SSRN, EBSCO, science direct) and libraries. Here, a targeted search is conducted for the keywords “rotation”, “audit firm rotation”, “audit partner rotation”, “non-audit services”, “non-audit fees” in combination with

“audit”, “external audit”, “audit quality”, “auditor independence” or technically associated terms (e.g. “financial accounting” or “earnings equality”). In parallel, the search was either widened by the addition of the broader term “corporate governance”, or narrowed by the addition of specific variables (e.g. “accruals”, “restatements”). In the further course of the literature review, contributions were examined for the suitability of their study design. While there is a main research dominance on the US capital market, there is no limitation on a special country. The reason for this decision is that recent studies also analyze

the non-US environment, e.g. EU member states (Germany, Spain, the UK, Italy, Greece, Norway, Sweden), Australia, New Zealand, Korea, China, Jordan, Malaysia, Taiwan. After the SOX, several countries conducted similar studies, so that the SOX can be classified as an international catalyst for a global audit regulation initiative.

Only empirical studies whose sample covers the period after the commencement of the SOX 2002, and which use multivariate statistics have been included. The SOX rules that would have affected the variable examined in the studies were not effective for most companies until 2004. Insofar, all of the included studies should have samples of 2004 or later. Apart from the increased complexity of the findings, which necessitates a temporal limitation of the study inclusion, the increased regulatory density makes a comparison between US-based studies before and after the SOX impossible. Given that research is predominantly focused on the US capital market, the temporal limitation is adequate. Moreover, the economic impact of rotation and non-audit services frequently examined before the SOX has not been taken into account. Only archival studies are included in our literature review in view of the homogeneity of the method and in view of the huge dominance. A total of 145 studies have been identified. For quality assurance reasons, only the contributions published in international journals with double-blind review have been included. This resulted in a sample reduction by 42 papers to a final sample of 103 studies.

The following overview of current empirical research on audit rotation and non-audit services allows a systematic mapping and analysis of the current international state of research for this AC framework, for the first time. A quantitative literature analysis in the form of vote counting focuses the significant findings and their respective signs but ignores the specific coefficient values. The underlying primary studies are assigned the expressions significant positive (+) and significant negative (-).

This literature review made several contributions to the present literature because it synthesizes a number of major new insights from the literature and offers a new and rich discussion of future research avenues. In contrast to former reviews on that topic, also non-US settings were included to stress the international relevance of the topic. Secondly, we only focus post-SOX studies because of the great regulatory changes in external audit in the cooperation with the audit committee. Furthermore, we integrate the studies on rotation and non-audit services in view to the three research lines earnings quality, audit quality and investor perceptions and present the main results of the empirical research via vote counting. The analysis provides crucial added value compared to previous surveys of empirical rotation and non-audit services research. The former studies are limited in view of these factors. First, we only rely on post-SOX studies in view of the great regulatory changes in rotation and NAS. Second, we include both empirical-quantitative studies on rotation and NAS in view of their interactions. Third, we separate in audit firm and audit partner rotation and tenure and describe whether the analysis was conducted in a mandatory or voluntary setting. In addition to the structured literature reviews, some meta-analyses can also be

found. With regard to the high heterogeneity of dependent variables in the field of earnings quality, audit quality, and investor perceptions, it does not make really sense to conduct a meta-analysis on our field of interest. As we expect new results from the post-SOX-era and from a broad range of earnings-related, audit-related and investor perception attributes together with a vote counting approach for this review a fruitful basis for deducting research limitations from the present studies and for future research recommendations are given.

Nearly half of the evaluated contributions focus on earnings-measures (46). In addition, studies on audit-related measures are quite popular (38), while research on investor perceptions is rather low (19). Studies on rotation (52) and non-audit services (52) are equal in their attraction for international researchers after the SOX. The analyses were published or prepared within the period 2007-2017. As explained above, US samples dominate all research strands. Many of the research findings were published in accounting and related journals with a significant amount in the journal "Auditing" (12) (see table 1).

Table 1. Count of published papers cited

Panel A: rotation/tenure			
	Earnings-related measures	Audit-related measures	Investor perceptions
Year of publication			
2007	1	0	0
2008	2	0	1
2009	3	1	0
2010	2	1	1
2011	2	0	0
2012	1	1	1
2013	1	1	2
2014	3	3	1
2015	7	5	0
2016	2	2	2
2017	2	3	1
Total: 52	26	17	9
Sample			
	Australia: 3 China: 1 Germany: 2 Greece: 1 Italy: 3 Jordan: 1 Korea: 2 Malaysia: 1 Spain: 1 USA: 11	Australia: 3 China: 2 Germany: 1 Jordan: 1 Korea: 1 Spain: 3 USA: 6	Australia: 1 Germany: 1 Italy: 2 USA: 5
Total: 52	26	17	9
Content			
	<ul style="list-style-type: none"> • Audit firm rotation/tenure: 24 • Audit partner rotation/tenure: 6 	<ul style="list-style-type: none"> • Audit firm rotation/tenure: 11 • Audit partner rotation/tenure: 7 	<ul style="list-style-type: none"> • Audit firm rotation/tenure: 8 • Audit partner rotation/tenure: 3
Total: 59*	30*	18*	11*
Journal			
	<ul style="list-style-type: none"> • Accounting & Business Research: 1 • Advances in Accounting, incorporating Advances in International Accounting: 1 • Asian Academy of Management Journal of Accounting & Finance: 1 • Auditing: 4 	<ul style="list-style-type: none"> • Accounting and Finance: 1 • Australian Accounting Review: 1 • Auditing: 5 • Estudios de Economia: 1 • Journal of Accounting and Public Policy: 2 • Journal of International Accounting, Auditing & Taxation: 1 • South African Journal of Accounting Research: 1 	<ul style="list-style-type: none"> • Accounting and the Public Interest: 1 • Accounting Horizons: 1 • Auditing: 3 • European Accounting Review: 1 • International Business Research: 1 • International Journal of Auditing: 1 • Journal of Accounting and Public Policy: 1

	<ul style="list-style-type: none"> • Australian Accounting Review: 1 • Contemporary Accounting Research: 1 • European Accounting Review: 1 • International Journal of Auditing: 1 • Journal of Accounting and Public Policy: 4 • Journal of Business Ethics: 2 • Journal of Accounting and Economics: 1 • Journal of Contemporary Accounting & Economics: 1 • Journal of Forensic & Investigative Accounting: 1 • Journal of International Accounting, Auditing & Taxation: 1 • Managerial Auditing Journal: 3 • The Accounting Review: 1 • The Journal of Applied Business Research: 1 	<ul style="list-style-type: none"> • Spanish Accounting Review: 1 • The Accounting Review: 2 • The Journal of Applied Business Research: 1 	
Total: 52	26	17	9
Panel B: non audit services			
	Earnings-related measures	Audit-related measures	Investor perceptions
Year of publication			
2007	1	0	0
2008	0	2	1
2009	1	1	2
2010	0	0	0
2011	2	1	1
2012	1	2	2
2013	5	5	1
2014	1	1	0
2015	5	5	1
2016	3	2	2
2017	1	2	0
Total: 51	20	21	10

