


Paper Type: Original Article

The Effect of EPU on Audit and Financial Reporting Quality: A Case Study of the Emerging Market of Iran

Seyed Reza Seyed Nezhad Fahim^{1,*}, Fatemeh Gholami Golsefid²

¹ Department of Accounting, Lahijan Branch, Islamic Azad University, Lahijan, Iran; fahim_re@yahoo.com.

² Department of Mathematics, Lahijan Branch, Islamic Azad University, Lahijan, Iran; gholami_so@yahoo.com.

Citation:

Received: 19 August 2023

Revised: 22 October 2023

Accepted: 20 December 2023

Seyed Nezhad Fahim, S. R., & Gholami Golsefid, F. (2024). The effect of EPU on audit and financial reporting quality: a case study of the emerging market of Iran. *Accounting and Auditing with Application*, 1(1), 36-45.

Abstract


This research focuses on the role that Economic Policy Uncertainty (EPU) plays in creating adverse effects on the quality of financial information and the profitability of firms, with an emphasis on identifying the relationships and effects thereof on Audit Quality (AQ) and Financial Reporting Quality (FRQ) to achieve a proper understanding by financial statement users. Therefore, the objective of this research is to examine the relationship between EPU, AQ, and FRQ. Multiple regression analysis was used to test the research hypotheses. The statistical population consisted of 110 companies listed on the Tehran Stock Exchange during 2013-2022 (1100 observations). EPU was tested using two indicators: inflation rate changes and exchange rate changes. The research results indicate a significant positive relationship between EPU based on the inflation rate changes index, AQ, and FRQ. However, the results show no significant relationship between EPU based on the exchange rate changes index, AQ, and FRQ.

Keywords: EPU, Audit quality, Financial reporting quality.

1 | Introduction

The purpose of this research is to investigate the relationship between Economic Policy Uncertainty (EPU) and Audit Quality (AQ). Economic policy in any country typically has a significant impact on the economic conditions of various market participants, and EPU can be critical to their decision-making [1]. On the other hand, auditors can assist decision-makers in the process of producing accounting information. Auditors can respond to and manage the audit risk that may arise from EPU. Independent auditors play an important role in reducing information asymmetry among capital market stakeholders by providing credibility to financial statements [2]. This audit behaviour leads to efficient resource allocation by reducing market information asymmetry and agency costs [3]. Specifically, as managers have more opportunities to manage earnings, auditor expectations increase during periods of high economic uncertainty, and failing to meet market

 Corresponding Author: fahim_re@yahoo.com

 10.22105/aaa.v1i1.30



Licensee System Analytics. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0>).

expectations may lead to increased audit failure costs. Therefore, when EPU increases, auditors seek to manage the increased audit risk by improving AQ.

In contrast to economic uncertainty, EPU involves uncertainty about government actions and future policies that affect the behaviour of market participants. This uncertainty potentially affects industry regulations, taxes, trade, and monetary policies, which distinguishes business decisions from macroeconomic uncertainty [4]. In addition, previous studies report evidence that corporate investment and financing activities decrease due to political uncertainty [5–8]. Since business investment is irreversible and subject to the cost of capital, EPU and investment are negatively correlated [9], while earnings management increases with EPU [10]. Moreover, when EPU is high, the extent of corporate proposals and voluntary disclosures to reduce information asymmetry increases. It suggests that when EPU is high, information asymmetry also increases [11]. Therefore, many studies suggest that EPU inherently affects accounting quality, as policy-induced uncertainty affects the information quality of representatives about future earnings and cash flows.

Although EPU significantly affects the information environment of firms, few studies have examined the effects of macroeconomic uncertainty on the behaviour of economic agents such as auditors, firms, and investors. Many previous studies suggest that auditors increase audit efforts to detect earnings management by managers, thereby reducing the risk of legal claims and enhancing their reputation [12], [13]. When EPU is high, auditors who audit firms with high inherent risk and a high probability of earnings management are likely to increase AQ through more significant effort in the audit process [14]. It leads to less ambiguity in the financial information disclosed by firms and reduces audit risk due to high EPU. Therefore, this study aims to investigate how AQ and Financial Reporting Quality (FRQ) are affected by EPU. Measuring and evaluating the metric of EPU is challenging because it is difficult to distinguish between uncertainty stemming from specific economic policies and political events stemming from general economic uncertainty [15].

