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The influence of auditor characteristics on audit quality

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Abstract — **Most of the literature on audit quality is at a firm and office level. Here, we analyse the influence of several auditor characteristics on audit quality, namely gender, education, education area and experience, in a European setting. Based on a sample of STOXX® 600, we find evidence that auditors' gender and education influence audit quality, the former decreasing discretionary accruals if the auditor is female and the latter increasing audit fees for higher degrees. These results may be due to the fact that female auditors are more interested in the audit quality (being more risk averse, more intense in the cognitive process and less overconfident than male auditors) than in the aspects of the audit firm's business. Moreover, the higher the level of education, the more knowledge auditors have to perform an audit and this is noted by the market. This study contributes to the existing literature on audit quality by studying auditor attributes and stressing the importance of gender and education in audit quality.**

Keywords - auditor characteristics; audit quality; gender; education; education area; experience.

I. INTRODUCTION

DeAngelo (1981) defines audit quality as the joint probability of detecting and reporting material misstatement, while Cheng, Liu and Chien (2008) say that audit firms' most important asset is their employees. The main objective of this paper is to verify which auditor characteristics could influence the audit quality of companies audited by those auditors. Most of the literature on audit quality has focused on the firm or office, namely the influence of the audit firm's size, industry specialization, individual practice offices, audit tenure, non-audit fees and audit committees on audit quality. Two dimensions mentioned by DeAngelo (1981), the auditor's competence and independence, could be analysed by studying gender, experience, and the level and area of education of the auditor responsible for the audit.

The auditor's gender can influence the importance attributed to audit quality or to business aspects of the audit firm. Females are found to be more risk averse, more intense in the cognitive process, more conservative and less overconfident (Byrnes, Miller & Schafer, 1999; Ittonen & Peni, 2012; Meyers-Levy & Maheswaram, 1991; Meyers-Levy & Sternthal, 1991; Olsen & Cox, 2001), which could enhance audit quality. Education increases knowledge about doing an audit and acts as a signal to the market (Che, Langli, & Svanstrom, 2018; Cutler & Lleras-Muney, 2010; Stiglitz, 1975). Education area could influence auditor thinking, since

if this lies in accounting auditors may have more analytical and problem-solving abilities (Diamond, 2005; Gramling, Schatzberg & Wallace, 1996; Reichelt & Wang, 2010). Experience creates knowledge which increases the auditor's expertise, making them more aware of errors in financial statements (Bonner & Lewis, 1990; Libby & Frederick, 1990).

Based on a sample of listed companies in the STOXX® 600 we verify the influence of gender, level of education, the education area and the experience of the auditor on audit quality. Our results support the theory that auditors' gender and education influence audit quality, by reducing discretionary accruals or increasing audit fees. We could not conclude that auditors' area of education and experience influence audit quality.

Our study contributes to the literature on audit quality in several ways. First, we contribute at a narrower level, which is auditor characteristics, and not just at a firm or office level (Francis, 2004) and complement behavioral research in auditing experience by using auditing experience in a broader context and not only relating a specific audit task to auditing experience. Second, we demonstrate that gender and education are important auditor attributes regarding audit quality, extending the literature on audit quality. Third, we complement the study by Cahan and Sun (2015) by measuring auditor experience differently, not focusing only on the auditor's experience and having a broader sample.

The remainder of the paper is organized as follows. Section two presents a literature review and develops the hypotheses. The third section presents the methodology used, the sample and the research design. The fourth section discusses the results and the fifth presents the conclusions.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Existing literature has analysed audit quality at the audit firm level (Becker et al. 1998; Francis & Krishnan, 1999; Simunic & Stein, 1987) and audit office level (Choi, Francis, Kim & Zang, 2010; Francis & Yiu, 2009). Since the audit process is partly a matter of professional judgments, it is unlikely that audit quality within audit firms is the same, stressing the importance of the characteristics of the auditor responsible for auditing the company and issuing the audit report (Hardies, Breesh & Brason, 2016). The auditor's individual characteristics have been considered as important for audit quality by several authors (Church, Davis & McCraken, 2008; DeFond & Francis, 2005). Audit quality being a matter

of competence and independence, the characteristics of the auditor engaged to perform the audit can be expected to influence audit quality. Gul, Wu and Yang (2013) say that although individual characteristics may influence audit outcomes, this could be constrained by the quality-controls defined by the audit firm, reducing or eliminating the possible influence of auditor characteristics on audit quality. However, the auditor engaged is still responsible for planning and implementing the audit and deciding on the type of audit report to be issued and signed by them. From another perspective, since the auditor's client cannot define the amount of audit service required to perform the audit or what to do afterwards, Dye (1993) says that the auditor's wealth (one of their characteristics) influences audit quality, because wealthy auditors have more to lose if they are sued for not performing a good audit.