Sample			
	<ul style="list-style-type: none"> • Australia: 1 • Germany: 2 • Korea: 2 • Malaysia: 1 • New Zealand: 2 • Norway: 1 • Spain: 1 • Sweden: 1 • Taiwan: 2 • UK: 1 • USA: 6 	<ul style="list-style-type: none"> • Australia: 1 • Fiji: 1 • Germany: 2 • Italy: 1 • Korea: 2 • New Zealand: 1 • Norway: 1 • Spain: 1 • UK: 2 • USA: 9 	<ul style="list-style-type: none"> • Australia: 1 • Canada: 1 • Korea: 1 • Norway: 2 • UK: 2 • USA: 3
Total: 51	20	21	10
Journal			
	<ul style="list-style-type: none"> • Accounting & Business Research: 1 • Asian Academy of Management Journal of Accounting & Finance: 1 • Auditing: 3 • Betriebswirtschaftliche Forschung und Praxis: 1 • Contemporary Accounting Research: 1 • European Accounting Review: 1 • International Journal of Auditing: 4 • Journal of Applied Business Research: 3 • Journal of Business Finance & Accounting: 1 • Journal of Service Theory and Practice: 1 • Review of Accounting and Finance: 1 • Review of Quantitative Finance and Accounting: 1 • The Accounting Review: 1 	<ul style="list-style-type: none"> • Accounting & Business Research: 1 • Accounting and Taxation: 1 • Auditing: 4 • Cogent Business & Management: 1 • Contemporary Accounting Research: 2 • Current Issues in Auditing: 1 • International Journal of Auditing: 1 • International Journal of u- and e-Service, Science and Technology: 1 • Journal of Accounting and Management Information Systems: 1 • Journal of Accounting, Auditing & Finance: 1 • Journal of Applied Business Research: 1 • Journal of Contemporary Accounting & Economics: 1 • Managerial Auditing Journal: 2 • The Accounting Review: 1 • The British Accounting Review: 1 • The Service Industries Journal: 1 	<ul style="list-style-type: none"> • The British Accounting Review: 1 • Accounting and Business Research: 2 • The Journal of Applied Business Research: 1 • Auditing: 2 • Journal of Accounting and Public Policy: 1 • Corporate Governance: 1 • The Accounting Review: 1 • Cogent Business & Management: 1
Total: 51	20	21	10

4.2. Earnings-related measures

Earnings management is central to the measurement of the impact of rotation and non-audit services on earnings quality. According to agency theory, an opportunistic accounting policy promotes existing asymmetric information between management and shareholder, because exercising options and utilizing discretionary powers in financial reporting is in conflict with decision usefulness. Through its monitoring actions, the auditor should provide management incentives to reduce earnings management. Consequently, earnings quality becomes a better key decision-making tool for investor decisions.

From an international perspective, the estimation of earnings management frequently focuses on abnormal accruals (Dechow et al., 2010). Abnormal accruals are the difference between the annual result (based on the income statement) and the operating cash flow, i.e. it shows results of the financial year not affecting cash (e.g. changes in provisions, depreciation of assets). The accruals models assume that the existence of accruals has no negative impact on quality if their amounts are not excessive. Only if they can be classed as abnormal or discretionary, opportunistic management behavior as an accounting policy will be associated with reduced earnings quality (Dechow et al., 2010). Accruals models showing an accounting policy in the accounts after the balance sheet date are highly popular in empirical research, as both their calculation and the procurement of the data is easy. In contrast, specific margins for separate balance sheet items (e.g. goodwill impairments) or accounting policy before the balance sheet date ("real" earnings management) are not taken into account.

In line with these "classical" earnings quality measures, we identify other variables, that are not popular in empirical audit research, e.g. IFRS estimation differences and adjustments after the first time introduction of IFRS standards, or tax-related variables, e.g. tax rate changes, long-term effective tax rate or FIN 48 tax reserves. As earnings management and tax avoidance strategies have many interactions, these variables are also useful for external audit research.

4.2.1. Audit partner rotation/tenure

We only identify six studies in this field, whereas two studies focus on a mandatory audit partner rotation regime (Australia and China) and four studies analyze the impact of tenure on earnings quality. A possible reason for this low amount of studies was the nonexistence of audit partner disclosures in many regimes in former years, e.g. in the USA. Insofar, the lack of an easy data analysis harms the attractiveness of empirical quantitative research in this field. Both mandatory rotation (Australia, Spain, USA) and voluntary rotation decisions (Australia) are included. The results are heterogeneous. Arthur et al. (2017) state a negative link between rotation and accruals when the incoming audit partner and the audit firm are industry specialist. In contrast to this, Bandyopadhyay et al. (2014) found income increasing accruals in the first three years after the rotation and no significant effect in total. According to Fargher et al. (2008), voluntary audit partner rotation will lead

to increased accruals in the initial years of tenure. In view of mandatory rotation, the study by Garcia-Blandon et al. (2017) only proved interaction effects of firm and partner tenure but no impact on accruals. This result contrasts the negative relationship by Litt et al. (2014).

4.2.2. Audit firm rotation/tenure

In comparison to audit partner rotation, empirical research mainly concentrates on audit firm rotation and tenure and their impact on earnings quality. We present the results of 24 studies, whereby 6 studies focus on rotation and 18 studies on tenure. Again, both mandatory audit firm rotation regimes (Italy, Korea) and voluntary ones (USA) are included. Cameran et al. (2016) found a negative link between mandatory rotation and accruals for the Italian audit market. In contrast to this, Corbella et al. (2015) state a positive relationship for non-big four audit firms. Heterogeneous results also exist for the mandatory rotation regime in Korea. According to Kim et al. (2015), a new auditor during the first-time audit is connected with increased accruals in comparison to a voluntary rotation. However, Kwon et al. (2014) did not state any relationship. With regard to the voluntary rotation US-regime, Mande and Son (2013) identify a positive link with earnings restatements. This relationship was moderated by severe restatements and high corporate governance quality. In the study by Litt et al. (2014), the effect of mandatory audit partner rotation on accruals is less negative compared to a voluntary audit firm rotation.

As already mentioned, most of the included studies focus on tenure and not on rotation explicitly. With regard to mandatory rotation regimes, tenure is negatively (Al-Thunabat et al., 2011) or positively (Cameran et al., 2015) related to accruals. Heterogeneous results also occur for tenure studies in voluntary rotation settings (positive link: Bamahros and Wan-Hussin, 2015; Mande and Son, 2015; negative link: Fargher et al., 2008, insignificant results: Boone et al., 2010; Davis et al., 2009; Francis and Yu, 2009; Garcia-Blandon et al., 2017). Gul et al. (2009) is one of the few studies with a clearer separation of accruals management and states that tenure is positively (negatively) connected with income increasing (decreasing) accruals. Quick and Wiemann (2011) also find mixed results for income increasing (positive) and income decreasing (insignificance) accruals.

In view of restatements as the dependent variable, Stanly and DeZoort (2007) state an overall positive impact of tenure. The authors further indicate that restatements are negatively linked to the audit firm's industry specialists and audit fees with short audit tenure. However, a long tenure has no impact on restatements. Jenkins and Velury (2008), Li (2010) and Rickert et al. (2016) concentrate on earnings conservatism and also find heterogeneous results. While tenure has a positive impact on earnings conservatism in total, the change between short and medium (positive link) contrasts the change between medium and long tenure (no significance). According to Li (2010), a positive link can be found for large or strongly monitored by auditors respectively a negative link for small firms or weakly monitored by auditors. However, a negative link (also in case for more important clients) is stated by

Rickert et al. (2016). Other studies show a negative link between tenure in voluntary settings on loss avoidance and avoidance of lower profits in comparison to the last year (Quick and Wiemann 2012; especially between the fifth and seventh tenure year), increased tax rate changes to meet or beat earnings forecasts (Brooks and Gu 2015) or increased IFRS estimation differences and adjustments (Ball et al. 2015).