This research can contribute to the existing literature in two ways. First, auditor efforts may help improve financial information quality under conditions of increasing information asymmetry due to EPU. Specifically, financial information and reporting quality increase when earnings management is reduced, while audit fees decrease. Auditor effort may not be reflected in audit fees during periods of higher EPU, but this does not necessarily imply a reduction in AQ. Second, this study aims to assess the mechanisms and effects of EPU on FRQ and investor confidence in the accuracy of financial information. By examining the effects of EPU on FRQ, this research can provide insights into the functional mechanisms and effects on FRQ and investor confidence in the accuracy of financial information. This research can assist corporate managers, auditors, regulators, and policymakers in identifying and implementing appropriate strategies to manage uncertainty and FRQ, thereby promoting a stable and trustworthy environment in the markets.

2 | Literature and Development of Research Hypotheses

2.1 | EPU and Audit Quality

Many scholars and policymakers attribute EPU as one of the main reasons for economic improvement efforts after the 2008 global financial crisis. Numerous studies have examined the relationship between macroEPU and firm behaviour [7]. Xu [16] found that EPU reduces innovation by decreasing research and development investment through increasing the cost of capital. This tendency is more vital for firms that face financial constraints and are highly dependent on external financing.

Yung and Root [10] documented a positive correlation between EPU and earnings management [17–20], which in turn reduces firm value. Since earnings management can occur through both accrual manipulation and real activity manipulation [21], EPU can affect financial information through different channels. Ghoul et al. [15] also indicate that higher EPU improves accounting information quality, implying that macroeconomic variables can have a significant impact on accounting information quality. However, the effect of EPU on auditor behaviour has not been extensively studied compared to studies on the behaviour of other corporate stakeholders. Recently, there have been studies on the relationship between audit fees and

EPU [22], [23]. Further research on auditor responses, such as audit input quality and capital market reactions to EPU, is still needed, as more aspects of AQ have not been investigated.

Tong et al. [22] demonstrate that the bargaining power of Big four auditors is associated with the level of audit price uncertainty EPU. Using audit fees and the EPU indices of eight countries, they find that when EPU increases, audit fees decrease because auditors reduce audit fees when EPU exacerbates firms' financial constraints. However, when EPU decreases, auditors may adjust audit fees asymmetrically relative to their previous levels because Big four auditors have an advantage in bargaining power with clients compared to non-Big four auditors. Precisely, Big four auditors adjust audit fees symmetrically with the level of EPU, while non-Big four auditors are unable to do so. Meanwhile, Chun and Yun [23] find a positive correlation between EPU and audit efforts in South Korea, indicating that auditors increase audit efforts as EPU increases. They argue that as EPU increases, auditors spend more audit hours, which leads to an increase in audit fees. However, the rise in audit fees is not proportional to the increase in audit hours; therefore, audit fees per hour and EPU have a negative relationship. Both studies show that auditors respond to changes in audit hours by adjusting audit risk, leading to a disproportionate increase in audit fees. However, these studies do not demonstrate whether auditor behaviour in response to EPU reduces information asymmetry and contributes to improving the quality of financial information to the benefit of capital market users.

Auditors increase their audit efforts to detect earnings management and thus increase their audit fees to receive insurance premiums for mitigating the risk of litigation and maintaining their reputation [13]. Generally, auditors control potential litigation or reputation risks when assessing audit risk and reflect them in their audit approaches. This effort may enhance the ability to detect earnings manipulation [24] and reduce abnormal accruals [25] therefore, when there is high EPU, auditors' efforts to detect and control potential risks stemming from increased earnings management possibilities will increase to enhance AQ.

Hypothesis 1. When EPU increases, AQ improves.

