Iranian Journal of
Accounting, Auditing & Finance

Ferdowsi University of Mashhad

Quarterly

The Impact of Economic Policy Uncertainty on Stock Liquidity with a Focus on the Role of Financial Disclosure

Reza Abbaszadeh Amiri[1], Hamid Reza Bazzazzadeh Torbati[*1], Mohammad Reza Abbaszadeh[2], Alireza Mehrazeen[1], Mohammad Karimi[3]

1. Department of Accounting, Ne.C., Islamic Azad University, Neyshabur, Iran.

2. Department of Accounting, Faculty of Administrative and Economic Sciences, Ferdowsi University of Mashhad, Mashhad, Iran.

3. Department of Management, Ne.C., Islamic Azad University, Neyshabur, Iran.

ARTICLE INFO

Abstract

Low market liquidity is often a direct consequence of economic policy uncertainty. Persistent policy fluctuations and a lack of transparency in economic decision-making erode investor confidence, resulting in lower trading volumes and reduced liquidity. Most stock markets around the world are not frictionless; increased economic policy uncertainty, high transaction costs, investor protection concerns, and information asymmetry further exacerbate market frictions. Changes in government policies or actions that alter the economic environment can significantly influence price reactions in financial markets. This study aims to investigate the relationship between economic policy uncertainty and stock liquidity, as well as the moderating effect of information disclosure on this relationship. To achieve this, accurate and consistent data were required; therefore, all companies listed on the Tehran Stock Exchange (TSE) were considered the study population. Data from 64 listed firms, spanning the period 2007–2021, were collected as the accessible sample to test the research hypotheses. Following the model proposed by Baker et al. (2016), a newspaper-based index of policy uncertainty was used to measure economic policy uncertainty. The moderating variable—information disclosure—was assessed using the Botosan (1997) disclosure index. Panel data econometrics and Estimated Generalized Least Squares (EGLS) regression models were employed to test the hypotheses, supported by diagnostic tests for stationarity, multicollinearity, normality, heteroscedasticity, and autocorrelation. The results indicate that economic policy uncertainty has a negative effect on stock liquidity. Moreover, economic policy uncertainty has no positive influence on information disclosure. Finally, information disclosure was found to mitigate the adverse impact of economic policy uncertainty on stock liquidity, confirming its moderating role. Overall, the findings suggest that managers tend to produce more information in response to information asymmetry shocks induced by economic policy uncertainty, thereby bridging the informational gap between insiders and market participants. When information asymmetry intensifies due to policy uncertainty—between informed traders (firms) and uninformed traders (potential investors)—managers have more substantial incentives to engage in voluntary disclosure to reduce informational frictions.

NUMBER OF REFERENCES
78

NUMBER OF FIGURES
1

NUMBER OF TABLES
9

1. Introduction

Liquidity has garnered substantial attention in academic research over the past few years. It refers to the ease and speed with which an asset can be bought or sold with minimal transaction costs. Liquidity plays a crucial role in price discovery and serves as a key indicator of market efficiency, particularly in relation to the dissemination of information. Beyond its theoretical importance, liquidity also has significant practical implications. Given market realities such as order imbalances, trading queues, and other frictions, addressing liquidity issues remains essential (Dang & Nguyen, 2021). Higher liquidity facilitates a more efficient distribution of financial risk by reducing portfolio management costs and encouraging investors to make more informed trading decisions. Studies have demonstrated that transaction costs in developed markets hold considerable economic significance (Kubick et al., 2015). As liquidity increases, transaction costs decrease accordingly, and market efficiency improves. Moreover, liquidity plays a vital role in the price discovery process. However, liquidity levels in Iran's capital market remain relatively low due to several structural and institutional factors, as confirmed by prior research. Given liquidity's critical function in the market, examining the determinants that influence stock liquidity and cause its fluctuation is of great importance. It is worth noting that low liquidity is not unique to Iran; it is a global challenge that affects many countries. For instance, Wang et al. (2022) report that only 6% of the Chinese economy's assets are liquid. Similarly, Dash et al. (2021) document average liquidity levels of 0.5% in Canada, 1% in France, 4% in Germany, 1% in Italy, 17% in the United Kingdom, and 8% in the United States, highlighting significant cross-country variation in liquidity conditions. Recent studies have increasingly focused on the influence of economic policy uncertainty (EPU) on stock liquidity—an issue of considerable relevance with compelling empirical findings. Uncertainty stemming from environmental crises, political instability, and the COVID-19 pandemic has imposed severe strains on global economies (Goodell, 2020). In light of these developments, an expanding body of literature (e.g., Julio & Yook, 2012; Gulen & Ion, 2016; Jens, 2017; Baker et al., 2016; Bonaime et al., 2018; Yang et al., 2019; Phan et al., 2021; Dang & Nguyen, 2021; Wang et al., 2022) has examined the real-world effects of policy uncertainty shocks on financial markets.