4.2.3. Non-audit services

In line with our results on rotation and tenure, the majority of our cited studies on non-audit services focus on accruals models as dependent variable. As for measuring non-audit services, different possibilities arise. Normally, non-audit fees or non-audit fee ratio are used. Eilifsen and Knivflä (2015), Knechel et al. (2012) and Liao et al. (2013) recognize abnormal non-audit fees. With regard to the huge importance of tax consulting services parallel to audit duties, some researcher split the non-audit fees and concentrate on tax-related service fees (Hogan and Noga, 2015; Klassen et al., 2016; Paterson and Valencia, 2011). Again, heterogeneous results can be found for accruals and other measures. While Bahmahros and Wan-Hussin (2015), Campa and Donnelly (2016), Krauss and Zuelch (2013), Lopatta et al. (2015) and Sharma et al. (2011) found a negative link between non-audit services and accruals, Carmona et al. (2015), Hossain and Sarowar (2013), Eilifsen and Knivflä (2013), Mande and Son (2015), Park et al. (2017) and Svänstrom (2013) did not state any relationship between these variables. According to Huang et al. (2007), non-audit services lead to an increased amount of abnormal accruals. Knechel et al. (2012) found a negative link for abnormal non-audit fees and the NAS fee ratio, but no impact of the NAS fees.

With regard to restatements, Campa and Donnelly (2016) found a negative and Paterson and Valencia (2011) no significant impact of NAS. Interestingly, recurring tax consulting fees are positively related to restatements. Other studies show a negative link between tax service fees and long-term effective tax rate (Hogan and Noga 2015), between actuarial fees and loss reserve bias (Gaver and Paterson 2014), tax service fees and corporate tax aggressiveness (Klassen et al. 2016), (abnormal) NAS fee (ratio) and conditional conservatism (Liao et al. 2013) or persistence (Park et al. 2016). According to Duh et al. (2009), non-audit services do not have an impact on the difference between audited and forecast earnings. No relationship does also not exist between NAS and meeting or beating earning benchmarks or reporting small earnings increases.

4.3. Audit-related measures

It is not surprising, that a key focus of empirical audit research is the impact on audit related-measures. Based on agency theory, only an external auditor independent from management and with adequate expertise can issue an objective audit opinion and ensure appropriate audit quality, which in turn will have a material effect on investor perception. Otherwise, the coalition risk between management and the external auditor would rise to the detriment of the shareholders, and the external auditor might

not document potentially poor financial reporting quality. An independent external auditor is also the basis for a close relationship with the audit committee who is in charge of the auditor selection and discussing audit fees.

In line with earnings quality, it is also impossible to measure external audit quality directly, wherefore a number of proxies are commonly used in empirical research (Knechel et al., 2013; DeFond and Zhang, 2014). Apart from expertise, the external auditor's independence is crucial. Traditional agency models (DeAngelo 1981a) assume increased competence and independence from the "Big (four)" audit firms, and industry specialists. In addition, auditor ratification is included. A more popular approach is to include audit fees to measure auditor independence. The scope of the audit mandate which is often supplemented by the approval of parallel non-audit services (e.g. tax consulting) has a key impact on the arrangement of auditor independence (DeFond and Zhang, 2014, 309). A large part of the empirical research assumes that auditor independence increases with increasing audit fees. Here, a complementary relationship between the audit committee and external auditor is assumed insofar as an effective audit committee increases audit fees to provide enhanced audit quality through a higher time and technical resource potential of the external auditor. If non-audit fees are extraordinarily high compared to the audit fees, external audit quality would fall according to this interpretation. According to the low balling strategy (De Angelo, 1981b), the parallel performance of the audit and non-audit services for a client promotes the risk of conflicts of interest through the anticipation of "quasi-rents". If the costs of the initial audit or second verification process are not covered for competitive reasons, the external auditor is motivated to generate additional income from parallel or future non-audit services, which contribute towards covering the initial loss (cross-subsidies). If the management becomes aware of low-balling, the auditor may be willing to make a concession in the verification of the financial reporting on account of this financial dependence, which would not exist without the additional mandate. However, some of the literature considers the relationship between the audit committee and the external auditor to be complementary; others view it as substitutive (Goodwin-Stewart and Kent, 2006). From this perspective, an effective audit committee closely cooperating with the external auditor would effect a reduction in audit fees in accordance with lean auditing.

A second subcategory that measures external audit quality deals with the auditor-client relationship. According to agency theory, management expects an unmodified opinion, even if the firm is in financial distress or the earnings quality is poor, and it will prevent the reappointment of the existing audit firm and prefer the appointment of an external auditor of lower quality (opinion shopping). The probability of going concern opinion issuance is used as a proxy for auditor competence. It evaluates the probability of the auditor in failing to issue a going concern opinion to a company that subsequently goes bankrupt (Knechel and Vanstraelen, 2007). The audit (report) lag is another proxy for audit quality. Audit lag, or audit delay, is defined as the number of days between the fiscal

year-end date and the date of the audit opinion. Audit lag does not directly serve as a measure of audit quality, but much rather of audit effort, i.e. the time the auditor requires to complete the audit, or audit efficiency (e.g., Knechel and Payne, 2001; Knechel and Sharma, 2010; Knechel et al., 2012). Furthermore, also the disclosure of material internal control weaknesses is of key significance to audit quality. Reporting these weaknesses has a negative market effect via the management, and from an agency theory perspective, it should be avoided. A strict auditor will insist on detection and disclosure of internal control weaknesses, and resist any negative influence from the management. Finally, some studies also include earnings misstatements. These are determined through earnings restatements or enforcement releases (e.g. by the Securities and Exchange Commission (SEC)) associated with adverse publicity. This is directly linked to the occurrence of management fraud. In both instances, an error in the financial statements becomes observable after publication. Careful monitoring of the financial reporting process should provide an incentive for the auditor to prevent accounting failures. Due to the large sample population and the publicly available SEC filings, enforcement error findings as a proxy for audit quality are only applied in the US context.

4.3.1. Audit partner rotation/tenure

We only identify seven studies in this field, whereas six studies focus on a mandatory audit partner rotation regime (Australia, China, USA) and one study analyzes the impact of tenure on audit quality. We already mentioned the nonexistence of audit partner disclosures in many regimes in former years, e.g. in the USA as a possible explanation for a low research activity. Stewart et al. (2016) is the only study that additionally analyses voluntary rotation settings. The results are heterogeneous. With regard to audit fees, Arthur et al. (2017), only identify a positive impact of mandatory rotation when the incoming audit partner and the audit firm are industry specialists. Sharma et al. (2017) and Stewart et al. (2016) also state a positive relationship, while no significant results were found by Ferguson et al. (2017). Focusing on audit or going concern opinions, Firth and Rui (2012) state a negative impact of mandatory rotation. Further studies indicate increased audit adjustments to profits in the years immediately surrounding rotation (last year of the old auditor and the first year of new auditor) (Lennox et al., 2014) and increased audit report lag (Sharma et al., 2017).