2.2 | Financial Reporting Quality under EPU

When EPU increases, the information asymmetry between internal and external individuals in a firm is likely to increase. Since earnings management is affected by both information uncertainty and profits, accrual-based earnings management is expected to increase during periods of high EPU [10]. If EPU is positively correlated with earnings management, the quality of financial information may vary depending on the relative level of incentives for earnings management under high EPU. Chun and Yun [23] argue that auditors increase their audit efforts because firms are more likely to manipulate earnings when EPU is high. Yung and Root [10] also indicate that when macroeconomic uncertainty increases, firms' earnings management also increases; therefore, auditors are likely to adopt a more conservative audit approach for firms with a high risk of earnings manipulation to control audit risk.

Specifically, companies facing financial difficulties are more likely to report earnings through earnings management to avoid reporting potential losses when EPU increases. Auditors are more sensitive to earnings manipulation that increases assets or earnings than to earnings manipulation that decreases assets or earnings, so auditors and management often disagree on accounting methods that increase earnings [26], [27]. In addition, legal claims against auditors tend to be brought for earnings-enhancing rather than earnings-reducing accounting practices [28], [29], so as the likelihood of earnings-enhancing accounting practices increases, audit risk is likely to increase. As a result, auditors put more effort into maintaining high AQ, especially when auditing firms with high incentives to report high earnings.

According to [30], AQ is defined as the likelihood that auditors detect and report material misstatements in financial statements in a timely manner. Material misstatements discovered by auditors should be reported promptly to ensure that audit efforts result in high AQ. Thus, auditors auditing firms with more significant incentives to report high earnings will make more tremendous efforts to detect material misstatements and

improve the quality of financial information by reporting them promptly. Hypothesis 2 is therefore formulated as follows:

Hypothesis 2. When EPU increases, the quality of financial reporting improves.

3 | Research Methodology

3.1 | Population

The statistical sample for this research consists of selected companies listed in the Tehran Stock Exchange that meet the following criteria within the period from 2013 to 2022 (10 years):

- I. Selected samples should have been listed on the Tehran Stock Exchange before 2013.
- II. Fiscal years ending in December to facilitate comparability.
- III. Companies should not have changed their activities or financial year during the study period.
- IV. Companies' activities should be in the manufacturing sector, excluding financial institutions, investment firms, and banks.

As a result, the number of companies meeting the above criteria and eligible for use as a statistical sample is 110, resulting in a total of 1,100 observations.

3.2 | Research Model and Variables

To investigate *Hypothesis 1* and *2*, which examine the relationship between EPU, AQ, and FRQ, two regression models are utilized, as expressed in *Models (1)* and *(2)*. The dependent variable in *Model (1)* is audit fees, and the dependent variable in *Model (2)* is discretionary accruals, which represent the FRQ. For testing the research hypotheses, the following regression models have been utilized:

$$AQ_{it} = \beta_0 + \beta_1 EPU_{it} + \beta_2 BIG_{it} + \beta_3 LNNTA_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 CA_{it} + \beta_7 INV_{it} + \beta_8 AR_{it} + \epsilon_{it} \quad (1)$$

$$FRQ_{it} = \beta_0 + \beta_1 EPU_{it} + \beta_2 BIG_{it} + \beta_3 LNNTA_{it} + \beta_4 ROA_{it} + \beta_5 LEV_{it} + \beta_6 CA_{it} + \beta_7 INV_{it} + \beta_8 AR_{it} + \epsilon_{it} \quad (2)$$

In these models

- I. Audit Quality (AQ) represents audit fees as the dependent variable in *Model 1*.
- II. FRQ represents discretionary accruals as the dependent variable in *Model 2*.
- III. EPU represents EPU, the independent variable of interest.
- IV. Control variables represent other control variables included in the model.

Independent variable

EPU (EconUit), in this research, is measured using the inflation rate index, following the approach of [31].

Inflation rate change = (year inflation rate_t - year inflation rate_{t-1}) / year inflation rate_{t-1}.

Dependent variables

The first dependent variable, AQ, is calculated using the audit fee. It is measured by taking the logarithm of the audit fee to assess the quality of auditing. $AQ = \log(\text{Audit Fee})$.