Liquidity plays a crucial role in the efficient functioning of capital markets by facilitating asset pricing, risk-sharing, and investment. However, in emerging economies such as Iran, stock market liquidity has consistently faced significant challenges stemming from structural inefficiencies, regulatory constraints, and macroeconomic instability. Recent evidence suggests that one of the key obstacles to developing deep and liquid markets in Iran is the volatility of economic policies and the lack of transparent financial information—factors that undermine investor confidence and elevate transaction costs (Khajavi et al., 2022; Moradi et al., 2022). For instance, Moradi et al. (2022) report that more than 60% of individual investors attribute information asymmetry and low liquidity as primary reasons for engaging in short-term speculation rather than long-term investment. Likewise, Khajavi et al. (2022) document a direct relationship between low levels of voluntary disclosure and wider bid–ask spreads on the Tehran Stock Exchange, indicating liquidity deterioration among firms operating in poor information environments. These findings underscore the necessity for systematic investigation into the determinants of stock liquidity, particularly within the Iranian context, where uncertainty and information opacity continue to represent systemic characteristics of the financial market.

To better understand the dynamics of stock liquidity, it is crucial to examine the channels through which macroeconomic factors influence liquidity. Among these channels, information asymmetry is particularly significant, as it tends to intensify during periods of economic policy uncertainty (EPU). EPU not only heightens overall market ambiguity but also widens the informational gap between corporate insiders and external investors (Qian et al., 2025). This friction discourages trading activity

and consequently diminishes market liquidity. In this context, financial information disclosure can function as a moderating mechanism that alleviates the adverse effects of uncertainty by enhancing transparency and reducing information asymmetry (Fu et al., 2025). Accordingly, in this study, stock liquidity is conceptualized as the outcome variable, economic policy uncertainty as the shock-inducing condition, information asymmetry as the transmission mechanism, and voluntary disclosure as the mitigating factor.

   Although numerous studies have examined the impact of uncertainty on stock liquidity, there is limited evidence regarding effective mechanisms through which firms can mitigate the adverse economic effects of exogenous uncertainty shocks in their operating environments (Wang et al., 2022). Accordingly, this study aims to address the research gap by highlighting the importance of stock liquidity for firm outcomes and the role of information disclosure as a mechanism to mitigate the negative impact of heightened economic policy uncertainty on stock liquidity. The central argument of this research is that economic policy uncertainty (EPU) negatively influences stock liquidity through the information channel. Elevated EPU intensifies information asymmetry in capital markets and impairs trading efficiency in securities markets (Pastor & Veronesi, 2012), thereby reducing investors' willingness to trade. High levels of EPU heighten uncertainty regarding firm value, prompting traders to withdraw from the capital market and, consequently, reducing stock liquidity (Debata & Mahakud, 2018). Drawing on prior empirical evidence and established economic theories, the effects of elevated economic policy uncertainty (EPU) on stock liquidity are expected to be more pronounced among firms operating within weak informational environments. Consequently, it is assumed that managers—responding to information asymmetry shocks induced by policy uncertainty—are likely to increase the level of information disclosure to narrow the informational gap between insiders and market participants. According to information disclosure theory, when information asymmetry in the market intensifies between firms (informed traders) and potential investors (uninformed traders), managers become more inclined to voluntarily disclose information to reduce informational frictions (Verrecchia, 1980) and mitigate investment uncertainty (Pastor & Veronesi, 2012). Investors tend to be highly averse to uncertainty shocks; hence, their demand for reliable and timely financial information increases as environmental uncertainty rises (Drechsler, 2013). Therefore, information disclosure is expected to be particularly beneficial for firms during periods of heightened economic policy uncertainty (EPU) (Nagar et al., 2019). In response to exogenous increases in EPU, managers may disclose more information to reduce informational asymmetry and alleviate investor uncertainty in capital markets. However, elevated EPU can also exacerbate information asymmetry by discouraging corporate disclosure. Under high uncertainty, firms often become more cautious about what information to reveal, balancing the potential benefits of transparency against the risks of unfavorable market reactions. Voluntary disclosure is inherently costly (Verrecchia, 1980), and these costs are magnified when the disclosed information is negative (Rogers et al., 2009). Consequently, managers may be less inclined to release additional information when the news is unfavorable (Chen et al., 2011). The incentive to withhold negative information, therefore, increases during periods of high policy uncertainty (Luo & Zhang, 2020). Similarly, firms are less likely to issue earnings forecasts in uncertain markets (Kim et al., 2016), and they tend to disclose such forecasts only when performance expectations are more predictable (Chen et al., 2011). Taken together, whether firms disclose more or less information during times of heightened economic policy uncertainty remains an empirical question requiring further investigation. Prior research generally suggests that greater information disclosure enhances a firm's information environment and improves stock liquidity (Healy & Palepu, 2001; Diamond & Verrecchia, 1991). However, it remains empirically unclear whether enhanced information disclosure can mitigate the adverse effects of rising economic policy uncertainty (EPU) on stock liquidity. This question is critical because market