4.3.2. Audit firm rotation/tenure

In our sample of cited studies, eleven studies analyze the impact of audit firm rotation/tenure on audit-related measures. Four rotation studies and seven tenure analyses are included. Both voluntary rotation regimes (USA, Spain) and mandatory settings (Korea, Jordan) can be found. Most studies use going concern opinions as an audit-related variable. According to Kim et al. (2015), a positive relationship can be found for the new auditor during the first-time audit after mandatory rotation in comparison to the voluntary rotation. Mohammadi et al. (2015) also found a positive link. Litt et al. (2014) state that the effect of mandatory partner rotation is less negative compared

to voluntary rotations. Elder et al. (2015) analyses the influence of voluntary rotation on the incidents of noncompliance with accounting and auditing standards. The negative significant link is not linked to auditor independence, but to auditor specialization. The included tenure studies are only conducted in voluntary rotation settings and connected with audit or going concern opinions. According to Garcia-Blandon and Argiles-Bosch (2014; 2015), Gonzalez-Diaz et al. (2015) and Read and Yezegel (2016) (for non big four audit firms in the initial years), tenure is negatively related to audit opinions. No significant results are found by Boone et al. (2010), Francis and Yu (2009), Read and Yezegel (2016) (type II errors for Big four audit firms), Gonzalez-Diaz et al. (2015) (until the sixth year of tenure) and Ratzinger-Sakel (2013).

4.3.3. Non-audit services

We identify 21 studies on NAS, whereas (going concern) opinions and audit fees are the most famous dependent variables. With regard to (going concern) opinions, also mixed results are present. While Blay and Geiger (2013) and Wang and Hay (2013) state a negative relationship, Robinson (2008) found a positive link. According to Callaghan et al. (2009), Fargher and Jiang (2008), Ianniello (2012), Ratzinger-Sakel (2013), Read (2015), Willoughby et al. (2012), Wu et al. (2015), Zhang et al. (2016), no significant impact of NAS on opinions can be stated. In view of audit fees, positive results (Dobler 2014), negative results (Krishnan and Yu 2011) and insignificant results (Park et al. 2017; Zhang et al. 2016) can be recognized. A deeper analysis of the different types of non-audit services by Krishnan and Yu (2011) indicates that actuarial services are positively and tax services negatively linked to audit fees. In contrast to this, Halperin and Lai (2015) found a positive link between tax services and audit fees. With regards to other audit-related measures, tax services are positively related to material internal control weakness disclosures (de Simone et al., 2015). According to Lee (2015), tax services are negatively linked to audit firm productivity and management advisory services are positively linked. NAS also have a negative impact on internal control weakness disclosure (Li et al., 2017; with respect to a former auditing standard) and SEC enforcement releases (Markevich and Rosner, 2013).

4.4. Investor perceptions

Our third strength of research deals with the impact of rotation and non-audit services on investor perceptions. Most papers use classical event study methodology, examining stock price reactions to specific events (e. g. announcement of auditor/audit firm rotation). As most event studies do (for an overview see Kothari and Warner, 1997), stock market reactions get usually captured by the average cumulative abnormal return (CAR). CAR measures the difference between the observed and the expected stock price for each day and cumulates the differences over a defined event window. Therefore, first abnormal return for firms on the relevant days is calculated by comparing the observed return with the expected. For calculating the expected stock price a regression on an estimation window is commonly used. Then the null hypotheses get tested, if the CAR

at a specific event window is equal to zero (for methodology overview see Kothari and Warner, 1997). If the CARs are significantly different from zero there is proof of positive or negative abnormal returns. The literature has examined a broad variety of event cases. Another market-related measure is the ex-ante cost of equity capital using the price-earnings ratio divided by the short-term earnings growth rate, the so-called PEG model by Easton (2004). This proxies predominant as an alternative firm-specific estimate of ex-ante cost of equity capital (Botosan and Plumlee, 2005). This is prior used to measure the relationship between financial reporting credibility and audit firm type (Azizkhani et al., 2013b) or audit firm tenure (Boone et al., 2008). Another measurand of earnings quality is the earnings response coefficient (ERC). This is based on the concept that investors respond to information that has value implications. A higher correlation with value implies that earnings better reflect fundamental performance. Besides the mentioned ex-post capital market reactions, ex-ante capital market reaction may also be analyzed by shareholder votes on the auditors/audit firm engagement.

4.4.1. Audit partner rotation/tenure

Studies on investor perceptions are very rare in our sample, we only identify three of them. According to Mechelli and Cimini (2017), the voluntary rotation is linked with higher value relevance. Dao et al. (2008) state that tenure in a mandatory rotation setting leads to higher shareholder votes against auditor ratification. As tenure for non big four clients is related to higher cost of equity (Azizkhani et al., 2013), rotation does not indicate any relationship.

4.4.2. Audit firm rotation/tenure

We identify eight audit firm rotation/tenure studies and their impact on investor perceptions, whereas three rotation and five tenure studies are included. With regard to a mandatory rotation setting, Cameran et al. (2014) found an increased ERC in the last three years before the rotation. According to Mechelli and Cimini (2017), voluntary rotation increases value relevance. In this context, audit firm rotation is more capable than audit partner rotation. A positive impact on CAR is also stated by Mande and Son (2013). In our sample of cited studies, only tenure studies with voluntary audit firm settings are included. Azizkhani et al. (2013) found a negative impact of tenure on equity capital and no significant results for rotation. According to Boone et al. (2010), no impact of tenure on equity risk premium could be found. Hohenfels also stated nonsignificant results between tenure and ERC, insofar, a nonlinear relationship seems to be probable. Jenkins and Velury (2012) found a decreased stock return in the pre SOX-period and no significance in the post-SOX period. In line with these mixed results, Su et al. (2016) only stated a higher stock price idiosyncratic volatility by industry specialist auditors.

4.4.3. Nonaudit services

Finally, we identify ten NAS studies in our sample with heterogeneous variables for investor perceptions. While Bugeja (2011) indicates no

significant impact of NAS on abnormal return and Ghosh et al. (2009) on CAR, Campa and Donnelly (2016) found a negative relationship. However, Holland and Lane (2012) stated an increased market to book value. According to Eilifsen and Knivsflå (2013), NAS is negatively related to ERC, but only for small, nonindustry specialized audit firms. A negative link was also presented by Niu (2008) in the relation to dual-class firms. In view of the cost of debt, Choi and Lee (2015) found a negative link during the post-IFRS period, while Zhang et al. (2016) did not state any relationship. According to Schmidt (2012), investor perceptions on audit litigations and NAS are positively related. Liu et al. (2009) found an increased shareholder voting against auditor selection with increased NAS.

5. LIMITATIONS AND FURTHER RESEARCH RECOMMENDATIONS

Empirical audit research remains dominant in the US capital market and the one-tier system. While the number of studies under other regimes, and for the two-tier system, has recently increased, a material research gap is still existent, e.g. for EU member states facing the implementation of the EU audit reform regulation 2014. Existing empirical studies are characterized by methodical limitations. In particular, neither earnings quality, nor audit quality or investor perceptions can be determined directly but must be estimated (Dechow et al., 2010). The significance of these substitute measures is limited. This especially affects the frequently used abnormal accruals which are always associated with negative financial reporting quality as a marker for earnings management. In particular, the differentiation between normal and abnormal accruals is characterized by a lack of comparability which is reflected in the diversity of empirical research models. This limited impact of estimate variables also affects the assessment of external audit quality (e.g. based on audit fees). However, it must be considered that the majority of the studies now conduct sensitivity analyses and robustness checks, and increasingly take endogeneity problems into account, e.g. by using instrumental variables.