A. Gender

Auditors face the trade-off between being more interested in the quality of the audit work or more interested in aspects of the firm's business. Auditors can have their independence impaired if they prioritize aspects of the firm's business (to retain the client). This trade-off could depend on the auditor's gender, since females and males are different in terms of management style and attitude towards risk (Nan-wei, Wen-si & Ning-jiao, 2014). Despite gender specificities, females and males receive the same education and training, which should lead to similar audit quality (Gold, Hunton & Gomaa, 2009). However, it appears than females are more risk averse than males (Byrnes, Miller & Schafer, 1999; Olsen & Cox, 2001) and are more intense in the cognitive process (Meyers-Levy & Maheswaram, 1991; Meyers-Levy & Sternthal, 1991). Females being more conservative and risk averse lets them spend more time in both audit planning and the audit process, also because they are less overconfident, and this affects the cost of the audit and thus the audit fees (Ittonen & Peni, 2012). However, as females find it more difficult to become an auditor partner, this may lead to them charging lower fees, together with the fact of females being more associated with lower wages (Ittonen & Peni, 2012). If females are more risk averse and conservative than male colleagues, we can expect, for instance, to find less opportunistic earnings management behavior in firms audited by women (Niskanen, Karjalainen, Niskanen & Karjalainen, 2011).

Using a sample of listed companies from Shanghai, Nan-wei et al. (2014) conclude on a relation between the auditor gender and audit fees. If female auditors charge higher fees, this may be because they are more risk-averse than males and perform more audit work, increasing the costs of the audit. Ittonen and Peni (2012) analyse listed companies in Denmark, Finland and Sweden, and the results show that auditor gender may influence audit fees. These are higher in the case of female auditors, suggesting that risk aversion increases audit fees. Niskanen et al. (2011) find that private Finnish companies audited by female auditors have more discretionary accruals in absolute terms than companies audited by males, but this seems to be caused by income decreasing discretionary accruals, suggesting higher conservatism among female auditors. In a sample of listed Finnish and Swedish companies, Ittonen, Vähämaa and Vähämaa (2013) find higher accrual quality

among female auditors' clients. For listed Chinese companies, Liu (2017) finds that female auditors increase audit fees, indicating that clients are more willing to pay premium audit fees for female auditors since they perform the audit more cautiously and have higher ethical standards.

The auditor partner's gender could influence audit quality, because of the differences related to risk and confidence, which could affect both the planning and the process. However, this could be attenuated by the quality-controls defined by the audit firm, and so the first hypothesis (H1) is:

H1: The auditor's gender influences audit quality.

B. Education

Auditors with higher formal education have more knowledge to perform an audit and are more likely to detect misstatements and work more efficiently (Che et al., 2018). Education increases general knowledge, the ability to apply theory and gives a signal to the market (Cutler & Lleras-Muney, 2010; Stiglitz, 1975). Education is a major element of expertise (Bonner & Lewis, 1990) and is considered as a component of general human capital (Brocheler et al., 2004).

Che et al. (2018) find that Norwegian auditors with a higher qualification (master) make more effort than others with a first degree. Studying Dutch companies, Brocheler et al. (2004) find a positive influence of education on audit firms' longevity, indicating that these audit firms have a higher performance than those with less educated auditors. Gul et al. (2013) study Chinese auditors, relating auditor education to audit outcome, and find that Chinese auditors with a master's degree are less likely to issue a qualified audit report than other auditors, meaning less audit quality. Liu (2017) studies Chinese listed companies and the relation between several auditor characteristics and audit fees, finding a positive relation between educational background and fees, meaning that clients can identify the high audit quality arising from education. Thus, the second hypothesis is:

H2: The auditor's level of education influences audit quality.