participants rely heavily on firm-specific information to make optimal investment decisions. Theoretically, greater information transparency enhances stock valuation, whereas elevated uncertainty reduces the intrinsic value of securities (Wang et al., 2022). In periods of heightened uncertainty, investors face greater difficulty in assessing firm quality. Consequently, transparent firms are expected to maintain higher valuations and exhibit greater stock liquidity during times of elevated EPU (Lang et al., 2012; Schoenfeld, 2017). Moreover, extensive information disclosure can influence trading behavior by affecting bid–ask spreads and trading volumes (Leuz & Verrecchia, 2000). Accordingly, the quality of a firm's information disclosure is expected to reduce information asymmetry caused by economic policy uncertainty and thereby mitigate its negative impact on stock liquidity. Based on the foregoing discussion, this study contributes to the literature by proposing a novel framework that integrates economic policy uncertainty, information disclosure quality, and stock liquidity and empirically investigates the moderating role of disclosure in this relationship.

First, this study contributes to two interrelated streams of literature: (1) the nexus between economic policy uncertainty and information asymmetry, and (2) the relationship between information asymmetry and information disclosure. Specifically, it extends prior research by examining how heightened economic policy uncertainty influences stock liquidity and the quality of corporate information disclosure. A distinctive aspect of this study is its focus on a setting where both the demand for information and the costs of disclosure are elevated under conditions of economic policy uncertainty. Despite the theoretical importance of this issue, there is limited evidence regarding whether—and how—managers adjust their disclosure behavior in such circumstances. Accordingly, this study contributes to the literature by demonstrating how economic policy uncertainty affects stock liquidity and shapes managerial disclosure decisions.

Second, this study contributes to a growing body of literature investigating the real effects of economic policy uncertainty (EPU) on economic and financial outcomes. Prior research has documented that increased EPU can trigger economic and market recessions, leading to reduced corporate investment (Gulen & Ion, 2016; Jens, 2017), lower innovation activity (Wang et al., 2022), slower banking credit growth (Nguyen et al., 2020), lower stock returns (Chen & Chiang, 2020), higher stock price volatility (Baker et al., 2016), weaker financial stability (Fan et al., 2020), and a greater risk of stock price crashes (Luo & Zhang, 2020). While these studies primarily focus on the negative consequences of policy uncertainty, they offer limited insights into how firms can effectively cope with such uncertainty, which has an adverse impact on financial markets. In contrast, the present study extends this literature by proposing a mitigating mechanism—high-quality information disclosure—that can reduce the adverse effect of economic policy uncertainty on stock liquidity. This research also complements previous studies, which suggest that political connections, corporate social responsibility, board networks, and family ownership can help firms buffer against uncertainty (Akey & Lewellen, 2017). Unlike those perspectives, this study reveals an additional, previously overlooked benefit of information disclosure: its capacity to mitigate the negative effects of heightened economic policy uncertainty on stock liquidity.

Third, this study adds to the existing literature by providing empirical evidence that investors react more strongly to earnings announcements of firms with higher levels of information disclosure during periods of heightened uncertainty.