The second dependent variable is the FRQ variable. To calculate the FRQ variable, we use discretionary Accruals (ACC) as proposed by Kothari et al. [32]. When EPU increases, it is expected that the effect of operational performance on company earnings manipulation will be significant. Therefore, discretionary accruals from the modified Jones model are considered an appropriate measure.

$$\frac{TACC_{it}}{TA_{it-1}} = \alpha_0 + \alpha_1 \left(\frac{1}{TA_{it-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it}}{TA_{it-1}} \right) + \alpha_3 \left(\frac{PPE}{TA_{it-1}} \right) + \alpha_4 (ROA_{it}) + \varepsilon_{it} \quad (3)$$

where, TACC represents total accruals derived from the difference between operating income and operating cash flow.

TA represents the total book value of assets.

ΔREV is the difference in sales between the current and previous year.

PPE represents property, plant, and equipment.

ROA represents the net income of the company divided by total assets.

Control variables

To control for company characteristics, the following variables are used:

- I. LNTA: the natural logarithm of total assets.
- II. ROA: the ratio of net income to total assets.
- III. LEV: the ratio of total liabilities to total assets.
- IV. CA: current assets to current liabilities ratio.
- V. INV: inventory to total assets ratio.
- VI. AR: accounts receivable to total assets ratio.
- VII. BIG: a binary variable where 1 represents a company audited by an Iranian audit organization and 0 otherwise.

4 | Findings of the Research

4.1 | Descriptive Statistics

The data descriptive statistics focus on the status of the data using measures of central tendency. *Table 1* illustrates the data status as follows.

Table 1. Descriptive statistics of quantitative variables.

Variable	Symbol	Mean	Median	Max	Min	S.D
EPU (inflation rate changes)	EcU1	.25	.15	2.25	-.55	.86
EPU (exchange rate changes)	EcU2	.22	.11	1.04	.00	.33
Audit fees	AQ	6.74	6.72	.50	2.92	.84
FRQ	FRQ	.078	.105	.53	.019	.107
The ratio of inventory to total assets	INV	.234	.218	.636	.0001	.131
The ratio of accounts receivable to total assets	AR	.253	.222	.958	.0002	.186
profitability	ROA	.114	.121	.401	-.340	.181
cash ratio	CA	.07	.037	.407	.05	.089
Financial leverage	LEV	.66	.67	1.54	.078	.058
Company size	LNTA	13.845	13.615	19.009	10.031	1.524

Based on the results of *Table 1*, it can be stated that, on average, assets affect 11% of profit creation, and 11% of companies have positive performance. 66% of assets are from liabilities. Cash constitutes 7% of the company's assets. Dummy variabel is also reported in *Table 2*.

Table 2. Dummy variable.

Size of audit firm (BIG)	292	26.5%	Iranian audit organization (1)
	808	73.5%	Other audit firm (0)

4.2 | Inferential Statistics

4.2.1 | Hypothesis testing results - inflation rate changes and audit quality

The research hypothesis was tested using linear regression. The results are presented in *Table 3*.

Table 3. Research hypothesis testing results based on fixed effects.

Symbol	β	S.d	t	Sig.
EcU1	1.5640	.6441	2.4282	.0151
BIG	.6847	.2030	3.3729	.0007
INV	-.3377	.1197	-2.8212	.0047
AR	-.4599	.1973	-2.3309	.0197
LNTA	.6002	.4380	1.3703	.1705
CA	.4062	.2164	1.8770	.0605
ROA	-.3539	.2001	-1.7686	.0769
LEV	.5507	.2935	1.8763	.0606
C	1.4090	.8061	1.7479	.0804
R2	.3594	F		45.3001
R2 Adj.	.3551	Durbin-Watson		1.97

Based on the results of *Table 3*, the F statistic is 45.3001, and since the significance level is 0.000, it can be said that the research model fits well. The test results at 95% confidence level show that there is a positive and significant relationship between EPU (based on the inflation rate change index) and AQ, in other words, the research hypothesis is accepted.