C. Education area

Having a master in accounting or auditing implies more audit quality than a master in another area (Che et al., 2018). The area as well as the extent of university education could influence the auditor's thinking (Gramling, Schatzberg & Wallace, 1996; Reichelt & Wang, 2010). The technical focus acquired in an accounting program means auditors acquire analytical and problem-solving abilities, making it easier to make decisions in complex and unusual circumstances (Diamond, 2005). However, auditors with an accounting background have a relatively narrow technical focus, reducing the competence to solve problems (Diamond, 2005). Furthermore, auditors with a degree in accounting are more methodical and mechanical, rather than creative, analytical and independent (Gammie & Kirkham, 2008; Howieson, 2003).

Studying auditors of listed companies in the United Kingdom, Chu, Florou and Pope (2017) find that auditors with an accounting degree produce greater audit quality, since they decrease earnings management and increase audit fees, but

only compared to auditors with a non-quantitative social sciences background. Thus, the third hypothesis is:

H3: The auditor's education area influences audit quality.

D. Experience

With audit quality being influenced by competence, besides independence, experience could be used as a proxy for competence (Wang, Wang, Yu, Zhao & Zhang, 2015). Bonner and Lewis (1990) say that education (for example, training) and experience create knowledge, determining auditor expertise. This relation has already been defined in the area of psychology, work experience being defined as job-relevant knowledge gained over time (McCall, Lombardo & Morrison 1988). Bonner and Lewis (1990) consider education and experience, with innate personal characteristics, as the main elements of expertise. Although education could be the same for any auditor who has obtained a university degree, experience could be very different, as it is gained during life, depending on specific and personal situations. Auditors with more experience are more knowledgeable about errors that can occur in financial statements (Libby & Frederick, 1990). However, the opposite effect could occur. More experienced auditors could reduce audit quality, because they tend to make predictions based on existing audit prototypes and are not sensitive to each situation (Wang et al., 2015), and are less willing to issue a qualified audit report since they are more aware of the consequences (Abdolmohammadi & Wright, 1987).

Studying listed Chinese companies, Wang et al. (2015) find that a more experienced auditor partner enhances audit quality (by reducing discretionary accruals) and increases earnings response coefficients, which is useful information for investors. Cahan and Sun (2015), studying listed Chinese companies and the influence of auditor experience on audit quality, find evidence that the aggregate audit experience of the two signee auditors (specific to the Chinese context) increases audit quality, increasing audit fees and decreasing absolute discretionary accruals. Also for listed Chinese companies, Liu (2017) finds a positive relation between audit fees and auditors' experience. Che, Langli and Svanstrm (2018) find no influence of professional experience on auditing effort among Norwegian auditors. Besides gender, in private financially distressed Belgian companies, Hardies et al. (2016) study auditor experience, measured by years as a certified public accountant (CPA), and find a negative association between auditor experience and issuing going concern opinions. Although theoretically, experience should enhance audit quality, empirical studies do not confirm that assumption, and so the fourth hypothesis is:

H4: The auditor's experience influences audit quality.

III. METHODOLOGY

A. Sample and data collection

The sample is based on Stoxx® Europe 600 for the period of 2015 to 2017, as shown in Table I. As in previous studies, we start by withdrawing all financial and utility companies because of their specific legislation (685 observations). Next, we exclude observations for companies that are not audited solely by one auditor (790 observations), as well as observations where we do not have all financial data (450 observations) or auditors' data (520 observations). We also eliminate the outliers (21 observations), those that are higher in absolute value of the average and three times the standard deviation, leaving a final sample of 534 observations. The financial data is obtained from Datastream and collected directly from financial reports, by email or through LinkedIn in the case of the auditor's characteristics.

TABLE I.   DEFENITION OF THE SAMPLE

	Observations	%
Stoxx® Europe 600	3,000	100
Observations withdrawn:		
Financial companies	-685	-22.8
More than one auditor (joint audits)	-790	-26.3
All financial data not available	-450	-15.0
Auditors' data not available	-520	-17.3
Outliers	-21	-0.7
Final sample	534	17.8