Hereafter, recommendations for future research activities shall be made. The literature review of empirical research activities on rotation and NAS shows that the principal-agent theory and the shareholder value approach are still dominant. However, research increasingly takes an interest in the extent to which external auditors can also influence other stakeholders' decision-making behavior and non-financial reporting (CSR reporting, integrated reporting). In order to drive stakeholder value through CSR activities, the appointment of auditors for evaluating nonfinancial reporting is crucial for CSR management quality. While there are an increased amount of empirical studies on CSR assurance, this topic is not linked with auditor independence and audit quality research on the archival level. Increased need for future research result from a lack of standardization of CSR reporting and integrated reporting due to different CSR reporting guidelines and the principal-based framework of the International Integrated Reporting Council (IIRC). Moreover, an external evaluation of non-financial reporting by an independent body (e.g.

external auditor, consultant) is not mandatory in most countries, resulting in an objectivity gap risk. Especially with regard to the integrated thinking for integrated reporting, the external audit should promote cooperation with the audit committee and internal audit and other employees associated with the internal control system.

Finally, only isolated studies have been conducted across several countries to examine the impact of various corporate governance systems, socio-economic framework conditions, and cultural influences. Future research activities should also use this starting point, to gain a deeper insight into the impact of rotation and NAS.

6. CONCLUSIONS

One of the key discussions in empirical audit research is connected with the economic benefit of audit rotation and the restriction of NAS in public interest entities (PIEs). Since the US legislator has significantly increased the awareness of auditor independence with the Sarbanes Oxley Act (SOX) 2002, many other regimes have also implemented regulations on external audit. One key challenge was the finalization in the EU member states through the audit reform 2014 in reaction to the financial crisis 2008/09. In addition to this regulatory attention, rotation and NSA has been at the heart of empirical audit research for many years, whereby research primarily focuses on the US capital market due to the high data availability and the massive international impact of the SOX on regulatory developments. However, during the last years, an increased amount of studies has been conducted in other regimes, e.g. the EU or Asia.

This structured literature review evaluates the empirical research findings on the economic impact of rotation and NAS dated after the SOX 2002. After deriving a theoretical and empirical framework, the structure was further organized into on earnings

quality, audit quality and investor perceptions. Most of the cited studies on earnings quality rely on abnormal accruals models. For the measurement of audit quality, audit fees and (going concern) opinions are popular. Out of the 103 included empirical-quantitative (archival) studies, the impact on earnings quality was the most frequently measured general size, and influence abnormal accruals the most popular specific value. Given the comparatively easy data generation (e.g. with the accruals models), this frequency is not surprising. However, a clear tendency in view of the impact of rotation and NAS on earnings quality is not obvious. This is also relevant for the studies on the audit quality and investor perceptions. Both the number of studies conducted and the observed significances are significantly lower for these components, especially for investor perceptions. These mixed results can be interpreted from the different theoretical foundations. While the agency theory suggests an audit firm and audit partner rotation in order to increase auditor independence, the resource-based view assumes the opposite view with regard to spillover effects between audit and NAS services or learnings effects in the future periods.

Based on tendencies and limitations identified in existing studies, recommendations for future research activities were made. Due to the dominant US orientation of the studies, an increased research interest exists for studies in other regimes, e.g. the EU member states, especially in the context of the commencement of the audit regulation 2014. While the statements on the US one-tier system cannot be transferred to economic assessments of other countries and corporate governance systems, the existing studies offer valuable guidance for the search for suitable empirical input and output variables for current rotation and NAS research.

REFERENCES

1. Al-Thunibat, A. A., Al Issa, R. T. T., & Baker, R. A. A. (2011). Do audit tenure and firm-size contribute to audit quality?: empirical evidence from Jordan. *Managerial Auditing Journal*, 26(4), 317-334.
2. Antle, R. (1982). The Auditor as an Economic Agent. *Journal of Accounting Research*, 20(2), 503-527. <https://doi.org/10.2307/2490884>
3. Arthur, N., Endrawes, M., & Ho, S. (2017). Impact of Partner Change on audit quality. *Australian Accounting Review* (online first).
4. Azizkhani, M., Monroe, G. S., & Shailer, G. (2013a). Audit partner tenure and cost of equity capital. *Auditing: A Journal of Practice & Theory*, 32(1), 183-202. <https://doi.org/10.2308/ajpt-50308>
5. Azizkhani, M., Monroe, G. S., & Shailer, G. (2013b). Audit partner tenure and cost of equity capital. *A Journal of Practice & Theory*, 32(1), 183-202.
6. Ball, F., Tyler, J., & Wells, P. (2015). Is audit quality impacted by auditor relationships? *Journal of Contemporary Accounting and Economics*, 11(2), 166-181. <https://doi.org/10.1016/j.jcae.2015.05.002>
7. Ball, R., Kothari, S. P., & Robin, A. (2015). The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics*, 29(1), 1-51. [https://doi.org/10.1016/S0165-4101\(00\)00012-4](https://doi.org/10.1016/S0165-4101(00)00012-4)
8. Balsam, S., Krishnan, J., & Yang, J. S. (2003). Auditor industry specialization and earnings quality. *Auditing: A Journal of Practice & Theory*, 22(2), 71-97. <https://doi.org/10.2308/aud.2003.22.2.71>
9. Bamahros, H. M., & Wan-Hussin, W. N. (2014). Non-audit services, audit firm tenure and earnings management in Malaysia. *Asian Academy of Management Journal of Accounting & Finance*, 11(1), 145-168.
10. Bandyopadhyay, S. P., Chen, C., & Yu, Y. (2014). Mandatory audit partner rotation, audit market concentration, and audit quality: evidence from China. *Advances in Accounting*, 30(1), 18-31. <https://doi.org/10.1016/j.adiac.2013.12.001>