4.2.2 | Results of hypothesis testing-the relationship between inflation rate changes and FRQ

The research hypothesis was tested using linear regression. The results are shown in *Table 4*. Based on the results of *Table 4*, the fisher F statistic is equal to 41.4610, and since its significance level is 0.000, it can be said that the research model fits well. The test results at the 95% confidence level show that there is a positive and significant relationship between economic uncertainty (based on the inflation rate change index) and earnings management; in other words, the research hypothesis is accepted.

Table 4. Research hypothesis testing results based on fixed effects.

Symbol	β	S.d	t	Sig.
EcU1	.9008	.4047	2.2258	.0206
BIG	-.6214	.2967	-2.0943	.0362
INV	.4517	.2214	2.0401	.0413
AR	.8402	.3664	2.2931	.0218
LNTA	.7023	.3047	2.3048	.0211
CA	.01549	.0970	1.5969	.1102
ROA	-.6567	.3012	-2.1802	.0292
LEV	-.8047	.3771	-2.1339	.0328
C	.7512	.2846	2.6394	.0083
R2	.4348	F		41.4610
R2 Adj.	.4310	Durbin-Watson		1.95

5 | Additional Tests

In this study, exchange rate changes were used to measure EPU (EcU2). The following definition was used to calculate the exchange rate change index [31].

Exchange rate change = (current year exchange rate - previous year exchange rate) / previous year exchange rate.

5.1| EPU (Index of Exchange Rate Changes) and Audit Quality

Using linear regression, the research hypothesis was tested. The results are presented in *Table 5*.

Table 5. Results of hypothesis testing based on fixed effects.

Symbol	β	S.d	t	Sig.
EcU2	.8017	.5116	1.5670	.1171
BIG	.6990	.3514	1.9891	.0466
INV	-.5411	.2725	-1.9856	.0470
AR	-.4035	.1833	-2.2013	.0277
LNTA	.3899	.2073	1.8808	.0599
CA	.7541	.5331	1.4145	.1572
ROA	-.6092	.2978	-2.0456	.0407
LEV	.5412	.3518	1.5383	.1239
C	.9669	.4540	2.1297	.0331
R ₂	.4811	F		41.4215
R ₂ Adj.	.4776	Durbin-Watson		1.96

Based on the results in *Table 5*, the F-statistic value is 41.4215, and since its significance level is 0.00, it can be said that the research model fits well. The test results at the 5% significance level indicate that there is no significant relationship between economic uncertainty (based on the exchange rate change index) and AQ. Therefore, the research hypothesis is rejected.

5.2| EPU (index of Exchange Rate Changes) and FRQ

The research hypothesis was tested using linear regression. The results are presented in *Table 6*.

Table 6 Results of hypothesis testing based on fixed effects.

Symbol	β	S.d	t	Sig.
EcU2	.6147	.3977	1.5456	.1222
BIG	.4970	.2011	2.4714	.0134
INV	.5031	.2215	2.2713	.0231
AR	.4901	.2307	2.1244	.0336
LNTA	.4540	.2693	1.6858	.0918
CA	.6521	.4228	1.5423	.1230
ROA	-.7003	.3102	-2.2575	.0239
LEV	-.6179	.2105	-2.9353	.0033
C	.2596	.0921	2.8186	.0000
R ₂	.4012	F		40.1459
R ₂ Adj.	.3972	Durbin-Watson		1.94

Based on the results of *Table 6*, the value of the F-statistic is 40.1459, and since its significance level is 0.000, it can be said that the research model is appropriate. The results of the test at a 5% significance level show that there is no significant relationship between EPU (based on the index of currency changes) and FRQ; in other words, the research hypothesis is not accepted.

6| Conclusion

These results suggest that auditors' efforts to limit discretionary accruals resulting from earnings management and to reduce uncertainty in financial information are helpful during periods of high economic uncertainty. However, when EPU increases, auditors may face challenges in charging sufficient audit fees to increase audit efforts for companies with high FRQ risks, suggesting that the positive correlation between audit fees and financial information quality may weaken. It implies that auditors auditing companies with high FRQ risks may reflect audit process risks to improve financial information quality, but these audit efforts may not be reflected in audit fees due to companies' financial constraints [33].