B. Research design

To test our hypothesis we use an ordinary least square (OLS) regression as indicated in the equation (1) relating audit quality to our variables of interest, which are gender, education, education area and auditor experience:

$$AQ_{it} = \alpha_0 + \alpha_1 GEN_{it} + \alpha_2 EDU_{it} + \alpha_3 EDUA_{it} + \alpha_4 EXP_{it} + \alpha_5 SIZE_{it} + \alpha_6 LEV_{it} + \alpha_7 CHSALES_{it} + \alpha_8 ROA_{it} + \alpha_9 PBV_{it} + \alpha_{10} LOSS_{it} + YD + CD + \varepsilon_{it} \quad (1)$$

where, for company i and year t, the dependent variable AQ is a proxy of earnings quality measured by both absolute discretionary accrual ($|DA|$) and audit fees ($AFEES$). The variables of interest are GEN, EDU, $EDUA$ and EXP, which are gender, education, education area and experience, respectively. The other variables are control variables ($SIZE$, LEV, $CHSALES$, ROA, PBV and $LOSS$). YD and CD are dummy variables for controlling years and country fixed effects.

The variables are summarized in Table II.

C. Measurement of variables

To measure audit quality we use as proxies earnings management measured by the absolute value of discretionary accruals ($|DA|$) computed by the Jones (1991) model modified by Kothary, Leone and Wasley (2005) and audit fees ($AFEES$). Earnings management is based on audit output and audit fees are based on audit input (DeFond & Zhang, 2014).

The absolute value of residuals of the following OLS regression as equation (2) is used to measure discretionary accruals:

$$TA_{it}/A_{it-1} = \alpha_0 + \alpha_1(1/A_{it-1}) + \alpha_2 \Delta REV_{it}/A_{it-1} + \alpha_3 PPE_{it}/A_{it-1} + \alpha_4 ROA_{it}/A_{it-1} + \varepsilon_{it} \quad (2)$$

where TA is total accruals; A is total assets; ΔREV is change in revenues (revenue in period t less revenue in period t-1); PPE is gross property, plant and equipment; and ROA is return on assets as the quotient of net income and assets.

Total accruals (TA) is calculated using balance sheet accruals estimates, and not by the difference between net

income and cash flow from operations, since the latter is computed by most companies using the indirect method, and equals the change in non-cash current assets, minus the change in current liabilities (excluding short-term debt) and minus depreciation. To reduce heteroskedasticity, the variables are deflated by total assets and the model as a constant (Kothary et al., 2005; White, 1980). The discretionary accruals are estimated separately for each industry.

Audit fees (*AFEES*) from audit pricing theory include the cost of the audit, risk premium and normal profit (Ittonen & Peni, 2012; Nan-wei et al., 2014). It could be inferred here that the auditor's risk tolerance may affect the audit fees by increasing the cost of the audit (there is more investment in the audit work) or/and risk premium (Houston, Peters & Pratt, 1999; Ittonen & Peni, 2012; Johnstone & Bedard, 2001). The greater the risk-aversion, the higher the audit fees. Audit fees are measured by the natural logarithm of fees (Cahan & Sun, 2015; Liu, 2017).

Gender (*GEN*) is one of the variables of interest and we expect the relation between this variable and audit quality to be positive, meaning females are more diligent, better prepared, less confident and more risk-averse, and implying less discretionary accruals and higher audit fees. Auditor education (*EDU*) is our second variable of interest. We expect a positive relation with audit quality, i.e., a negative association between education and discretionary accruals and a positive association with audit fees. The third variable of interest is area of education (*EDUA*), where we expect a positive relation with audit quality. The last variable of interest is auditor experience (*EXP*). We expect a negative association between experience and discretionary accruals and a positive association with audit fees.

The other variables are control variables. We include the size variable (*SIZE*) to control for the client size effect on audit quality (Dechow & Dichev, 2002). Simunic (1980) and Firth (1985) find that the size of audit companies is an important determinant of audit fees. The leverage variable (*LEV*) is included since it works as an incentive to increase earnings management (Watts & Zimmerman, 1986) and increase audit fees by increasing the audit time (Bell, Landsman & Shackelford, 2001; Simunic, 1980). The variables of change in sales (*CHSALES*), return of assets (*ROE*) and price to book value (*PBV*) are included for the purpose of controlling for differences in performance (Young, 1999). The losses variable (*LOSS*) is a dummy variable included to control for potential differences in earnings management and audit fees between loss and profit firms (Carcello, Hermanson, Neal & Riley, 2002; Choi, Kim, Kim & Zang, 2010).

