



The Impact of CEOs' Ethnic Characteristics on Audit Report Lags and Audit Fees in Iran

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Abstract

Timeliness in financial reporting is so crucial that it is mentioned in the conceptual accounting framework as qualitative characteristics of accounting information. This research tries to consider a new attitude in accounting research in audit report lag and audit fees.

The study used the data from listed companies on the Tehran Stock exchange during 2009 -2015.

The findings show a significant relationship between audit report lag and variables including type of audit firm, number of Basis for Modification Paragraphs, audit opinion, and ROA. Also, there is a significant relationship between audit fees and variables, including audit firm change during the fiscal year, type of audit firm, number of the basis for modification paragraphs, CEO's educational degree, and company size.

The current study results may give more information about the fluctuation of audit fees in developing nations.

Keywords: CEO's ethnicity, audit report lag, audit fees.

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1. Introduction

Audit report lag as an indicator of financial reporting timeliness (Ettredge, Scholz, & Li, 2007; Masli, Peters, Richardson, & Sanchez, 2010) and also audit fee as an indicator of audit efficiency (Masli et al., 2010; Raghunandan & Rama, 2006) have been used in many studies. Therefore, determining these two variables and factors affecting them are so important in both auditors' and clients' perspectives. On the other hand, users of financial statements are seeking accounting information on a timely basis (FASB, 2008), and by reducing audit report lag, they can have a more relevant information.

Many studies investigate different factors having a relationship with audit report lag and audit fees. Still, most of these factors are related to companies like company size, total liabilities, company product, and industry (Corbella, Florio, Gotti, & Mastrolia, 2015; Pourali, Jozi, Rostami, Taherpour, & Niazi, 2013). Or are related to auditors like audit firm size and expertise, audit firm changes and type of audit firm (Lowensohn, Johnson, Elder, & Davies, 2007; LUO, 2012) or are related to corporate governance like audit committee size and expertise, new rules and regulations and having internal audit (Apadore & Noor, 2013; Griffin, Lont, & Sun, 2008). A few studies investigate the impact of auditors', CEOs' and users' Psychological characteristics or ethnicities on audit report lag and audit fees.

The inheritance has a significant role in making a person's characteristics (Akrami, Bastani, Modarresi, Reyhani, & Karimi Rad, 2012; Balaban, Benjamin, Ebstein, & Belmaker, 2002). So people might inherit their ethnic personality. Some Iranian ethnics are famous for their generosity, bravery, pride, and other moral and behavioral characteristics. Therefore, ethnicity might broadcast some people's characteristics.

As CEOs' race, gender, and being Black or white impact their risk aversion, precision, monitoring, and decisions (Harjoto, Laksmana, & Lee, 2015), the CEOs' ethnicity also has the potential to affect the factors mentioned above. Some studies show that racial minority CEOs for acquiring and maintaining their position need higher educations than others (Hillman, Cannella, & Harris, 2002). Furthermore, they are more precise and do the work more cautiously because of fear of blame (Park & Westphal, 2013). On the other hand, ethnic minorities are more concerned about their jobs and try harder to succeed and keep their positions (E. S. Ng & Sears, 2010). Therefore, these factors can affect financial reporting timeliness and audit report lag.

CEOs have the power to influence the board decisions (Scott, 2012) so that their personality traits like stinginess, generousness, precision, and risk aversion can affect board decisions about audit fees. On the other hand, in some studies, audit fees are considered as a proxy of audit quality (Abbott, Parker, Peters, & Raghunandan, 2003; Carcello, Hermanson, Neal, & Riley, 2002; Moazam Khan & ul Haq, 2015) and CEOs are motivated to more audit quality according to some regulations like Section 302 and 404 of the Sarbanes-Oxley Act (Harjoto et al., 2015). So low audit quality and poor financial reporting cause managers to receive penalties (Desai, Hogan, & Wilkins, 2006). CEOs, to avoid these penalties, might offer higher audit fees.

Since no study has investigated ethnicity's impact on audit report lag and audit fees in Iran, and our findings can create new knowledge, this study's necessity becomes clear. Furthermore, the results might help auditors form their audit teams to reduce the audit report lag.

The remainder of this paper is organized as follows. The section "literature review" presents some information about Iranian ethnics, the study's background, and developing hypotheses. The section "research methodology" reports the experimental methods used to test the research hypotheses. The results of the study are presented in the next section. The last section discusses the conclusion and limitations of the study.

2. Theoretical issues, related literature, and hypotheses development

Iran is a country with different ethnics that most of them are Persians, Azeris, Kurds, Lurs, Turkmens, Talishis, Mazanis, Gilaks, Arabs, and Baluchs (Diba Vajari, Shafia Abadi, Esmaeeli, & Karami, 2012; Nassaj, 2009; Pishgahi Fard & Omidi Avaj, 2009). Among these different ethnics, Persians with 61%, Azeris with 16%, Kurds with 6%, Arabs with 2%, Baluchs with 2%, Turkmens with 2%, Talishis with 2%, and others with 1% are the total population of Iran (CIA-WorldFactbook, 2012). Persians with the most population live in the central region, Azeris live in the northwestern, Kurds live in the western, Lurs live in western and southwestern, Baluchs live in the eastern and southeastern Arabs live in the southern area of Iran country (Nassaj, 2009). In the population aspect of different ethnicities in Iran, Persians, Azeris, Kurds, Lurs, Arabs, and Baluchs are the most important Iranian ethnics (Azad Armaki & Momtaz Jahromi, 2014; Omidi & Rezaei, 2010).

Ethnicity is a group of people that belong to the social group with a shared or common national, cultural, traditional, linguistic, or religious features (Burgess, 1986; Fearon, 2003). In other words, ethnics have a culture that makes their norms, values, and lifestyles and causes them to consider themselves a unique group and better than others (Yousofi & Asgharpoor Masole, 2010). So, ethnicity has the potential to form individuals' behavior (Zareh Shahabadi & Amini, 2010) but also can influence on life-experiences of each individual (Huang, Fowler, & Baskerville, 2016).

Ethnics have a unique culture, customs, and traditions that they are identified with them. As Hofstede (1983, 1984) showed, in different nations, there are different cultural values, and also, as Gray (1988) mentioned, different cultural values can impact accounting practices and information. However, there are some critiques to Hofstede's research, such as equating a nation with culture (Baskerville-Morley, 2005; Rachel F Baskerville, 2003). However, it is necessary to consider the culture and cultural values for standards-setting (Young, 2013). On the other hand, some researchers try to explore the relationship between ethnicity and accounting practices and education (Rachel F. Baskerville, Jacobs, Lautour, & Sissons, 2016).

Different first languages can indicate ethnicity (Rachel F Baskerville, Wynn-Williams, Evans, & Gillett, 2014). Iranian ethnics have a different first language and have special characteristics that separate them from the other ethnics. Some of them are famous for bravery, some of them for generosity, and the other positive or negative features. Furthermore, some behaviors cause ethnics to diverge from united Iran. For instance, Arab girls do not marry non-Arab boys, or Kurd people tend to Autonomy and have the same feelings as Kurds in other regions or countries. Extreme contrasts between Persian and Turkish languages are recognized as the other cultural and ethnic issues (Ahmadi & Jaafari, 2015). Another issue that ethnicity might impact on it is violence against women or so-called patriarchy. Zareh Shahabadi & Amini (2010) showed that violence against women among Azeri people is more than Persian or Kurd people. Taleb & Goudarzi (2004) also found that the number of Opponents of women's work among Baluch people is twice of non-Baluch people. Arab people, more than the other ethnics, believe the gender advantage, and they consider masculinity as a value instead of the feminine (Azad Armaki & Momtaz Jahromi, 2014). These cases show that sending a women team for corporate auditing that its CEO is a man can cause difficulties and issues that make the audit process longer than usual. The inverse here might be true, and sending a men team for auditing the corporate that its CEO is a woman may bring some difficulties.