First, EPU increases operational risks for firms and leads to lower firm performance. Managers may be incentivized to manipulate financial statements to ensure high compensation and meet earnings expectations.

Auditors need to perform more audit procedures and extend the scope of audit risk assessment as the problem of corporate representation is exacerbated. Managers are more likely to manage earnings to hide their opportunistic behaviour, which increases their motivation to manipulate financial statements. Auditors need to allocate more resources, spend more time, and make more significant efforts to verify the financial statements of audited entities. It suggests that auditors should consider the practical risks of EPU when making decisions about audit fees. Second, EPU makes it more difficult for auditors to predict and monitor management behaviour. Auditors are more likely to encounter reduced related party transactions, exacerbating the problem of corporate representation. Managers are more likely to manage earnings to hide their opportunistic behaviour, increasing their motivation to manipulate financial statements. Auditors need to allocate more resources, spend more time, and make more significant efforts to audit the financial statements of audited entities. It suggests that auditors should consider the practical risks arising from EPU when making decisions about audit fees. The study is consistent with the research of [23].

The capital market is always influenced by economic conditions and their stability or instability. EPU leads to increased information asymmetry in the capital market. In such a market, investors cannot observe and monitor a company's performance and prospects. Therefore, under uncertainty, one of the prerequisites for earnings management, namely information asymmetry, is provided, and the necessary opportunity for managers to engage in earnings manipulation is created [1].

Managers are forced to change their decisions in response to various consequences of uncertainty resulting from policy changes [34]. Under EPU, Yung and Root [10] suggested that increased economic uncertainty leads rational investors to pay more attention to firm-specific information. Therefore, financial statements are perceived as very important. On the other hand, under regulatory uncertainty, the political cost hypothesis [35–38], suggests that firms manage reported earnings to minimize the net cost of potential regulatory scrutiny. Policy uncertainty includes uncertainty in monetary and fiscal policy, which can lead to fluctuations in firm expectations and managerial judgments. Firms facing policy uncertainty make different judgments about the precise level of accruals and current earnings for reporting purposes, and their motivation is to maintain specific authority [10]. Through earnings management, opportunistic managers seek to present reported earnings in a way that meets their objectives. Therefore, firms adjust discretionary accruals to mitigate EPU [10].

Empirically, the results show that when EPU increases information asymmetry and when there are FRQ risks, auditors' efforts help to improve financial information quality. In particular, the fact that financial information quality increases while audit fees decrease in the presence of FRQ risk suggests that audit efforts may not be reflected in audit fees during periods of high EPU; however, this does not imply a decrease in financial information quality. The findings are consistent with [10] and [35], but contrary to the study by [34].

Based on the results of the EPU in the country, it is recommended that investors thoroughly study the existing risks in a particular industry before investing. Previous research has shown that earnings management will occur differently in various industries. Therefore, economic and political risks can have an impact on earnings management. It is also recommended for managers and audit committees to pay special attention to ranking audit firms when appointing or hiring audit teams. Audit teams that maintain their AQ under any economic and environmental conditions can preserve the interests of investors, shareholders, and stakeholders. Researchers are advised to investigate the moderating effect of corporate governance based on internal and external mechanisms separately in future studies. It is also suggested that the moderating effect of managerial ability be studied.

References

- [1] Akhgar, M. O., Sajjadi, Z., & Rasouli Kurdistan, N. (2023). Economic Policy uncertainty and firm adoption: the role of product market competition, financial frictions, and financialization. *Accounting and auditing reviews*, 30(114), 614-658. (In Persian). https://elmnet.ir/doc/2733149-69112?elm_num=1