11. Barnett, M. L., & King, A. A. (2008). Good fences make good neighbors: a longitudinal analysis of an industry self-regulatory institution. *Academy of Management Journal*, 51(6), 1150-1170. <https://doi.org/10.5465/amj.2008.35732609>
12. Bar-Yosef, S., & Livnat, J. (1984). Investment in commodities futures: the accounting implications. *Abacus*, 20(1), 87-95. <https://doi.org/10.1111/j.1467-6281.1984.tb00192.x>
13. Beck, P.J., Frecka, T. J. & Solomon, I. (1988). An empirical analysis of the relationship between MAS involvement and auditor tenure. *Journal of Accounting Literature*, 7, 65-84.
14. Bigus, J., & Zimmermann, R.-C. (2007). Unabhängigkeit und Regulierung von Abschlussprüfern - neuere Entwicklungen in den USA, Europa und in Deutschland. Working Paper.
15. Boone, J. P., Khurana, I. K., & Raman, K. 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. <https://doi.org/10.1016/j.jaccpubpol.2010.06.007>
16. Boone, J., Khurana, I. K., & Raman, K. K. (2008). Audit firm tenure and the equity risk premium. *Journal of Accounting, Auditing & Finance*, 23(1), 115-140. <https://doi.org/10.1177/0148558X0802300107>
17. Botosan, C. A., & Plumlee, M. A. (2005). Assessing alternative proxies for the expected risk premium. *The Accounting Review*, 80(1), 21-53. <https://doi.org/10.2308/accr.2005.80.1.21>
18. Braun, K. W. (2001). The disposition of audit-detected misstatements: An examination of risk and reward factors and aggregation effects. *Contemporary Accounting Research*, 18(1), 71-99. <https://doi.org/10.1506/U818-CAAD-MXBE-FXMA>
19. Brooks, L. Z., & Guo, P. (2015). Audit firm tenure, audit materiality, and last-minute earnings management. *Journal of Forensic and Investigative Accounting*, 7(1), 292-340.
20. Burton, J. C., & Roberts, W. (1963). A study of auditor changes. *Journal of Accountancy*, 1967(4), 31-36.
21. Cameran, M., Francis, J. R., Marra, A., & Pettinicchio, A. (2015). Are there adverse consequences of audit rotation? Evidence from the Italian experience. *Auditing: A Journal of Practice & Theory*, 34(1), 1-24. <https://doi.org/10.2308/ajpt-50663>
22. Cameran, M., Prencipe, A., & Trombetta, M. (2016). Mandatory audit firm rotation and audit quality. *European Accounting Review*, 25(1), 35-58. <https://doi.org/10.1080/09638180.2014.921446>
23. Cameran, M., Prencipe, A., & Trombetta, M. (2008). Earnings management, Auditor Tenure and Auditor change: Does mandatory auditor rotation really improve audit quality? Working Paper.
24. Cameran, M., Francis, J., Marra, A. and Pettinicchio, A. (2015). Are there adverse consequences of Mandatory Auditor Rotation? *Auditing*, 34, 1-24.
25. Campa, D. & Donnelly, R. (2016). Non-audit services provided to audit clients, independence of mind and independence in appearance. *Accounting and Business Research*, 46, 422-449.
26. Carcello, J. V., & Nagy, A. L. (2004). Client size, auditor specialization and fraudulent financial reporting. *Managerial Auditing Journal*, 19(5), 651-668. <https://doi.org/10.1108/02686900410537775>
27. Carcello, J. V., & Neal, T. L. (2000). Audit Committee Composition and Auditor Reporting. *The Accounting Review*, 75(5), 453-467. <https://doi.org/10.2308/accr.2000.75.4.453>
28. Caskey, J., Nagar, V., & Petacchi, P. (2010). Reporting bias with an audit committee. *The Accounting Review*, 85(2), 447-481. <https://doi.org/10.2308/accr.2010.85.2.447>
29. Chen, C. Y., Lin, C. J., & Lin, Y. C. (2008). Audit partner tenure, audit firm tenure, and discretionary accruals: does long auditor tenure impair earnings quality? *Contemporary Accounting Research*, 25(2), 415-445. <https://doi.org/10.1506/car.25.2.5>
30. Chen, S., Sun, S. Y., & Wu, D. (2010). Client importance, institutional improvements, and audit quality in China: an office and individual auditor level analysis. *The Accounting Review*, 85(1), 127-158. <https://doi.org/10.2308/accr.2010.85.1.127>
31. Chi, W., & Huang, H. (2005). Discretionary accruals, audit-firm tenure and audit-partner tenure: Empirical evidence from Taiwan. *Journal of Contemporary Accounting and Economics*, 1(1), 65-92. [https://doi.org/10.1016/S1815-5669\(10\)70003-5](https://doi.org/10.1016/S1815-5669(10)70003-5)
32. Chi, W., Huang, H., Liao, Y., & Xie, H. (2009). Mandatory audit-partner rotation, audit quality, and market perception. *Contemporary Accounting Research*, 26(2), 359-391. <https://doi.org/10.1506/car.26.2.2>
33. Chow, C. (1982). The demand for external auditing: size, debt and ownership influences. *The Accounting Review*, 57(2), 272-291.
34. Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1), 2-19. <https://doi.org/10.1016/j.jacceco.2010.01.002>
35. Corbella, S., Florio, C., Gotti, G., & Mastrolia, S. A. (2015). Audit firm rotation, audit fees, and audit quality: the experience of Italian public companies. *Journal of International Accounting, Auditing & Taxation*, 25(1), 46-66. <https://doi.org/10.1016/j.intaccaudtax.2015.10.003>
36. Dao, M., Mishra, S., & Raghunandan, K. (2008). Auditor tenure and shareholder ratification of the auditor. *Accounting Horizons*, 22(2), 297-314. <https://doi.org/10.2308/acch.2008.22.3.297>
37. David, L. R., Soo, B. S., & Trompeter G. M. (2009). Audit tenure and the ability to meet or beat earnings forecasts. *Contemporary Accounting Research*, 26(2), 517-548. <https://doi.org/10.1506/car.26.2.8>
38. DeAngelo, L. E. (1981). Auditor size and auditor quality. *Journal of Accounting and Economics*, 3(1), 183-199. [https://doi.org/10.1016/0165-4101\(81\)90002-1](https://doi.org/10.1016/0165-4101(81)90002-1)