Individuals feel more psychological intimacy about their ethnics and enjoy being with them (Gholipour & Pourezat, 2009; Mitchell & Dell, 1992). They trust in others in their religious group (Ames, Seifert, & Rich, 2015). Additionally, ethnic identities are prominent among Iranian ethnics, and a sense of belonging to ethnicity and bias toward

it is so strong among them, too (Amirkafi & Hajiani, 2013; Hajiyani, 2009). But this sense is less strong among the Persians than the other ethnicities. The reason mentioned by Taghizadeh et al. (2014) is that Persians are ethnic majorities. Since Persians consider themselves the upper class of society (Azad Armaki & Momtaz Jahromi, 2014) and there is a bias among other ethnic groups, sending an audit team consists of individuals with the same ethnicity as the CEO can accelerate the audit process.

According to the above, the first hypothesis is constructed as follows:

H₁: *Ceteris paribus*, the CEO's ethnicity is associated with audit report lag.

Audit report lag, audit delay, financial reporting timeliness (different terms with the same proxies in different studies) are affected by many variables, and some are verified empirically. For instance, company size, the month of yearend, industry classification, type of audit firm, and type of audit opinion are variables that impact audit report lag (Ashton, Graul, & Newton, 1989; Ashton, Willingham, & Elliott, 1987; P. P. Ng & Tai, 1994). Some other studies mentioned capital structure, company's needs for financing, leverage, and profitability (ROA) as variables affecting audit delay (Al-Ajmi, 2008; Leventis & Caramanis, 2005). CEOs' characteristics can also impact financial reporting timeliness and audit report lag (Harjoto et al., 2015). Managerial skills, abilities, and reputation can enhance financial reporting quality (Habib & Hossain, 2013). There is a positive relationship between audit report lag and disclosure quality or financial reporting quality (Molla Imeny & Marfou, 2015). So deductively, managerial attributes can impact audit report lags.

From the psychological perspective, personality disorder symptomatology among Blacks is high; among Hispanics, it is moderate; whites are low, and Caucasians are very low (Selby & Joiner, 2008). In Iran, Jalali, Ghasemi Pir Palooti, and Tayebbeh (2015) concluded that Extraversion and Locus of Control (it considers the ability of a person to control themselves and they're effective) are significantly different among Iranian ethnic groups. Furthermore, Kurds people desire freedom and independence more than other Iranian ethnics, but they also expect a lot from life compared to the others. On the other hand, Azeris and Lurs people tend to experience better subjective well-being, and they are more satisfied with their lives (Taghizadeh et al., 2014). Therefore, individual psychological characteristics can potentially impact the audit process, audit scope, the extent of audit procedures, and finally, the audit fee.

Some studies show that ethnic and racial minorities are more risk-averse than ethnic and racial majorities (Finucane, Slovic, Mertz, Flynn, & Satterfield, 2000; Flynn, Slovic, & Mertz, 1994). Additionally, ethnic minorities are more concerned about their job security, their compensations, and their positions (E. S. Ng & Sears, 2010). The existence of risk-averse managers concerned about their reputation and job security causes a careful focus on assurance and audit processes. They are willing to expense more and allocate additional time in order to avoid false reporting (Carcello et al., 2002).

According to the above, the second hypothesis is constructed as follows:

H₂: *Ceteris paribus*, CEO's ethnicity, is associated with audit fees.

The determinants of audit fees can be classified into three categories: company (client), audit firm, and engagement attributes (Hay, Knechel, & Wong, 2006). Studies focused on company-level characteristics consider corporate governance, including board and audit committee characteristics (Abbott et al., 2003; Carcello et al., 2002; Goodwin-Stewart & Kent, 2006; Rainsbury, Bradbury, & Cahan, 2009), corporate compensation policies (Wysocki, 2010), internal audit department characteristics (Ho & Hutchinson, 2010), etc. as variables might affect audit fees. On the aspect of the audit firm, we have studies investigating the association between audit fees and variables like audit firm changes, type of audit firm, audit opinion, etc. (Corbella et al., 2015; Griffin & Lont, 2011; Xie, Cai, & Ye, 2010). However, existing research has not given much attention to

factors like top executives, directors, and CEO characteristics that influence the level of audit services, audit quality, and audit fees (Harjoto et al., 2015).

There are many studies in the audit report lag and audit fees context that some recent researches are mentioned as follows:

Hassan (2016) investigated the factors that impact audit report lag for Palestinian listed companies. He considered company size, the number of company's board members, type of audit firm, business complexity, CEO duality, audit committee's existence, percentage of ordinary shares held by individual investors, and ownership concentration as main variables might have a relation with audit report lag. His findings showed a significant relationship between audit report lag and variables, including company size, number of company's board members, type of audit firm, business complexity, an audit committee's existence, and ownership concentration.

Bryan and Mason (2016) studied the effect of extreme CEO pay cuts on audit fees. They believe that extreme CEO pay cuts in companies may be a sign of risk growth. Because severe and sudden decreases in total CEO compensation provide an incentive for the CEO to manipulate the financial statements and reports, so, with this logic, they concluded that CEO pay cuts cause audit fees to be increased.

Beri (2015) has investigated the audit report lag variable for Nigerian listed companies. After an investigation of 266 firm-years data, he concluded that audit report lag is associated with variables including company size, profitability, and leverage. To maintain their investors' confidence, bigger firms would make their Financial Statements ready for audit earlier than smaller firms. Besides, since these firms also have better internal control, it is relatively easier for their auditors to complete the audit process. However, more leveraged and profitable firms were found to subject to longer audit work.

Harjoto et al. (2015) investigated the impact of CEOs and directors' demographic characteristics on audit fees and audit delay. By using CEOs' ethnic and gender as a proxy of demographic characters and investigating those variables for American listed companies from 2000 to 2010, they found that companies which CEOs' are from ethnic minorities or women have paid more than other companies to the auditors and have had more audit report lag too. In their research, some important variables, including company size, type of audit firm, company liquidity, leverage, ROA ratio, having profit or loss, reporting a restatement, audit firm change, audit opinion, and CEO changes during the fiscal year were investigated either.

Corbella et al. (2015) investigated the impact of firm audit rotation on audit fees and audit quality. By investigating 1,583 firm-year observations from 1998 to 2011 in Italian public companies, they found that there is not any significant relationship between audit payments of companies audited by non-Big 4 and audit firm rotation. However, there is a significant negative relationship between Big 4 audit fees and audit firm rotation. Also, there is a positive relationship between audit firm rotation and audit quality.

Pizzini, Lin, and Ziegenfuss (2014) investigated the impact of internal audit function quality on audit delay. They concluded that internal audit quality causes a reduction in audit delay. Furthermore, they found that by the cooperation of internal and external auditors, it can substantially reduce audit delay.

3. research methodology

3.1. Data and Sample

Companies listed on the Tehran Stock Exchange from 2009 to 2015 are considered the statistical population of this research. For sample selection, the following constraints imposed on the population:

The fiscal yearend should be on March 19 or 20: this date in Iran is the calendar year. Most companies in Iran have fiscal yearend on this date like December 31 for other

countries. We imposed this constraint to make our sample balanced. Since many companies report on a calendar year basis (March 19 or 20 in Iran and December 31 in other countries), the audit firms are busy on this date (Ashton et al., 1989). Therefore, the audit report lag for companies whose year ends is near the calendar year is normally more than the others.

During the research period, the fiscal year did not change: changing the fiscal year causes the financial statements not totally to include 12 months of the year. By imposing this constraint, all information belongs to a complete 12 months.

Companies are not included in banking, leasing, and insurance industries: these industries are special. They use special accounting methods and provide special financial statements. In order to have a comparable sample, these companies were omitted from the sample.

Companies have disclosed audit fees in their financial statements: in Iran, companies are not forced to disclose their audit fees, and actually, there is no resource to collect this information other than financial statements. So, we are compelled to consider those companies disclosing their audit fees in their financial statements.

According to the above constraints, 69 companies were found as a residual sample. So, there are 483 observations for every variable in order to test the research hypotheses.

The required information was totally collected from companies' financial statements, annual reports, minutes of the board of directors, and minutes of annual general meetings of shareholders, which they can be collected from Iran's Comprehensive Database of All Listed Companies (www.codal.ir) and also from Iran's official newspaper (www.rrk.ir).