- [2] Watts, R., & J. Zimmerman. (1981). *The market for Independence and independent auditors*. Center for research in government policy & business.
- [3] Bae, S. H., Jeong, S. W., & Park, J. I. (2014). The associations among auditors' abnormal audit fees, industry expertise, and discretionary accruals. *Korean accounting journal*, 23(2), 143–190.
- [4] Lee, H., & Jeong, S. W. T. (2024). Economic policy uncertainty, audit quality, and earnings manipulation. *Asia-pacific journal of accounting & economics*, 31(2), 269–299. <https://doi.org/10.1080/16081625.2023.2228836>
- [5] Çolak, G., Durnev, A., & Qian, Y. (2017). Political uncertainty and IPO activity: evidence from U.S. gubernatorial elections. *Journal of financial and quantitative analysis*, 52(6), 2523–2564. DOI:10.1017/S0022109017000862
- [6] Col, B., Durnev, A., & Molchanov, A. (2018). Foreign risk, domestic problem: capital allocation and firm performance under political instability. *Management science*, 64(5), 2102–2125. <https://doi.org/10.1287/mnsc.2016.2638>
- [7] Gulen, H., & Ion, M. (2015). Policy uncertainty and corporate investment. *The review of financial studies*, 29(3), 523–564. <https://doi.org/10.1093/rfs/hhv050>
- [8] Julio, B., & Yook, Y. (2012). Political Uncertainty and corporate investment cycles. *The journal of finance*, 67(1), 45–83. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1540-6261.2011.01707.x>
- [9] Bonaime, A., Gulen, H., & Ion, M. (2018). Does policy uncertainty affect mergers and acquisitions? *Journal of financial economics*, 129(3), 531–558. <https://www.sciencedirect.com/science/article/pii/S0304405X18301338>
- [10] Yung, K., & Root, A. (2019). Policy uncertainty and earnings management: international evidence. *Journal of business research*, 100, 255–267. <https://www.sciencedirect.com/science/article/pii/S0148296319302413>
- [11] Nagar, V., Schoenfeld, J., & Wellman, L. (2019). The effect of economic policy uncertainty on investor information asymmetry and management disclosures. *Journal of accounting and economics*, 67(1), 36–57. <https://www.sciencedirect.com/science/article/pii/S0165410118300958>
- [12] Becker, C. L., Defond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary accounting research*, 15(1), 1–24. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1911-3846.1998.tb00547.x>
- [13] Heninger, W. G. (2001). The association between auditor litigation and abnormal accruals. *The accounting review*, 76(1), 111–126. <https://doi.org/10.2308/accr.2001.76.1.111>
- [14] Shahmoradi, N., & Tabatabaieinasab, Z. (2021). The effect of audit quality on the relationship between economic uncertainty and accrual based earnings management in listed companies in tehran stock exchange. *Financial accounting research*, 13(1), 67-86. **(In Persian)**. https://far.ui.ac.ir/article_25426.html
- [15] El Ghouli, S., Guedhami, O., Kim, Y., & Yoon, H. J. (2021). Policy uncertainty and accounting quality. *The accounting review*, 96(4), 233–260. <https://doi.org/10.2308/TAR-2018-0057>
- [16] Xu, Z. (2020). Economic policy uncertainty, cost of capital, and corporate innovation. *Journal of banking & finance*, 111, 105698. <https://www.sciencedirect.com/science/article/pii/S0378426619302729>
- [17] Dechow, P. M., & Dichev, I. D. (2002). The Quality of accruals and earnings: the role of accrual estimation errors. *The accounting review*, 77(s-1), 35–59. <https://doi.org/10.2308/accr.2002.77.s-1.35>
- [18] Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *Accounting review*, 70, 193–225. <https://www.jstor.org/stable/248303>
- [19] Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2005). The market pricing of accruals quality. *Journal of accounting and economics*, 39(2), 295–327. <https://www.sciencedirect.com/science/article/pii/S016541010500025X>
- [20] Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of accounting research*, 29(2), 193–228. <http://www.jstor.org/stable/2491047>
- [21] Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of accounting and economics*, 42(3), 335–370. <https://www.sciencedirect.com/science/article/pii/S0165410106000401>
- [22] Zhang, M., Xu, H., Tong, L., & Ye, T. (2018). International evidence on economic policy uncertainty and asymmetric adjustment of audit pricing: big four versus non-big four auditors. *Journal of business finance & accounting*, 45(5–6), 728–756. <https://onlinelibrary.wiley.com/doi/abs/10.1111/jbfa.12299>
- [23] Yun, Y., & Chun, H. (2021). Economic policy uncertainty and audit effort: evidence from audit hours. *Managerial auditing journal*, 36(4), 643–662. <https://doi.org/10.1108/MAJ-08-2020-2808>