39. Dechow, P. M., & Diechev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77(1), 35-59. <https://doi.org/10.2308/accr.2002.77.s-1.35>
40. Dechow, P. M., Richardson, S.A., & Tuna, I. (2003). Why are earnings kinky? An examination of the earnings management explanation. *Review of Accounting Studies*, 8(2), 355-384. <https://doi.org/10.1023/A:1024481916719>
41. Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193-225.
42. Dechow, P. M., Weili, G., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(3), 344-401. <https://doi.org/10.1016/j.jacceco.2010.09.001>
43. DeFond, M. L. de, & Subramanyam, K. R. (1998). Auditor Changes and Discretionary Accruals. *Journal of Accounting and Economics*, 25(1), 35-68. [https://doi.org/10.1016/S0165-4101\(98\)00018-4](https://doi.org/10.1016/S0165-4101(98)00018-4)
44. DeFond, M. L., & Francis, J. R. (2005). Audit Research after Sarbanes-Oxley. *Auditing: A Journal of Practice & Theory*, 24(s1), 5-30.
45. European Commission (Ed.). Grünbuch: Weiteres Vorgehen im Bereich der Abschlussprüfung: Lehren aus der Krise. Brüssel.
46. Ewelt-Knauer, C., Knauer, T., & Thielemann, M. (2014). Exit behavior of investment companies: The choice of the exit channel. *Journal of Business Economics*, 84(4), 571-607. <https://doi.org/10.1007/s11573-013-0699-8>
47. Ewert, R. (2003). Prüfung, Beratung und externe Rotation: Ökonomische Forschungsbeiträge zur aktuellen Regierungsdebatte im Bereich der Wirtschaftsprüfung. *Der Konzern*, 1, 528-539.
48. Fama, E. F. (1980). Agency Problems and the Theory of the Firm. *The Journal of Political Economy*, 88(2), 288-307. <https://doi.org/10.1086/260866>
49. Fargher, N., Lee, H., & Mande, V. (2008). The effect of audit partner tenure on client managers accounting discretion. *Managerial Auditing Journal*, 23(2), 161-186. <https://doi.org/10.1108/02686900810839857>
50. Ferguson, A., Lam, P. & Ma, N. (2017). Further evidence on mandatory partner rotation and audit pricing. *Accounting & Finance* (online first).
51. Firth, M. A., & Rui, O. M. (2012). Rotate back or not after mandatory audit partner rotation? *Journal of Accounting and Public Policy*, 31(4), 356-373. <https://doi.org/10.1016/j.jaccpubpol.2012.05.002>
52. Francis, J. R., & Yu, M. D. (2009). Big 4 Office size and audit quality. *The Accounting Review*, 84(5), 1521-1552. <https://doi.org/10.2308/accr.2009.84.5.1521>
53. Garcia-Blandon, J., & Argilés-Bosch, J. (2013). Audit tenure and audit qualifications in low litigation risk setting: An analysis of the Spanish market. *Estudios de Economía*, 40(2), 133-156. <https://doi.org/10.4067/S0718-52862013000200002>
54. Garcia-Blandon, J., & Argilés-Bosch, J. (2015). Audit firm tenure and independence: A comprehensive investigation of audit qualifications in Spain. *Journal of International Accounting, Auditing & Taxation*, 24(1), 82-93. <https://doi.org/10.1016/j.intaccaudtax.2015.02.001>
55. Garcia-Blandon, J. & Argiles-Bosch, J. (2017). The interaction effects of firm and partner tenure on audit quality. *Accounting and Business Research* (online first).
56. Geiger, M. A., & Raghunandan K. (2002). Audit tenure and audit reporting failure. *Auditing: A Journal of Practice & Theory*, 21(1), 67-78. <https://doi.org/10.2308/aud.2002.21.1.67>
57. Gonzalez-Diaz, B., Garcia-Fernandez, R., & Lopez-Dias, A. (2015). Auditor tenure and audit quality in Spanish state-owned foundations. *Spanish Accounting Review*, 18(2), 115-126. <https://doi.org/10.1016/j.rcsar.2014.04.001>
58. Grand, B. (1996). Approaches the critiques de l'audit. Working Paper, 1996(469).
59. Gul, F. A., Jaggi, B. L., & Krishnan, G. V. (2007). Auditor independence. *Auditing: A Journal of Practice & Theory*, 26, 117-142. <https://doi.org/10.2308/aud.2007.26.2.117>
60. Gul, F. A., Fung, S. Y., & Jaggi, B. (2009a). Earnings quality: Some evidence on the role of auditor tenure and auditors' industry expertise. *Journal of Accounting and Economics*, 47, 265-287. <https://doi.org/10.1016/j.jacceco.2009.03.001>
61. Gul, F. A., Fung, S., & Jaggi, B. (2009b). Earnings Quality: Some evidence of the role of auditor tenure and auditors' industry expertise. *Journal of Accounting and Economics*, 47, 265-287. <https://doi.org/10.1016/j.jacceco.2009.03.001>
62. Gunnar, K., Krishnan, G., & Zhang, Y. (2007). Is audit quality associated with auditor tenure, industry expertise and fees? Evidence from PCAOB inspections. Working Paper.
63. Herzig, N., & Watrin, C. (1995). Obligatorische Rotation des Wirtschaftsprüfers : ein Weg zur Verbesserung der externen Unternehmenskontrolle? *Schmalenbachs Zeitschrift für betriebswirtschaftliche Forschung*, 47(9), 775-804.
64. Hill, C. W., & Jones, T. M. (1992). Stakeholder-Agency theory. *Journal of Management Studies*, 29(2), 131-154. <https://doi.org/10.1111/j.1467-6486.1992.tb00657.x>
65. Jackson, A. B., Moldrich, M., & Roebuck, P. (2008). Mandatory audit firm rotation and audit quality. *Managerial Auditing Journal*, 23(5), 420-437. <https://doi.org/10.1108/02686900810875271>
66. Jenkins, D. S., & Velury U. (2008). Does audit tenure influence the reporting of conservative earnings? *Journal of Accounting and Public Policy*, 27(2), 115-132. <https://doi.org/10.1016/j.jaccpubpol.2008.01.005>

67. Jenkins, D. S., & Velury, U. K. (2012). Auditor tenure and the pricing of discretionary accruals in the post-SOX era. *Accounting and the Public Interest*, 12(1), 1-15. <https://doi.org/10.2308/apin-10204>
68. Jensen, M. C., & Meckling, W. H. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(2), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
69. Johnson, V. E., Khurana, I. K., & Reynold, J. K. (2002). Audit-firm tenure and the quality of financial reports. *Contemporary Accounting Research*, 19(4), 637-660. <https://doi.org/10.1506/LLTH-JXQV-8CEW-8MXD>
70. Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193-228. <https://doi.org/10.2307/2491047>
71. Keune, M. B., & Johnstone, K. M. (2012). Materiality judgments and the resolution of detected misstatements: The role of managers, auditors, and audit committees. *The Accounting Review*, 87(5), 1641-1677. <https://doi.org/10.2308/accr-50185>
72. Kim, H., Lee, H., & Lee, J. E. (2015). Mandatory audit firm rotation and audit quality. *Journal of Applied Business Research*, 31(3), 1089-1106. <https://doi.org/10.19030/jabr.v31i3.9245>
73. Kim, J.-B., Min, C.-K., & Yi, C. H. (2004). Auditor designation, auditor independence, and earnings management: Evidence from Korea. Working Paper.
74. Klassen, K., Lisowsky, P. & Mescall, D. (2016). The Role of Auditors, Non-Auditors, and Internal Tax Departments in Corporate Tax Aggressiveness. *The Accounting Review*, 91, 179-205.
75. Knechel, W. R., & Vanstraelen A. (2007). The relationship between auditor tenure and audit quality implied by going concern opinions. *Auditing: A Journal of Practice & Theory*, 26(1), 113-131. <https://doi.org/10.2308/aud.2007.26.1.113>
76. Kothari, S. P., & Warner, J. B. (1997). Measuring long-horizon security price performance. *Journal of Financial Economics*, 43(3), 301-339. [https://doi.org/10.1016/S0304-405X\(96\)00899-9](https://doi.org/10.1016/S0304-405X(96)00899-9)
77. Kothari, S. P., Leone, A., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163-197. <https://doi.org/10.1016/j.jacceco.2004.11.002>
78. Kraakman, R. H. (1986). Gatekeepers: the anatomy of a third-party enforcement strategy. *Journal of Law Economics and Organization*, 2(1), 53-104.
79. Krishnan, G. V. (2003). Audit Quality and the Pricing of Discretionary Accruals. *Auditing: A Journal of Practice & Theory*, 22(1), 109-126. <https://doi.org/10.2308/aud.2003.22.1.109>
80. Kwon, S. Y., Lim, Y., & Simnet, R. (2014). Effects of mandatory audit firm rotation upon quality of audit: The perception of audit firms-evidence from Bahrain. *Auditing: A Journal of Practice & Theory*, 33(4), 167-196. <https://doi.org/10.2308/ajpt-50814>
81. Leffson, U. (1988). *Wirtschaftsprüfung* (4th ed.). Düsseldorf: Springer.
82. Lennox, C. S., Wu, X., & Zhang, T. (2014). Does mandatory rotation of audit partners improve audit quality? *The Accounting Review*, 89(5), 1775-1803. <https://doi.org/10.2308/accr-50800>
83. Levinthal, D. A., & Fichman M. (1988). Dynamics of Interorganizational attachments: Auditor-client relationships. *Administrative Science Quarterly*, 33(3), 345-369. <https://doi.org/10.2307/2392713>
84. Li, D. (2010). Does auditor tenure affect accounting conservatism? Further evidence. *Journal of Accounting and Public Policy*, 29(3), 226-241. <https://doi.org/10.1016/j.jaccpubpol.2010.03.004>
85. Li, C., Raman, K.K., Sun, L. & Wu, D. (2017). The effect of ambiguity in an Auditing Standard on Auditor Independence. *Journal of Contemporary Accounting & Economics* (online first).
86. Litt, B., Sharma, D. S., Simpson, T., & Tanyi, P. N. (2014). Audit partner rotation and financial reporting quality. *Auditing: A Journal of Practice & Theory*, 33(3), 59-86. <https://doi.org/10.2308/ajpt-50753>
87. Magee, R. P. and Tseng, M.-C. (1990). Audit Pricing and Independence. *The Accounting Review*, 65, 315-336.
88. Mande, V., & Son, M. (2013a). Do financial restatements lead to auditor changes? *Auditing: A Journal of Practice & Theory*, 32(2), 119-145. <https://doi.org/10.2308/ajpt-50362>
89. Mande, V., & Son, M. (2013b). Do financial restatements lead to auditor changes? *Auditing: A Journal of Practice & Theory*, 32(2), 119-145. <https://doi.org/10.2308/ajpt-50362>
90. Mande, V., & Son, M. (2015). How do auditor fees affect accruals quality? Additional Evidence. *International Journal of Auditing*, 19(3), 238-251. <https://doi.org/10.1111/ijau.12038>
91. Manry, D. L., Mock, T. J., & Turner, J. L. (2008). Does Increased Audit Partner Tenure Reduce Audit Quality. *Journal of Accounting, Auditing & Finance*, 23(4), 553-572. <https://doi.org/10.1177/0148558X0802300406>
92. McNichols, M. F. (2000). Research design issues in earnings management studies. *Journal of Accounting and Public Policy*, 19(4-5), 313-345. [https://doi.org/10.1016/S0278-4254\(00\)00018-1](https://doi.org/10.1016/S0278-4254(00)00018-1)
93. Mechelli, A. & Cimini, RR. (2017). Do (Audit Firm and Key Audit Partner) Rotations Affect Value Relevance? *International Business Research* 10, 143-152.
94. Mohammadi, S., Maharlouie, M. M., & Kazemi, S. (2015). Audit firm rotation and audit report: evidence from the Tehran Stock Exchange. *South African Journal of Accounting Research*, 29(1), 1-12. <https://doi.org/10.1080/10291954.2015.999451>
95. Nashwa, G. (2004). Auditor rotation and the quality of audits. *The CPA Journal*, 74(12), 22-26.
96. O'Keefe, T. B., Simunic, D. A., & Stein, M. T. (1994). The production of audit services: Evidence from a major public accounting firm. *Journal of Accounting Research*, 32(2), 241-261. <https://doi.org/10.2307/2491284>
97. Ostrowski, M. (2003). *Kapitalmarkt und Wirtschaftsprüfer: Eine empirische Analyse der Wahl des Prüfers bei IPO-Unternehmen und der Kapitalmarktreaktionen auf die Prüferwahl*. Schriften zu Theorie und Praxis der Rechnungslegung und Wirtschaftsprüfung, (Vol. 1). Frankfurt am Main: Peter-Lange Verlag.