3.2. Model and variables

According to the research background and literature, review, model (1) is considered to investigate the relationship between CEO's ethnicity and audit report lag, and model (2) is considered to investigate the relationship between CEO's ethnicity and audit fees.

$$\begin{aligned}
 LADELAY_{it} = & \beta_0 + \beta_1 CEOETHNIC_{it} + \beta_2 AUDITCHG_{it} + \beta_3 AUDITTYPE_{it} \\
 & + \beta_4 NOARP_{it} + \beta_5 AUDITOPIN_{it} + \beta_6 CEOCHG_{it} \\
 & + \beta_7 CEOEDU_{it} + \beta_8 SIZE_{it} + \beta_9 LIQ_{it} + \beta_{10} ROA_{it} \\
 & + \beta_{11} DEBT_{it} + \beta_{12} LOSS_{it} + \beta_{13} PPA_{it} + \beta_{14} INDUST_{it}
 \end{aligned} \tag{1}$$

$$\begin{aligned}
 LAFEE_{it} = & \beta_0 + \beta_1 CEOETHNIC_{it} + \beta_2 AUDITCHG_{it} + \beta_3 AUDITTYPE_{it} \\
 & + \beta_4 NOARP_{it} + \beta_5 AUDITOPIN_{it} + \beta_6 CEOCHG_{it} \\
 & + \beta_7 CEOEDU_{it} + \beta_8 SIZE_{it} + \beta_9 LIQ_{it} + \beta_{10} ROA_{it} \\
 & + \beta_{11} DEBT_{it} + \beta_{12} LOSS_{it} + \beta_{13} PPA_{it} + \beta_{14} INDUST_{it} \\
 & + \beta_{15} LADELAY_{it}
 \end{aligned} \tag{2}$$

3.2.1. Dependent Variables

Audit report lag (LADELAY): this variable in many types of research is defined by the days between fiscal yearend and audit report date (Ashton et al., 1989; Carslaw & Kaplan, 1991; P. P. Ng & Tai, 1994) and in some researches, natural log of this period is used (Ettredge et al., 2007; Harjoto et al., 2015). Since in Iran, financial statements are ready to use after uploading by the company in Iran's Comprehensive Database of All Listed Companies (www.codal.ir), we defined the audit report lag as the natural log of days

between the Fiscal yearend and the issuance date of financial statements in CODAL website.

Audit fees (LAFEE): this variable, as many other types of research, is defined by the natural log of fees paid to the auditor for auditing services (Duellman, Hurwitz, & Sun, 2015; Harjoto et al., 2015).

3.2.2. Independent Variable

CEO's ethnicity (CEOETHNIC): to measure this variable, we used CEOs' national code. This code is specific for every person in Iran, and it is embedded in every Iranian national identity card. The first three numbers of this code indicate the region of birth for every person. Thus, it is extracted from the CEO's national code from Iran's Comprehensive Database of All Listed Companies or Iran's official newspaper for every company. After that, it is identified CEOs' region of birth according to the first three numbers of their national code. By examining the CEOs' region of birth from the map of ethnicity and religion in Iran (CIA-WorldFactbook, 2012), we determined the CEO's ethnicity for every company. Finally, we categorized the CEO's ethnicity for 3 populated ethnicities and 1 category for other ethnicities. So, this variable equals 1 as CEO has belonged to the Persian ethnic group, equals 2 as CEO has belonged to the Azeris ethnic group, equals 3 as the CEO is belonged to the Kurds ethnic group, and equals 4 for other ethnicities. Since ethnicity can influence the level of risk tolerance, overconfidence, diligence, and monitoring intensity of managers, it is expected to have a relationship with audit report lag and audit fees (Harjoto et al., 2015). As mentioned in the literature review, the ethnic bias in Iran is so strong (Amirkafi & Hajiani, 2013; Hajiyani, 2009), and it may cause audit problems and audit delay. On the other hand, ethnic minority CEOs are more likely to avoid audit delay because of financial reporting timeliness (Harjoto et al., 2015). Therefore, there is no expected sign of the relation between these two variables. Furthermore, As Harjoto et al. (2015) concluded, we expect ethnic minority CEOs are associated with higher audit fees.

3.2.3. Control Variables

Audit firm changed (AUDITCHG): this is a dummy variable, and it gives 1 if the audit firm has been changed; otherwise, it gives 0. According to IAS 510, auditors in their initial audit engagement "shall obtain sufficient appropriate audit evidence about whether the opening balances contain misstatements that materially affect the current period's financial statements". So, auditors bear more risk in their initial audit engagement and must do more scrutiny and activities. We expect a positive sign in audit firm changes with audit report lag and audit fees.

Type of audit firm (AUDITTYPE): big 4 audit firms do not work in Iran because of some political and social issues. Furthermore, the audit firms are not big enough to make a special category for big firms and non-big firms. A governmental institution called "Audit Organization" is budgeted by Iran's Ministry of Economic Affairs and Finance. The Audit Organization audits some Tehran stock exchange listed companies and are bigger in size, revenues, staff, and auditing managers than the others. Therefore, we defined a dummy variable that gives 1 if the audit firm is Audit Organization and 0 otherwise.

Number of Basis for Modification Paragraphs (NOBMP): as PCAOB (2015) mentioned, the number of material or immaterial errors in financial reporting from fraud or other financial reporting misconduct was discovered by the audit firm can be a positive indicator of audit quality. So, we expect more basis for modification paragraphs showing more audit effort and consequently, more audit fees and more audit report lag.

Type of audit opinion (AUDITOPIN): this is a dummy variable equals 1 if the audit opinion is other than unqualified and otherwise 0. During the audit process, problems occurred to increase the audit risk and, consequently, the audit work quantity and the audit cost (Simunic, 1980). The most common proxy to measure audit problems in many research types is a dummy variable indicating an audit opinion's issuance other than unqualified (Hay et al., 2006). So, if the audit opinion is other than unqualified, more audit delay and higher audit fees are expected.

CEO changes during the fiscal year (CEOCHG): this is a dummy variable equals 1 if the CEO has been changed during the fiscal year and otherwise 0. As Yan and Wheatley (2010) mentioned, the presence of new CEO associates with audit fee premiums, but it does not mean that there is a greater audit effort.

CEO's educational degree (CEOEDU): this variable gives 1 if the CEO does not have a university or college degree. It gives 2 if the CEO is a bachelor, it gives 3 if the CEO has an MSc degree, and it gives 4 if the CEO has a Ph.D. degree. We expect that CEOs with higher education better understand the necessity of the audit process. Therefore, they cooperate with auditors and cause audit reporting timeliness, and offer higher audit fees.

Company size (SIZE): like many other types of research, its total assets' natural log is used to define the company size variable. Since agency costs are growing along with its growth, higher audit quality and more audit effort are needed (Vinten, Leventis, & Caramanis, 2005). Therefore, it is expected higher audit fees and more audit delay for bigger companies.

Company liquidity (LIQ): this variable is defined by the ratio of current assets to current liabilities (Harjoto et al., 2015; Raghunandan & Rama, 2006). According to the meta-analysis of audit fees, the expected association between audit fees and company liquidity is negative (Hay et al., 2006). Additionally, most Iran audit firms do not publicly release their report before the company pays off its audit fees. So, if the company suffers from liquidity problems, the audit report lag is expected.

Return on assets (ROA): this variable is defined by the net income ratio to total assets. This ratio measures management's overall effectiveness in generating profits with its available assets and indicates a company (Gitman & Zutter, 2012). It is expected that more profitable companies afford to pay more for audit quality and audit fees.

Amount of the company's debts (DEBT): this variable is defined by the natural log of the company's total debts. The more debts a firm has, the greater its risk of being unable to meet its contractual debt payments (Gitman & Zutter, 2012). A company's risks and leverage both can affect audit fees (Hay et al., 2006). Companies with more debts demand a high-quality audit service to satisfy their creditors' needs and remove debt-holders' suspicions about wealth transfer (Vinten et al., 2005). Therefore, a positive relationship between the amount of the company's debts and audit fees and audit report lag is expected.

Company reports loss (LOSS): this is a dummy variable equals 1 if the company reported the loss and otherwise 0. According to the signaling theory, companies having good news are willing to signal their news faster than the others (Godfrey, Hodgson, Tarca, Hamilton, & Holmes, 2010; Scott, 2012; Wolk, Dodd, & Rozycki, 2008). Furthermore, the company's profitability can be an indicator of risk (Simunic, 1980). So, if a company reports loss, its auditor encounters more risk, and consequently, more audit fees are expected (Hay et al., 2006).