TABLE II.   MEASUREMENT OF VARIABLES

Panel A: Dependent variable

Variable name	Variable label	Measurement
AQ	*Audit quality*	Absolute value of discretionary accruals (|DA|) measured by the modified Jones (1991) model (Kothari et al., 2005) and the natural logarithm of audit fees (AFEES).

Panel B: Independent variable, explanatory variables

Variable name	Variable label	Measurement	|DA|	AFEES
GEN	*Gender*	Variable that takes the value of 1 if the auditor is male and 0 otherwise.	+	−
EDU	*Education*	Variable that takes the value of 3 if the auditor has a PhD, 2 if the auditor has a master's degree and 1 if the auditor has a first degree.	−	+
EDUA	*Education area*	Variable that takes the value of 1 if the area of education is not in accounting, auditing, management, economics or finance and 0 otherwise.	+	−
EXP	*Experience*	Total number of years that the auditor has been practising.	−	+

Panel C: Independent variable, control variables

Variable name	Variable label	Measurement	|DA|	AFEES
SIZE	*Size*	Natural logarithm of total assets.	−	+
LEV	*Leverage*	Ratio of total debt to total assets.	+	+
CHSALES	*Change in sales*	Quotient of change in sales and sales of the previous period.	+	−
ROA	*Return on assets*	Ratio between net income and total assets.	−	+
PBV	*Price book value*	Ratio between the price and the book value per share.	−	+
LOSS	*Losses*	Variable that takes the value of 1 for negative net income and 0 otherwise.	+	+

IV.   RESULTS

A. Descriptive statistics

The descriptive statistics are presented in Table III. The mean of absolute value discretionary accruals (\|*DA*\|) is approximately 3.7% and the mean of audit fees in thousands of Euros is 7,438. Female auditors in the samples are only 8.6% (46 in 534 auditors). In terms of education, 4.7% of the auditors have a PhD, 33.9% have a master degree and the remainder (61.4%), more than half the sample, have a first degree. About 68% of auditors have a degree in the area of auditing. Mean experience is about 26 years.

TABLE III.   DESCRIPTIVE VARIABLES

Panel A: Quantitative variables

Variables	Mean	Standard deviation	N
Dependent variables			
|DA|	0.037	0.036	534
AFEES	6.451	0.657	534
Independent variables			
EXP	25.530	10.975	534
SIZE	6.943	0.635	534
LEV	0.594	0.165	534
CHSALES	0.052	0.334	534
ROA	0.059	0.060	534
PBV	3.734	7.685	534

Panel B: Qualitative variables

Variables		Frequency	N
Independent variable			
GEN	1	488	91.4%
	0	46	8.6%
EDU	1	328	61.4%

		2	181	33.9%
EDUA		1	171	32.0%
		0	363	68.0%
LOSS		1	30	5.6%
		0	504	94.4%

Panel A of this table includes descriptive statistics for quantitative variables and Panel B for qualitative variables. All variables defined in Table II. *** , ** , * indicate statistical significance from two-tailed tests at 0.01, 0.05, and 0.1, respectively.

B. Multivariate analysis

Table IV shows the Pearson (for quantitative variables) and Spearmen (for qualitative variables) correlations. The sign of the correlations between the dependent variables (|*DA*| and *AFEES*) and the variables of interest (*GEN*, *EDU*, *EDUA* and *EXP*) are in the correct direction although most of them are not statistically significant. This correlation matrix is also used to examine whether multicollinearity is a potential issue and since all the correlations are below 0.80 we can conclude this is not the case (Judge, Hill, Griffiths, Lutkepohl & Lee, 1988).

TABLE IV. PEARSON AND SPEARMAN CORRELATIONS

Panel A: Dependent and explanatory variables

	|DA|	AFEES	GEN	EDU	EDUA	EXP
|DA|	1					
AFEES	-0,086*	1				
GEN	0,066	-0,002	1			
EDU	-0,011	0,030	0,047	1		
EDUA	0,019	-0,007	0,068	-0,118**	1	
EXP	-0,053	0,166**	-0,152*	-0,012**	0,245**	1
SIZE	-0,033	0,665**	-0,024	-0,075	0,140**	0,288**
LEV	-0,016	0,171**	0,054	0,025	-0,113*	0,092*
CHSALES	0,190**	-0,152**	0,012	0,054	-0,083	0,009
ROA	0,108**	-0,253**	-0,048	-0,106**	-0,069	-0,089*
PBV	0,050	-0,090*	-0,076	-0,077	-0,034	-0,077
LOSS	-0,120**	0,074	-0,012	0,064	0,146**	0,193**