98. Park, S., Kim, Y. & Kim, J. (2016). Non-Audit Services and The Persistence and Market Pricing of Earnings. *The Journal of Applied Business Research*, 32, 1585-1602.
99. Park, H.-J., Choi, J. & Cheung, J. (2017). Doen non-audit services compromise audit quality? *The Journal of Applied Business Research*, 33, 309-320.
100. Quick, R., & Wlmann, D. (2011). Zum Einfluss der Mandatsdauer des Abschlussprüfers auf die Prüfungsqualität. *Zeitschrift für Betriebswirtschaft*, 81, 915-943. <https://doi.org/10.1007/s11573-011-0498-z>
101. Quick, R., & Wlmann, D. (2012). Einfluss der Mandatsdauer des Abschlussprüfers auf ergebniszielgrößenorientierte Bilanzpolitik. *Zeitschrift für Betriebswirtschaft*, 82(10), 1107-1142. <https://doi.org/10.1007/s11573-012-0618-4>
102. Raghunathan, B., Lewis, B. L., & Evans J. L. (1994). An empirical investigation of problem audits. *Research in Accounting Regulation*, 8(1), 35-58.
103. Ratzinger-Sakel, N. V. (2013). Auditor fees and auditor independence—evidence from going concern reporting decisions in Germany. *Auditing: A Journal of Practice & Theory*, 32(4), 129-168. <https://doi.org/10.2308/ajpt-50532>
104. Read, W. J., & Yezegel, A. (2016). Auditor tenure and going concern opinions for bankrupt clients: additional evidence. *Auditing: A Journal of Practice & Theory*, 35(1), 163-179. <https://doi.org/10.2308/ajpt-51217>
105. Ricket, L. K., Maggina, A., & Alam, P. (2016). Auditor tenure and accounting conservatism: evidence from Greece. *Managerial Auditing Journal*, 31(6/7), 538-565. <https://doi.org/10.1108/MAJ-10-2014-1103>
106. Ross, S. (1973). The Economic Theory of Agency: The Principal's Problem. *American Economic Review*, 63(2), 134-139.
107. Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3), 335-370. <https://doi.org/10.1016/j.jacceco.2006.01.002>
108. Ruiz-Barbadillo, E., Gomez-Aguilar N., & Carrera N. (2009). Does mandatory audit firm rotation enhance auditor independence? *Auditing: A Journal of Practice and Theory*, 28(1), 113-135. <https://doi.org/10.2308/aud.2009.28.1.113>
109. Sharma, D.S., Tanyi, P. & Litt, B. (2017). Costs of Mandatory Periodic Audit Partner Rotation. *Auditing*, 36, 129-149.
110. Spence, M. (1973). Job market signaling. *Journal of Economics*, 87, pp. 355-374.
111. Stanly, J. D., & DeZoort, F. T. (2007). Audit firm tenure and financial restatements: An analysis of industry specialization and fee effects. *Journal of Accounting and Public Policy*, 26(1), 131-159. <https://doi.org/10.1016/j.jaccpubpol.2007.02.003>
112. Stewart, J., Kent, P., & Routledge, J. (2016). The association between audit partner rotation and audit fees: Empirical evidence from the Australian market. *Auditing: A Journal of Practice & Theory*, 35(1), 181-197. <https://doi.org/10.2308/ajpt-51173>
113. Stice, J. (1991). Using financial and market information to identify pre-engagement factors associated with lawsuits against auditors. *The Accounting Review*, 66, 516-553.
114. Su, L., Zhao, X., & Zhou, G. (2016). Auditor Tenure and Stock Price Idiosyncratic Volatility. *Auditing*, 35, 147-166.
115. Tirole, J. (1986). Hierarchies and Bureaucracies: On the Role of Collusion in Organizations. *Journal of Law Economics and Organization*, 2(2), 181-214.
116. Vanstralen A. (2000). Impact of renewable long-term audit mandates on audit quality. *European Accounting Review*, 9(3), 419-442. <https://doi.org/10.1080/09638180020017140>
117. Walker, P. L., Lewis, B. L., & Casterella, J. R. (2001). Mandatory auditor rotation: arguments and current evidence. *Accounting Enquiries*, 10(2), 209-242.
118. Watts, R., & Zimmerman, J. L. (1983). Agency problems, auditing, and the theory of the firm: some evidence. *Journal of Law & Economics*, 26(3), 613-633. <https://doi.org/10.1086/467051>
119. Watts, R., & Zimmermann, J. (1983). Agency problems, auditing, and the theory of the firm: Some evidence. *Journal of Law & Economics*, 26(3), 613-633. <https://doi.org/10.1086/467051>
120. Williams, D. D. (1988). The potential determinants of auditor change. *Journal of Business Finance & Accounting*, 15(2), 243-261. <https://doi.org/10.1111/j.1468-5957.1988.tb00133.x>
121. Zhang, Y., Hay, D. & Holm C. (2016). Non-audit services and auditor independence. *Cogent Business & Management* 3, 1-19.