Prior period adjustments (PPA): it is calculated by the natural log of prior period adjustments reported by the company. As PCAOB (2006) mentioned: "Either the successor auditor or the predecessor auditor may audit the adjustments made to prior period financial statements so long as the auditor is independent and registered with the PCAOB". Therefore, audit works and responsibilities will be increased when the

company reports prior period adjustments, and more audit delays and higher audit fees are expected.

Industry (INDUST): this variable is defined by 15 industry classification of the sample as follows: rubber products equal 1; industrial machinery equals 2; pulp, paper, and paperboard mills equal 3; transportation equals 4; automobile manufacturing equals 5; pharmaceuticals and medicines equal 6, agriculture, forestry, fishing, and hunting equals 7, cement and concrete products equal 8, chemicals and petrochemical equals 9, food and beverage equal 10, metal products equals 11, sugar and confectionery products equals 12, metallic and nonmetallic minerals equals 13, household appliances equals 14, and textile mills equals 15. Some industries structurally are complex, and it takes more time and effort to audit their financial affairs.

Audit report lag (LADELAY): as mentioned earlier, this variable is defined by the natural log of days between the Fiscal yearend and the financial statements' issuance date on the CODAL website. A positive relationship between audit delay and audit fees is expected, like Chan, Ezzamel, and Gwilliam (1993) concluded.

All information about the variables is summarized in Table 1.

4. Empirical results

4.1. Descriptive Statistics

Tables 2 and 3 present the results of the descriptive statistics for research observations, respectively. The sample includes 483 observations that the mean and median of AUDITDELAY are approximately 78 and 80 days, respectively, representing an audit report lag of around a quarter in Iran. Also, the mean and median of AUDITFEE are approximately 803 and 524 million IRR, respectively, indicating that the mean of audit fee data is skewed to the right. In this sample, the audit firms have less changed for the next year, and most of the companies have not been audited by Audit Organization. On average, there are 1.273 paragraphs as the basis for modification to the auditor's opinion. CEOs have not been changed a lot during the fiscal year, and most of them have an MSC degree.

Table 3 provides the distribution of research samples across the CEO's ethnicity and industries. It can be seen from Panel A that most of the CEOs are Persians, and Persians are the ethnic majorities in Iran. On average, Persians have the most audit delay with a LADELAY of 4.305. However, Azeris paid the most audit fees with a LAFEE of 6.418. On panel B of table 3, observations are classified into 15 related industries. Most of the sample observations belong to the automobile manufacturing industry in which 13 companies are included, and the least of them are included in transportation, agriculture, forestry, fishing, and hunting, sugar and confectionery products, and textile industries. The most audit delay was in the household appliances industry (LADELAY=4.655), and the last one was in the pharmaceuticals and medicines industry (LADELAY=3.993). Additionally, most audit fees are paid in the agriculture, forestry, fishing, and hunting industry (LAFEE=6.837), and the least one paid in the textile industry (LAFEE=5.788).

Table 1. Variable Definitions

Variable	Expected Sign for LADELAY	Expected Sign for LAFEE	Definition
Dependent Variables:			
LADELAY		+	Natural log of days between Fiscal yearend and the issuance date of financial statements on the CODAL website
LAFEE			Natural log of fees paid to the auditor for auditing services
Independent Variable:			
CEOETHNIC	?	+	Equals 1 as CEO is belonged to the Persians ethnic group, equals 2 as CEO belongs to the Azeris ethnic group, equals 3 as CEO is belonged to the Kurds ethnic group, and equals 4 for other ethnicities
Control Variables:			
AUDITCHG	+	+	The dummy variable equals 1 if the audit firm has been changed and 0 otherwise
AUDITTYPE	?	?	The dummy variable equals 1 if the audit firm is Audit Organization and 0 otherwise
NOBMP	+	+	Number of Basis for Modification paragraphs
AUDITOPIN	+	+	Dummy variable equals 1 if the audit opinion is other than unqualified and otherwise 0
CEOCHG	?	+	Dummy variable equals 1 if the CEO has been changed during the fiscal year and otherwise, 0
CEOEDU	-	+	Equals 1 if CEO does not have a degree from any university or college, it equals 2 if CEO is a bachelor, it equals 3 if CEO has an MSc degree, and it equals 4 if CEO has a Ph.D. degree
SIZE	+	+	Natural log of the company's total assets
LIQ	-	-	The ratio of current assets to current liabilities
ROA	?	+	The ratio of net income to total assets
DEBT	+	+	Natural log of the company's total debts
LOSS	+	+	Dummy variable equals 1 if the company reported the loss and otherwise, 0
PPA	+	+	Natural log of prior period adjustments reported by the company
INDUST	?	?	Rubber products equal 1; industrial machinery equals 2; pulp, paper, and paperboard mills equal 3; transportation equals 4. Automobile manufacturing equals 5, pharmaceuticals and medicines equal 6, agriculture, forestry, fishing, and hunting equals 7, cement and concrete products equals 8, chemicals and petrochemical equals 9, food and beverage equals 10, metal products equal 11, sugar and confectionery products equals 12, metallic and nonmetallic minerals equals 13, household appliances equal 14, and textile mills equal 15

Table 2. Sample statistics

Variable	N	Mean	Median	Stdev.	Skewnes s	Kurtosi s	Min	Max
AUDITDELA Y (days)	483	78.180	80.000	27.728	-0.084	1.637	23.00 0	133.00 0
AUDITFEE (IRR million)	483	802.996	524.000	989.07 4	4.824	36.411	19.00 0	1,0967. 000
CEOETHNIC	483	1.847	1.000	1.162	0.968	2.311	1.000	4.000
AUDITCHG	483	0.215	0.000	0.411	1.385	2.919	0.000	1.000
AUDITTYPE	483	.0255	0.000	0.436	1.126	2.268	0.000	1.000
NOBMP	483	1.273	0.000	1.931	2.115	8.150	0.000	11.000
AUDITOPIN	483	0.489	0.000	0.500	0.046	1.002	0.000	1.000
CEOCHG	483	0.259	0.000	0.438	1.101	2.213	0.000	1.000
CEOEDU	483	2.671	3.000	0.715	0.441	2.250	1.000	4.000
SIZE (IRR million)	483	1,975,34 3	575,056	7,517, 436	7.533	63.425	22,72 5	73,705, 891
LIQ	483	1.420	1.278	0.795	2.899	20.036	0.223	8.670
ROA	483	0.139	0.117	0.130	0.641	3.961	- 0.248	0.627
DEBT (IRR million)	483	1,395,45 2	302,193	5,919, 798	8.141	75.967	111,0 5	63,268, 140
LOSS	483	0.079	0.000	0.269	3.130	10.796	0.000	1.000
PPA (IRR million)	483	15,319	1,732	75,646	11.441	154.605	0.000	1,166,1 41
INDUST	483	8.150	8.000	3.588	0.082	2.023	1.000	15.000

AUDITDELAY is the number of calendar days from fiscal yearend to the date of financial statement issuance on the CODAL website. AUDIT FEE is the total dollar audit fee (IRR million). SIZE is the total asset (IRR million). DEBT is the total liabilities (IRR million). PPA is the absolute value of prior period adjustments (IRR million). The natural log of AUDITDELAY, AUDITFEE, SIZE, DEBT, and PPA is used in regression analysis. See Table 1 for other variable definitions.

4.2. Correlation among Variables

Table 4 presents the correlation matrix among audit delay, audit fees, CEO's ethnicity, and other control variables. The correlation between audit fees and CEO's ethnicity is negative and significant. Despite our expectation, the correlation shows that ethnic majorities have paid more audit fees. Audit fees negatively correlate with the changing of an audit firm. There is a significant correlation between the type of audit firm and audit fees. It is mentioned that the Audit Organization, as a governmental auditing firm, has been paid more than the other firms. The correlation matrix shows a positive and significant correlation between audit opinion and audit report lag. However, the number of Basis for Modification Paragraphs is correlated by audit report lag significantly and clarifies that more audit findings take longer investigations and longer reporting process. As expected, CEOs with higher educational degrees cause to accelerate the auditing process. Therefore, the correlation between audit delay and CEO's education is significantly negative. Company liquidity and ROA both are correlated negatively with audit report lag, but only company liquidity has a significant and negative correlation with audit fees. Total liabilities as an indicator of the company's risk are positively correlated with audit fees. If the company reports loss, more audit delay is expected.