Panel B: Control variables

	SIZE	LEV	CHSALES	ROA	PBV	LOSS
SIZE	1					
LEV	0,215**	1				
CHSALES	0,068	0,070	1			
ROA	0,356**	-0,293**	0,099*	1		
PBV	-0,080	0,002	0,033	0,067	1	
LOSS	0,128**	0,071	-0,194*	-0,339**	-0,217**	1

Panel A of this table shows the correlation matrix for the dependent and explanatory variables and Panel B for the control variables. All variables defined in Table II. *** , ** , * indicate statistical significance from two-tailed tests at 0.01, 0.05, and 0.1, respectively.

Table V presents the main results of the OLS regression for the influence of auditor characteristics on discretionary accruals and audit fees. Analysing the results we can confirm the first hypothesis, i.e., auditor gender influences audit quality but when audit quality is measured by discretionary accruals, and the second hypothesis, that the auditor's education influences audit quality, but measured by audit fees, since the coefficients are statistically significant at least at a 10% level. Thus, if the auditor is female discretionary accruals decrease, which increases audit quality, and the higher the level of education the higher the audit fees, meaning increased audit quality. However, the coefficients of the other variables of interest (education area and experience) are not statistically significant for either discretionary accruals or audit fees, meaning it is not possible to confirm that the education area

and experience influence audit quality measured by discretionary accruals and audit fees (H3 and H4).

These results suggest that female auditors are more interested in audit quality than in the aspects of the audit firm business, because female auditors are more risk-averse, more intense in the cognitive process and less overconfident than males (Byrnes, Miller & Schafer, 1999; Ittonen & Peni, 2012; Meyers-Levy & Maheswaram, 1991; Meyers-Levy & Sternthal, 1991; Nan-wei, Wen-si & Ning-jiao, 2014; Olsen & Cox, 2001). These results also confirm that formal education increases general knowledge to perform an audit and this is signalled by the market through higher audit fees (Brocheler et al., 2004; Cutler & Lleras-Muney, 2010; Che et al., 2018; Stiglitz, 1975).

TABLE V. OLS REGRESSION RESULTS OF THE INFLUENCE OF AUDITOR CHARACTERISTICS ON AUDIT QUALITY

Variables	Sign	|DA|	AFEES
Intercept		0.078 (0.000)***	1.211 (0.000)***
GEN	+/–	0.010 (0.079)*	-0.059 (0.346)
EDU	–/+	-0.000 (0.844)	0.014 (0.063)*
EDUA	+/–	-0.002 (0.468)	-0.040 (0.277)
EXP	–/+	0.000 (0.174)	-0.000 (0.654)
SIZE	–/+	-0.001 (0.856)	0.449 (0.000)***
LEV	±/±	0.019 (0.000)***	-0.205 (0.000)***
CHSALES	+/–	-0.008 (0.003)***	0.710 (0.000)***
ROA	–/+	-0.049 (0.134)	0.194 (0.582)
PBV	–/+	0.000 (0.789)	-0.003 (0.103)
LOSS	+/–	0.011 (0.150)	-0.042 (0.617)
YD		Included	Included
CD		Included	Included
N		534	534
Adjusted R²		0.129	0.702
F-value		3.834***	45.923***

This table shows the coefficients and *t*-statistics for the influence of the auditor on earnings management and audit fees. All variables defined in Table II. *** , ** , * indicate statistical significance from two-tailed tests at 0.01, 0.05, and 0.1, respectively.

V. CONCLUSION

Most studies on audit quality are at the firm and office level, but here we study the influence on audit quality at the auditor level. The characteristics studied are gender, education, area of education and experience of the auditor responsible for the audit. We study auditors of the STOXX 600 and the influence of auditor characteristics on audit quality measured by both discretionary accruals and audit fees.

The main results confirm the influence of the auditor's gender and level of education on audit quality. Moreover, when auditors are female, this reduces discretionary accruals and increases audit quality, since females are more risk-averse,

more intense in the cognitive process and less overconfident than males. When the auditor has a higher degree, that increases audit fees, which could be explained by formal education increasing knowledge about performing an audit, and this is signaled by the market.

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