- [24] Hillegeist, S. A. (1999). Financial reporting and auditing under alternative damage apportionment rules. *The accounting review*, 74(3), 347–369. <https://doi.org/10.2308/accr.1999.74.3.347>
- [25] Caramanis, C., & Lennox, C. (2008). Audit effort and earnings management. *Journal of accounting and economics*, 45(1), 116–138. <https://www.sciencedirect.com/science/article/pii/S0165410107000432>
- [26] Nelson, M. W., Elliott, J. A., & Tarpley, R. L. (2002). Evidence from auditors about managers' and auditors' earnings management decisions. *The accounting review*, 77(s-1), 175–202. <https://doi.org/10.2308/accr.2002.77.s-1.175>
- [27] Kinney Jr, W. R., & Martin, R. D. (1994). Does auditing reduce bias in financial reporting? A review of audit-related adjustment studies. *Auditing*, 13(1), 149-156. <https://search.proquest.com/openview/88de1645b310ac3c593a84e2d5e40253/1?pq-origsite=gscholar&cbl=31718>
- [28] Beaver, W. H., & Ryan, S. G. (1993). Accounting fundamentals of the book-to-market ratio. *Financial analysts journal*, 49(6), 50–56. <https://doi.org/10.2469/faj.v49.n6.50>
- [29] Ball, R., Kothari, S. P., & Watts, R. L. (1993). Economic determinants of the relation between earnings changes and stock returns. *The accounting review*, 68(3), 622–638. <http://www.jstor.org/stable/248205>
- [30] DeAngelo, L. E. (1981). Auditor independence, 'low balling', and disclosure regulation. *Journal of accounting and economics*, 3(2), 113–127. <https://www.sciencedirect.com/science/article/pii/0165410181900094>
- [31] Rezaei, Z., & Kayani, F. (2021). Investigating the effect of economic uncertainty on the relationship between the comparability of financial statements and the reduction of stock prices in Tehran Stock Exchange. *Journal of financial and investment developments*, 2(4), 1-6. **(In Persian)**. https://elmnet.ir/doc/2480661-80154?elm_num=2
- [32] Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of accounting and economics*, 39(1), 163–197. <https://doi.org/10.1016/j.jacceco.2004.11.002>
- [33] Cheng, M., & Sutunyarak, C. (2023). Impact of Economic policy uncertainty on audit fees: evidence from chinese listed companies. *Problems and perspectives in management*, 21(3), 682–697. DOI:10.21511/ppm.21(3).2023.53
- [34] Kim, H., & Yasuda, Y. (2021). Economic policy uncertainty and earnings management: evidence from Japan. *Journal of financial stability*, 56, 100925. <https://www.sciencedirect.com/science/article/pii/S1572308921000851>
- [35] Watts, R. L., & Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. *The accounting review*, 53(1), 112–134. <http://www.jstor.org/stable/245729>
- [36] Pouresmaeil Motlagh, B., & Mohtasham, A. (2024). Measuring brand performance in the petrochemical industry with the approach of improving financial performance. *Financial and banking strategic studies*, 1(4), 216–232. **(In Persian)**. https://www.journal-fbs.com/article_193658.html
- [37] Khalilian, B. (2023). Lack of financial reporting transparency, audit quality, risk of stock fall. *Financial and banking strategic studies*, 1(2), 93–105. **(In Persian)**. https://www.journal-fbs.com/article_178953.html
- [38] Shemshad, A. (2023). Financial distress and audit fees: new evidence of the role of firm size. *Innovation management and operational strategies*, 4(4), 355–368. **(In Persian)**. http://www.journal-imos.ir/article_192868.html