Finally, there is a significant correlation between prior period adjustments and industry variables and audit delay and audit fees variables.

Table 3. Sample distribution across CEO's ethnicity and industries

	Freq.	%	LADELAY	LAFEE
Panel A: CEO's Ethnicity				
Persians	284	58.80	4.305	6.373
Azeris	73	15.11	4.289	6.418
Kurds	42	8.70	4.119	6.029
Other ethnics	84	17.39	4.304	6.202
Panel B: Industries				
Rubber products	14	2.899	4.188	6.558
Industrial machinery	14	2.899	4.520	6.605
Pulp, paper, and paperboard mills	14	2.899	4.327	6.175
Transportation	7	1.450	4.569	6.388
Automobile manufacturing	91	18.840	4.455	6.661
Pharmaceuticals and medicines	63	13.042	3.993	6.083
Agriculture, forestry, fishing, and hunting	7	1.450	4.453	6.837
Cement and concrete products	77	15.942	4.029	6.578
Chemicals and petrochemical	28	5.796	4.195	5.986
Food and beverage	21	4.348	4.506	5.855
Metal products	35	7.245	4.204	6.047
Sugar and confectionery products	7	1.450	4.271	6.217
Metallic and nonmetallic minerals	84	17.391	4.422	6.120
Household appliances	14	2.899	4.655	6.182
Textile mills	7	1.450	4.525	5.788

LADELAY is the natural log of audit delay. LAFEE is the natural log of the audit fee.

4.3. Choosing Analysis Method

Panel data analysis is used to analyze research data. This statistical method supports the researcher to consider relations between variables over time. Panel data analysis can consider unobservable heterogeneity in units like individuals, firms, states, countries, etc. allowing for subject-specific variables (Gujarati, 2014). This statistical method by combining time series of cross-sectional observations can give "more informative data, more variability, less collinearity among variables, more degrees of freedom, and more efficiency" (Baltagi, 2008). There are two kinds of effects, fixed effects, and random effects that we use the Hausman test to recognize the best analyzing model (Gujarati, 2014). Furthermore, to choose between a fixed-effects model and ordinary least squares (OLS), an F test or Chow test is used (Agung, 2013; Baltagi, 2008). Table 5 presents the F test and the Hausman test to determine the best model for statistical analysis.

Since the P-value of the F-test for Models (1) and (2) is less than 1%, the fixed effects model is better than ordinary least squares. Additionally, since the P-value of the Hausman test for Model (1) is greater than 1%, the random-effects model is better than the fixed-effects model. On the other hand, since this value for Model (2) is less than 1%, the fixed effects model is better than the random-effects model.

Table 4. Correlation Coefficients

Variables:	LADelay	LAFEE	CEOETHNIC	AUDITCHG	AUDITYPE	NOBMP	AUDITOPIN	CEOCHG	CEOEDU	SIZE	LIQ	ROA	DEBT	LOSS	PPA	INDUST
LADelay	1															
LAFEE	0.054	1														
CEOETHNIC	-0.042	-0.105*	1													
AUDITCHG	-0.019	-0.150*	0.126*	1												
AUDITYPE	0.079	0.496*	-0.189*	-0.225*	1											
NOBMP	0.312*	0.045	-0.003	0.020	-0.033	1										
AUDITOPIN	0.274*	-0.075	-0.020	0.082	-0.058	0.675*	1									
CEOCHG	-0.056	0.042	0.005	0.081	0.002	0.061	0.028	1								
CEOEDU	-0.182*	-0.089	0.141*	0.037	-0.043	0.059	0.021	0.014	1							
SIZE	0.037	0.685	0.005	-0.047	0.287*	0.223*	0.076	0.066	0.151*	1						
LIQ	-0.093*	-0.104*	-0.052	0.012	-0.154*	-0.124*	-0.087	0.003	0.048	-0.172*	1					
ROA	-0.325*	0.037	0.008	-0.020	0.084	-0.304*	-0.241*	-0.012	-0.050	-0.029	0.417*	1				
DEBT	0.076	0.643*	0.022	-0.039	0.284*	0.255*	0.113*	0.061	0.146*	0.966*	-0.373*	-0.184*	1			
LOSS	0.119*	0.015	0.012	0.034	0.023	0.337*	0.176*	0.091*	0.070	0.043	-0.180*	-0.470*	0.104*	1		
PPA	0.235*	0.189*	0.045	0.036	0.014	0.178*	0.107*	0.072	0.035	0.196*	-0.174*	-0.263*	0.240*	0.173*	1	
INDUST	0.097*	-0.184*	-0.044	-0.020	0.004	-0.026	0.083	-0.070	-0.227*	-0.193*	0.048	0.082	-0.193*	0.031	-0.118*	1

* indicates significant at 5% or less.

Table 5. Process of choosing the best model

Model No.	F test			Hausman test			Result
	F-statistic	d.f.	P-value	Chi-Sq. Statistic	d.f.	P-value	
(1)	16.215	67, 401	0.000	22.025	13	0.032	The random Effects Model is the best
(2)	4.534	67, 401	0.000	85.262	14	0.000	The Fixed Effects Model is the best

4.4. Panel data analysis results

The results of panel data analysis are presented in Table 6.

Table 6. Results of panel data analysis for both (1) and (2) models

Variables	Model (1)				Model (2)			
	Expected Signs	Coefficient	t-Statistic	P-value	Expected Signs	Coefficient	t-Statistic	P-value
Intercept		3.696	12.806	0.000** *				
CEOETHNIC	?	0.023	1.762	0.079 ⁺	+	-0.015	-0.527	0.598
AUDITCHG	+	-0.003	-0.110	0.913	+	-0.082	-1.694	0.091 ⁺
AUDITTYPE	?	0.114	2.612	0.009**	?	0.292	2.904	0.004**
NOBMP	+	0.021	1.991	0.047*	+	0.040	1.685	0.093 ⁺
AUDITOPI	+	0.058	1.817	0.070 ⁺	+	-0.106	-1.571	0.117
CEOCHG	?	0.021	0.958	0.338	+	0.034	0.742	0.459
CEOEDU	-	-0.015	-0.680	0.497	+	-0.148	-3.010	0.003**
SIZE	+	0.023	0.245	0.806	+	0.768	3.599	0.000** *
LIQ	-	0.045	1.306	0.192	-	0.088	1.135	0.257
ROA	?	-0.509	-3.334	0.001** *	+	-0.348	-1.046	0.296
DEBT	+	0.005	0.056	0.955	+	0.006	0.028	0.978
LOSS	+	-0.062	-1.348	0.178	+	-0.066	-0.686	0.493
PPA	+	0.004	1.348	0.178	+	0.003	0.434	0.664
INDUST	?	0.014	1.347	0.179	?			
LADELAY					+	-0.029	-0.283	0.777
F-statistic		3.569				20.871		
P-value		0.000				0.000		
Adjusted R ²		0.093				0.350		

See Table 1 for variable definitions.

+ significant at 10%

* significant at 5%

** significant at 1%

*** significant at less than 1%

Intercept in the fixed effects model is omitted (Model (2)). INDUST variable is omitted automatically because of perfect multicollinearity in Model (2). LADELAY independent variable is related only to the Model (2).

In table 6, significant relationships have been illustrated. As we can see, there is a significant relationship between CEO's ethnicity and audit report lag (0.079). This shows that if the CEO's ethnicity changes from Persians (Ethnic majorities) to Azeris, Kurds, and other ethnic minorities, the audit report lag will increase. As mentioned before, ethnic bias causes audit problems and audit delay. We can say that Persians with the least ethnic bias among Iranian ethnics (Taghizadeh et al., 2014) can work more comfortably with the Persian auditors or auditors from the other ethnic groups. Therefore, there aren't any statistical pieces of evidence to reject the first research hypothesis. But there is not a significant relationship between CEO's ethnicity and audit fees (0.598). Unlike Harjoto et al. (2015) and our expectations, the CEO's ethnicity does not influence Iran's audit fees. Maybe the reason is that in Iran, Audit fees are determined by shareholders in general meetings. So the CEO has not enough power to influence it. As a result, the second research hypothesis is rejected

As we expected, the audit firm type significantly impacts both audit delay and audit fees (0.009, 0.004). The finding shows that the Audit Organization is paid more and has more delays in reporting. On the other hand, changing the auditor does not influence audit delay. It has a significant impact on audit fees (0.091), however.

As expected, the type of audit opinion has a significant relationship with audit report lag (0.070), and we can statistically say that opinion on clear reports causes lesser audit report lag. Furthermore, by increasing the Basis for Modification Paragraphs, the audit delay will be increased (0.047). Because finding more material misstatement needs more audit time and effort, the audit fees will be increased too (0.093).

The variables related to the CEO do not have a significant relationship with audit report lag and audit fees except CEO's educational degree (0.003). Contrary to our expectations, CEOs with higher education pay lower audit fees. As Kalelkar and Khan (2016) mentioned, CEOs' work experience in accounting and finance contexts affects audit risks, and by decreasing auditors' engagement risk, they pay low audit fees. We can conclude that CEOs with higher education reduce auditors' engagement risk and, consequently, the audit fees.

There is a significant relationship between company size and audit fees (0.000) and also between ROA and audit report lag (0.001) as expected. But contrary to our expectation, variables including the amount of the company's debts, company reports loss, prior period adjustments, and industry does not have significant relationships with audit report lag and audit fees variables.

4.5. Assessing the Goodness of Models

In order to have a good regression model and a valid interpretation of the regression estimates, some assumptions including are required. These assumptions are (Gujarati, 2014):

1. Zero mean value of disturbance residuals;
2. Normal distribution of residuals;
3. Homoscedasticity or equal variance of residuals;
4. No autocorrelation between the disturbances;
5. Zero covariance between residuals and independent variables;
6. There is no perfect multicollinearity.

Table 7 presents some tests for verifying the goodness of both Models (1) and (2):

Table 7. Assessing the goodness of both (1) and (2) models

Tests	Reason for test	Model (1)			Model (2)		
		Statistics	P-value	Results	Statistics	P-value	Results
T-test	For assessing the zero mean distribution of residuals	0.000	0.999	Zero mean	0.000	0.999	Zero mean
Lilliefors normality test	For assessing the normal distribution of residuals	0.046	0.015	Distributed symmetrically	0.068	0.009	Distributed asymmetrically
Durbin-Watson test	For assessing the autocorrelation between variables	1.56		No comments	1.97		No autocorrelation
ACF plot	For assessing the autocorrelation between variables			No autocorrelation in second lag			No autocorrelation in first lag
Fisher test	For assessing the homoscedasticity of residuals	309.98	0.000	Homoscedastic	229.51	0.000	Homoscedastic

According to table 7, we can consider both Models (1) and (2) good models to test research hypotheses, and their results can be acceptable and reliable.

5. Conclusion and Limitations

Ethnic bias is a variable that can affect most daily decisions. This variable affects the simple decisions and has the potential to influence the material decisions of managers. Therefore, in this research, we tried to test the relationship between the CEO's ethnicity and two variables of audit report lag and audit fees. The findings showed a significant relationship between CEO's ethnicity and audit report lag, which means that if CEO's ethnicity changes from Persians (ethnic majorities) to Azeris, Kurds, and the other ethnics (ethnic minorities), the audit report lag will be increased. But on the other hand, there is no significant relationship between CEO's ethnicity and audit fees. Furthermore, we concluded that there are significant relationships between audit report lag and variables, including the type of audit firm, number of Basis for Modification Paragraphs, type of audit opinion, and return on assets. Also, there significant relationships between audit fees and variables, including changes of audit firms, type of audit firm, number of Basis for Modification Paragraphs, CEO's educational degree, and company size.

This research has some limitations. Although the number of calendar days from fiscal yearend to the auditor's report is used as a proxy of audit report lag in most studies, we cannot consider it as the actual audit delay. The reason is that the audit process begins before the fiscal yearend by audit planning, and it continues after the issuance of the audit report. Another limitation faced in this study was the possibility of a CEO's birth in an unrelated region to his ethnicity. However, this possibility is not strong because most of the CEOs in Iran started from the Islamic Revolution in 1979, but most CEOs are older than 40.

According to the results showing a significant relationship between CEO's ethnicity and audit report lag, we recommend audit firms consider the CEO's ethnicity in their planning to accelerate their audit process and issue their reports timely. Furthermore, by selecting an audit team that their members' ethnicity is similar to CEOs', they can obtain CEOs' cooperation and willingness.

Additionally, since the incompatibility between CEO's real ethnicity and his birthplace (a research limitation) is possible, redoing this study with other research methodologies

and tools (e.g., using questionnaires to recognize CEO's ethnicity) is recommended.

References

- Abbott, L.J. Parker, S. Peters, G.F. and Raghunandan, K. (2003). An empirical investigation of audit fees, nonaudit fees, and audit committees. *Contemporary Accounting Research*, 20(2), 215-234. <https://doi.org/10.1506/8YP9-P27G-5NW5-DJJK>
- Agung, I.G.N. (2013). *Panel Data Analysis Using EViews*: John Wiley & Sons.
- Ahmadi, S.A. and Jaafari, S. (2015). *Study of contexts on convergence and divergence among Iranian ethnic groups*. Paper presented at The 8th Congress of Iranian Geopolitics Association Empathy between the Iranian Ethnic Groups, National Integrity and Solidarity, Iran, Sanandaj.
- Akrami, S. M. Bastani, A. Modarresi, M.H. Reyhani, F. and Karimi Rad, V. (2012). Genes or Environment; which one specifies our Future. *The Iranian Journal of Bioethics*, 2(4), 181-192. <https://www.sid.ir/en/journal/ViewPaper.aspx?id=293824>
- Al-Ajmi, J. (2008). Audit and reporting delays: Evidence from an emerging market. *Advances in Accounting*, 24(2), 217-226. <https://doi.org/10.1016/j.adiac.2008.08.002>
- Ames, D. Seifert, D.L. and Rich, J. (2015). Religious Social Identity and Whistle-Blowing *Research on Professional Responsibility and Ethics in Accounting* (pp. 181-207): Emerald Group Publishing Limited.
- Amirkafi, M. and Hajjani, E. (2013). Relationship between ethnic and national identities in Iran's multiethnic society: study and comparison of three theoretical approaches. *Rahbord*, 22(66), 117-146. <https://www.sid.ir/en/journal/ViewPaper.aspx?id=286493>
- Apadore, K. and Noor, M.M. (2013). Determinants of audit report lag and corporate governance in Malaysia. *International Journal of Business and Management*, 8(15), 151. doi: [10.5539/ijbm.v8n15p151](https://doi.org/10.5539/ijbm.v8n15p151)
- Ashton, R. H. Graul, P.R. and Newton, J.D. (1989). Audit delay and the timeliness of corporate reporting. *Contemporary Accounting Research*, 5(2), 657-673. <https://doi.org/10.1111/j.1911-3846.1989.tb00732.x>
- Ashton, R.H. Willingham, J.J. and Elliott, R.K. (1987). An empirical analysis of audit delay. *Journal of Accounting Research*, 25 (2), 275-292. <https://www.jstor.org/stable/2491018>
- Azad Armaki, T. and Momtaz Jahromi, N. (2014). Study of social values in different ethnicities Ahwaz and provide management solutions to enhance its. *Journal of Cultural Management*, 7(22), 31-51. <https://www.sid.ir/en/journal/ViewPaper.aspx?id=452582>
- Balaban, E. Benjamin, J. Ebstein, R. and Belmaker, R. (2002). Human correlative behavioral genetics: an alternative viewpoint (pp. 293-314): American Psychiatric Publishing, Inc.
- Baltagi, B. (2008). *Econometric analysis of panel data*: John Wiley & Sons.
- Baskerville-Morley, R.F. (2005). A research note: the unfinished business of culture.

Accounting, Organizations and Society, 30(4), 389-391.
<https://doi.org/10.1016/j.aos.2004.08.002>

Baskerville, R.F. (2003). Hofstede never studied culture. *Accounting, Organizations and Society*, 28(1), 1-14. [https://doi.org/10.1016/S0361-3682\(01\)00048-4](https://doi.org/10.1016/S0361-3682(01)00048-4)

Baskerville, R.F. Jacobs, K. Lautour, V.J.d. and Sissons, J. (2016). Ethnicity as inclusion and exclusion: Drawing on concept and practice in accounting research. *Accounting, Auditing & Accountability Journal*, 29(8), 1262-1269. [doi:10.1108/AAAJ-07-2016-2643](https://doi.org/10.1108/AAAJ-07-2016-2643)

Baskerville, R.F. Wynn-Williams, K. Evans, E. and Gillett, S. (2014). Researching ethnicity in the Pacific Region. *Pacific Accounting Review*, 26(3), 302-323. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3146687

Beri, M.H. (2015). *Corporate governance and audit lag in Nigerian quoted companies*. (Master of Science Thesis), Universiti Utara Malaysia.

Bryan, D.B. and Mason, T.W. (2016). Extreme CEO pay cuts and audit fees. *Advances in Accounting*, 33, 1-10. <https://doi.org/10.1016/j.adiac.2016.02.001>

Burgess, R.G. (1986). *Key variables in social investigation*. London: Routledge & Kegan Paul.

Carcello, J.V. Hermanson, D.R. Neal, T.L. and Riley, R.A. (2002). Board characteristics and audit fees. *Contemporary Accounting Research*, 19(3), 365-384. <https://doi.org/10.1506/CHWK-GMQ0-MLKE-K03V>

Carslaw, C.A. and Kaplan, S.E. (1991). An examination of audit delay: Further evidence from New Zealand. *Accounting and Business Research*, 22(85), 21-32. <https://doi.org/10.1080/00014788.1991.9729414>

Chan, P. Ezzamel, M. and Gwilliam, D. (1993). Determinants of audit fees for quoted UK companies. *Journal of Business Finance & Accounting*, 20(6), 765-786. <https://doi.org/10.1111/j.1468-5957.1993.tb00292.x>

CIA-WorldFactbook. (2012). Ethnicities and religions in Iran.

Corbella, S. Florio, C. Gotti, G. and Mastrolia, S.A. (2015). Audit firm rotation, audit fees and audit quality: The experience of Italian public companies. *Journal of International Accounting, Auditing and Taxation*, 25, 46-66. <https://doi.org/10.1016/j.intaccaudtax.2015.10.003>

Desai, H. Hogan, C.E. and Wilkins, M.S. (2006). The reputational penalty for aggressive accounting: Earnings restatements and management turnover. *The Accounting Review*, 81(1), 83-112. <https://www.jstor.org/stable/4093129>

Diba Vajari, M. Shafia abadi, A. Esmaeeli, M. and Karami, A. (2012). Comparison of the multicultural counseling competencies of Tehran's counselors with different ethnicity in dimensions of knowledge, awareness and skill. *Journal of Research in Psychological Health*, 6(3), 40-49. <https://www.sid.ir/en/journal/ViewPaper.aspx?id=354832>

Duellman, S. Hurwitz, H. and Sun, Y. (2015). Managerial overconfidence and audit fees. *Journal of Contemporary Accounting & Economics*, 11(2), 148-165. <https://doi.org/10.1016/j.jcae.2015.05.00>

Ettredge, M.L. Scholz, S. and Li, C. (2007). Audit fees and auditor dismissals in the

-
- Sarbanes-Oxley era. *Accounting Horizons*, 21(4), 371-386.
<https://doi.org/10.2308/acch.2007.21.4.371>
- FASB. (2008). Statement of Financial Accounting Concepts No. 2 *Qualitative Characteristics of Accounting Information*.
- Fearon, J D. (2003). Ethnic and Cultural Diversity by Country*. *Journal of Economic Growth*, 8(2), 195-222. doi: [10.1023/a:1024419522867](https://doi.org/10.1023/a:1024419522867)
- Finucane, M.L. Slovic, P. Mertz, C.K. Flynn, J. and Satterfield, T.A. (2000). Gender, race, and perceived risk: The 'white male' effect. *Health, risk & society*, 2(2), 159-172. <https://doi.org/10.1080/713670162>
- Flynn, J. Slovic, P. and Mertz, C.K. (1994). Gender, race, and perception of environmental health risks. *Risk analysis*, 14(6), 1101-1108.
<https://doi.org/10.1111/j.1539-6924.1994.tb00082.x>
- Gholipour, A. and Pourezat, A.A. (2009). A review on the role of media in analyzing and managing latent social crises: management of ethnic groups. *Quarterly Journal of Communication Research*, 15(56), 29-46.
- Gitman, L.J. and Zutter, C.J. (2012). *Principles of managerial finance* (Thirteenth ed.): Prentice Hall.
- Godfrey, J. Hodgson, A. Tarca, A. Hamilton, J. and Holmes, S. (2010). *Accounting theory*: Wiley.
- Goodwin-Stewart, J. and Kent, P. (2006). Relation between external audit fees, audit committee characteristics and internal audit. *Accounting & Finance*, 46(3), 387-404. doi: [10.1111/j.1467-629X.2006.00174.x](https://doi.org/10.1111/j.1467-629X.2006.00174.x)
- Gray, S.J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus*, 24(1), 1-15.
<https://doi.org/10.1111/j.1467-6281.1988.tb00200.x>
- Griffin, P.A. and Lont, D.H. (2011). Audit fees around dismissals and resignations: Additional evidence. *Journal of Contemporary Accounting & Economics*, 7(2), 65-81. <https://doi.org/10.1016/j.jcae.2011.10.001>
- Griffin, P.A. Lont, D.H. and Sun, Y. (2008). Corporate governance and audit fees: Evidence of countervailing relations. *Journal of Contemporary Accounting & Economics*, 4(1), 18-49. [https://doi.org/10.1016/S1815-5669\(10\)70028-X](https://doi.org/10.1016/S1815-5669(10)70028-X)
- Gujarati, D. (2014). *Econometrics by example*: Palgrave Macmillan.
- Habib, A., and Hossain, M. (2013). CEO/CFO characteristics and financial reporting quality: A review. *Research in Accounting Regulation*, 25(1), 88-100.
<https://doi.org/10.1016/j.racreg.2012.11.002>
- Hajiyani, E. (2009). Relationship between national and ethnic identities among Iranian ethnic groups. *Iranian Journal of Sociology*, 9(3-4), 143-164.
<https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=211003>
- Harjoto, M.A. Laksmana, I. and Lee, R. (2015). The impact of demographic characteristics of CEOs and directors on audit fees and audit delay. *Managerial Auditing Journal*, 30(8/9), 963-997. doi: [doi:10.1108/MAJ-01-2015-1147](https://doi.org/10.1108/MAJ-01-2015-1147)
- Hassan, Y.M. (2016). Determinants of audit report lag: evidence from Palestine. *Journal*

of *Accounting in Emerging Economies*, 6(1), 13-32. <https://doi.org/10.1108/JAEE-05-2013-0024>

Hay, D.C. Knechel, W.R. and Wong, N. (2006). Audit fees: A Meta-analysis of the effect of supply and demand attributes. *Contemporary Accounting Research*, 23(1), 141-191. <https://doi.org/10.1506/4XR4-KT5V-E8CN-91GX>

Hillman, A.J. Cannella, A.A. and Harris, I.C. (2002). Women and racial minorities in the boardroom: How do directors differ?. *Journal of Management*, 28(6), 747-763. <https://doi.org/10.1177/014920630202800603>

Ho, S. and Hutchinson, M. (2010). Internal audit department characteristics/activities and audit fees: Some evidence from Hong Kong firms. *Journal of International Accounting, Auditing and Taxation*, 19(2), 121-136.

Hofstede, G. (1983). Dimensions of national cultures in fifty countries and three regions. *Expiscations in cross-cultural psychology*, 335-355.

Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Vol. 5): sage.

Huang, G. Fowler, C.J. and Baskerville, R.F. (2016). Entering the accounting profession: the operationalization of ethnicity-based discrimination. *Accounting, Auditing & Accountability Journal*, 29(8), 1342-1366. [doi:10.1108/AAAJ-07-2015-2153](https://doi.org/10.1108/AAAJ-07-2015-2153)

Jalali, D. Ghasemi Pir Palooti, M. and Tayebbeh, S. (2015). A comparative study of personality characters among university students from some Iranian ethnicities. *Journal of Personality and Individual Differences*, 4(8), 69-100. <https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=528481>

Kalelkar, R. and Khan, S.A. (2016). CEO Financial Background and Audit Pricing. *Accounting Horizons*.

Leventis, S. and Caramanis, C. (2005). Determinants of audit time as a proxy of audit quality. *Managerial Auditing Journal*, 20(5), 460-478. doi: [10.1108/02686900510598821](https://doi.org/10.1108/02686900510598821)

Lowensohn, S. Johnson, L.E. Elder, R.J. and Davies, S.P. (2007). Auditor specialization, perceived audit quality, and audit fees in the local government audit market. *Journal of Accounting and Public Policy*, 26(6), 705-732. <https://doi.org/10.1016/j.jaccpubpol.2007.10.004>

LUO, W. (2012). Determinants and implications of audit reporting lags in China.

Masli, A. Peters, G.F. Richardson, V.J. and Sanchez, J.M. (2010). Examining the potential benefits of internal control monitoring technology. *The Accounting Review*, 85(3), 1001-1034. <https://www.jstor.org/stable/27802678>

Mitchell, S.L. and Dell, D.M. (1992). The relationship between Black students' racial identity attitude and participation in campus organizations. *Journal of College Student Development*, 33 (1), 39-43. <https://psycnet.apa.org/record/1992-29279-001>

Moazam Khan, M. and ul Haq, A. (2015). Quality and Audit Fees: Evidence from Pakistan. *Research Journal of Finance and Accounting*, 6(7), 1-11. <https://iiste.org/Journals/index.php/RJFA/article/view/21586>

Molla Imeny, V. and Marfou, M. (2015). The relationship between disclosure quality and

audit report lag. *Empirical Studies in Financial Accounting Quarterly*, 12(45), 51-71.

- Nassaj, H. (2009). Globalization and Iranian ethnic identity with a focus on language and customs. *Research in Theoretical Politics*, 1(5), 129-156. <https://www.sid.ir/en/journal/ViewPaper.aspx?id=171206>
- Ng, E.S. and Sears, G.J. (2010). What women and ethnic minorities want. Work values and labor market confidence: A self-determination perspective. *The International Journal of Human Resource Management*, 21(5), 676-698. <https://doi.org/10.1080/09585191003658847>
- Ng, P.P. and Tai, B.Y. (1994). An empirical examination of the determinants of audit delay in Hong Kong. *The British Accounting Review*, 26(1), 43-59. <https://doi.org/10.1006/bare.1994.1005>
- Omidi, A. and Rezaei, F. (2010). The political and cultural impacts of globalization on Iranian ethnic groups (A field study on Azeri, Arab, Kurd and Baluch students). *PIZHUHISH-I SIYASAT-I NAZARI: RESEARCH IN POLITICAL SCIENCE*, 8, 141-170. <https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=246623>
- Park, S.H. and Westphal, J.D. (2013). Social discrimination in the corporate elite how status affects the propensity for minority CEOs to receive blame for low firm performance. *Administrative Science Quarterly*, 58(4), 542-586. <https://doi.org/10.1177/0001839213509364>
- PCAOB. (2006). Staff Questions and Answers: Adjustments to Prior-period Financial Statements Audited by a Predecessor Auditor.
- PCAOB. (2015). Concept Release on Audit Quality Indicators.
- Pishgahi Fard, Z. and Omidi Avaj, M. (2009). Relationship between Iranian ethnic dispersion and borders security. *International Quarterly of Geopolitics*, 5(14), 48-71. <https://www.sid.ir/en/journal/ViewPaper.aspx?id=176276>
- Pizzini, M. Lin, S. and Ziegenfuss, D.E. (2014). The impact of internal audit function quality and contribution on audit delay. *Auditing: A Journal of Practice & Theory*, 34(1), 25-58. doi: [10.2139/ssrn.1673490](https://doi.org/10.2139/ssrn.1673490)
- Pourali, M. Jozi, M. Rostami, K.H. Taherpour, G. and Niazi, F. (2013). Investigation of effective factors in audit delay: evidence from Tehran Stock Exchange (TSE). *Research Journal of Applied Sciences, Engineering and Technology*, 5(2), 405-410. Doi: [10.19026/rjaset.5.4966](https://doi.org/10.19026/rjaset.5.4966)
- Raghunandan, K. and Rama, D.V. (2006). SOX Section 404 material weakness disclosures and audit fees. *Auditing: A Journal of Practice & Theory*, 25(1), 99-114.
- Rainsbury, E. A., Bradbury, M., and Cahan, S. F. (2009). The impact of audit committee quality on financial reporting quality and audit fees. *Journal of Contemporary Accounting & Economics*, 5(1), 20-33. <https://doi.org/10.1016/j.jcae.2009.03.002>
- Scott, W.R. (2012). *Financial accounting theory* (sixth ed.): Pearson Canada. ISBN-13: [978-0135119150](https://doi.org/10.1016/j.jpsychires.2008.03.005)
- Selby, E.A. and Joiner, T.E. (2008). Ethnic variations in the structure of borderline personality disorder symptomatology. *Journal of Psychiatric Research*, 43(2), 115-123. <https://doi.org/10.1016/j.jpsychires.2008.03.005>

-
- Simunic, D.A. (1980). The pricing of audit services: Theory and evidence. *Journal of Accounting Research*, 18(1), 161-190. <https://www.jstor.org/stable/2490397>
- Taghizadeh, M.A. Khoshkonesh, A. Zademohamadi, A. and Habibi, M. (2014). Comparison of Ethnic Identity and Subjective Well-Being in Iranian Ethnicities. *Social Welfare Quarterly*, 14(52), 135-158. http://refahj.uswr.ac.ir/browse.php?a_id=1485&slc_lang=en&sid=1&printcase=1&hbnr=1&hmb=1
- Taleb, M. and Goudarzi, M. (2004). Ethnicity and Gender: A study of ethnic groups in Sistan and Baluchestan. *Women in Development & Politics*, 2(1), 23-48. <https://www.sid.ir/en/journal/ViewPaper.aspx?id=12037>
- Vinten, G. Leventis, S. and Caramanis, C. (2005). Determinants of audit time as a proxy of audit quality. *Managerial Auditing Journal*, 20(5), 460-478. <https://www.semanticscholar.org/paper/Determinants-of-audit-time-as-a-proxy-of-audit-Leventis-Caramanis/5806e2b6e03b77f6ecd3fb3eaa3072fe43fd113f>
- Wolk, H.I. Dodd, J.L. and Rozycki, J.J. (2008). *Accounting theory: conceptual issues in a political and economic environment*, 2, <http://sk.sagepub.com/books/accounting-theory-conceptual-issues-in-a-political-economic-environment-9e>
- Wysocki, P. (2010). Corporate compensation policies and audit fees. *Journal of Accounting and Economics*, 49(1-2), 155-160. <https://doi.org/10.1016/j.jacceco.2009.11.002>
- Xie, Z. Cai, C. and Ye, J. (2010). Abnormal Audit Fees and Audit Opinion—Further Evidence from China's Capital Market. *China Journal of Accounting Research*, 3, 51-70. [https://doi.org/10.1016/S1755-3091\(13\)60019-2](https://doi.org/10.1016/S1755-3091(13)60019-2)
- Yan, Y.C. and Wheatley, C.M. (2010). New Executives and Audit Fees. SSRN Electronic Journal, Doi: [10.2139/ssrn.1626205](https://doi.org/10.2139/ssrn.1626205)
- Young, M. (2013). Cultural Influences on Accounting and Its Practices. *Senior Honors Theses*, Paper 382. <https://www.semanticscholar.org/paper/Cultural-Influences-on-Accounting-and-Its-Practices-Young/488a95e8ddec1cc53983338221835a6c3aeed650>
- Yousofi, A. and Asgharpoor Masole, A. (2010). Ethnocentrism and its effect on interethnic relationships in Iran A secondary analysis. *Historical Sociology*, 1(1), 125-144. <https://jhs.modares.ac.ir/article-25-7664-en.html>
- Zareh Shahabadi, A. and Amini, k. (2010). Survey the effect of ethnicity in violence against women in Takab city. *Nazm Va Amniyat-e Entezami*, 3(1), 53-78. <https://www.sid.ir/en/Journal/ViewPaper.aspx?ID=200386>