Fourth, the study extends the finance literature related to emerging economies and developing markets. Prior research on the relationship between information disclosure, stock liquidity, and economic policy uncertainty has predominantly focused on firms in the United States and other developed markets, where financial systems operate with relatively fewer frictions.

Therefore, the findings of prior studies may not be fully generalizable to firms operating in the financial markets of emerging economies such as Iran, where market frictions are considerably

higher. The effects of policy uncertainty are more pronounced in unstable economies with substantial government intervention—a characteristic that accurately describes the Iranian economy, where industrial policies are predominantly government-driven and publicly funded (Arianpoor et al., 2023). Consequently, compared to firms in more market-oriented countries, Iranian companies are likely to experience greater adverse effects from policy uncertainty (Ahmadi et al., 2025). Moreover, prior research suggests that high-quality information disclosure is particularly valuable in environments with weak investor protection and fragile institutional frameworks. In such settings, firms tend to complement limited national regulations through voluntary disclosures and more frequent updates at the firm level (Zahedi et al., 2023). Hence, examining the effects of corporate transparency in highly developed markets—such as the United States, with its robust financial systems and strong disclosure standards—may yield limited insights for countries with weaker regulatory environments, such as Iran. Iran represents an emerging market with a relatively small capital market, weak investor protection, and an underdeveloped information environment (Mousavi et al., 2022). In emerging markets characterized by fragile institutions, liquidity costs tend to be higher (Salehi et al., 2023). Accordingly, this study addresses an existing gap in the literature by analyzing the impact of economic policy uncertainty on stock liquidity, with an emphasis on the moderating role of financial information disclosure in an emerging economy with weak institutional frameworks. The findings can also be extended to other markets with similar institutional characteristics, such as those of other Middle Eastern countries, offering valuable insights for both managers and policymakers.

The remainder of this paper is organized as follows. Section 2 reviews the theoretical foundations and develops the research hypotheses. Section 3 describes the research methodology, including the econometric models, data collection procedures, and variable definitions. Section 4 presents the empirical analysis, encompassing diagnostic tests and regression results. Finally, Section 5 discusses the findings in the context of existing literature and concludes with practical implications and suggestions for future research.

2. Theoretical foundations and hypothesis development
2.1. Economic policy uncertainty and stock liquidity
An escalation in economic policy uncertainty (EPU) increases investor apprehension regarding firms' investment prospects (Pastor & Veronesi, 2012). According to options theory, firms tend to delay or reduce irreversible investments during periods of heightened uncertainty until ambiguity is resolved (Dixit & Pindyck, 1994; Gulen & Ion, 2016). Under such conditions, self-interested managers may refrain from disclosing their investment decisions to the market to avoid potential declines in stock prices. Rising economic policy uncertainty also amplifies information asymmetry in capital markets (Ghosh & Olsen, 2009). Nagar et al. (2019), examining U.S. corporations, find that EPU increases informational frictions within financial markets. Greater information asymmetry, in turn, reduces investors' willingness to trade and negatively affects stock liquidity (Schoenfeld, 2017). Consistent with information asymmetry theory, prior studies demonstrate that higher levels of asymmetry in capital markets negatively impact stock liquidity (Glosten & Milgrom, 1985; Kelly & Ljungqvist, 2012; Ellul & Panayides, 2018).

Several studies suggest that economic policy uncertainty (EPU) is associated with increased stock price volatility (Baker et al., 2016; Pastor & Veronesi, 2012; Li et al., 2021). Greater volatility in stock prices and returns makes price forecasting more difficult for investors, thereby discouraging trading activity (Armstrong et al., 2011; Chordia et al., 2008; Hameed et al., 2010). Evidence from emerging markets further supports the notion that EPU exacerbates liquidity constraints. In Iran, fluctuations in monetary policy and exchange rate regimes have contributed to substantial capital

market volatility and reduced market depth (Loni et al., 2021). Similarly, increased policy-related uncertainty in Iran has been linked to lower trading volumes, wider bid–ask spreads, and decreased investor participation (Taheri Bazkhaneh & Sadrara, 2025). Moreover, higher levels of policy uncertainty have been shown to depress stock prices (Pastor & Veronesi, 2012). Overall, prior evidence suggests that economic policy uncertainty negatively impacts stock market performance in multiple ways. Duong et al. (2018) documented a negative impact of EPU on stock liquidity, while Wang et al. (2022) similarly found that greater policy uncertainty leads to a decline in liquidity. Based on these arguments, the first research hypothesis is formulated as follows:

H1: Economic policy uncertainty negatively affects stock liquidity;

2.2. Economic policy uncertainty, information disclosure, and stock liquidity

When information asymmetry arises as a result of economic policy uncertainty (EPU), managers may increase the level of corporate disclosure to mitigate its adverse impact on stock liquidity (Verrecchia, 1980). Enhancing corporate transparency through greater information disclosure enables potential investors to better assess the quality of a company's securities, reduce agency costs, and increase the attractiveness of its shares in the capital market. Higher disclosure quality and transparency help firms counteract the negative effects of information asymmetry (Lang & Maffett, 2011) and lessen stock mispricing. Frequent and high-quality disclosures reduce the cost of capital and attract a broader investor base (Balakrishnan et al., 2014; Lambert et al., 2007). In the Iranian context, however, the effectiveness of voluntary disclosure is often constrained by underdeveloped regulatory institutions, elevated political risk, and the dominance of state-owned enterprises. Setayesh et al. (2011) found that the moderating effect of disclosure weakens in firms with concentrated government ownership. Nonetheless, emerging evidence suggests that Iranian firms with higher-quality voluntary reporting—particularly during periods of heightened policy uncertainty—experience superior stock liquidity and narrower bid–ask spreads. Further evidence from Lang et al. (2012) shows that transparent firms tend to exhibit higher valuations and more liquid stocks. Similarly, Cho and Kim (2021) demonstrate that the positive effect of increased disclosure on stock liquidity is more pronounced for firms disclosing favorable news than for those disclosing unfavorable news.

Additionally, the effects of negative disclosures may evolve. While such disclosures often lead to lower liquidity in the short term—owing to increased investor caution and wider bid–ask spreads—they can, in the long run, foster greater investor trust, enhance a firm's reputation for transparency, and ultimately improve stock liquidity. This dynamic effect has been particularly observed in markets characterized by low institutional trust and volatile policy environments (Md Zaini et al., 2018).

The Investor Recognition Hypothesis posits that potential investors prefer to trade or invest in stocks with transparent and easily assessable information at lower costs (Merton, 1987). Firm-specific disclosures enable investors to distinguish between high-quality and low-quality firms with minimal information costs. Consequently, investors tend to exhibit risk-averse behavior during periods of uncertainty, shifting from risky securities to safer and more predictable assets (Brunnermeier & Pedersen, 2009; Hameed et al., 2010). Given that increased transparency enhances stock liquidity (Campbell et al., 2014; Schoenfeld, 2017; Diamond & Verrecchia, 1991; Lang et al., 2012; Elshandidy & Neri, 2015), it is expected that the disclosure of negative information moderates the relationship between economic policy uncertainty and stock liquidity. Based on these arguments, the second research hypothesis is formulated as follows:

H2: Increased information disclosure significantly moderates the negative relationship between economic policy uncertainty and stock liquidity.

Although prior studies have extensively highlighted the positive role of information disclosure in

enhancing stock liquidity (e.g., Mbanyele, 2023; Muzaffar & Malik, 2024), relatively few have directly examined its moderating effect on the relationship between economic policy uncertainty (EPU) and stock liquidity. Recent empirical evidence, however, provides strong support for this moderating role. For instance, Lang et al. (2012) found that firms with higher levels of voluntary disclosure exhibit a significantly weaker negative association between EPU and stock liquidity. Their study, based on a comprehensive panel of Chinese listed firms, suggests that financial transparency mitigates the adverse market reactions triggered by policy uncertainty through reducing information asymmetry. Similarly, Zhang et al. (2023) demonstrated that voluntary disclosure serves as a buffer against the detrimental effects of economic uncertainty on stock market frictions, particularly those related to liquidity and investor responsiveness. Collectively, these studies reinforce the notion that information disclosure functions not only as a determinant of stock liquidity but also as a contextual moderator within uncertainty-driven capital markets.

Moreover, it is essential to distinguish between voluntary and mandatory disclosures, as their effects on stock liquidity differ substantially. Voluntary disclosure—primarily driven by managerial discretion—has been shown to exert a more substantial moderating influence under conditions of uncertainty, particularly in markets characterized by weaker regulatory oversight. In contrast, while mandatory disclosure establishes a baseline of transparency, it may not effectively mitigate information asymmetry unless supported by strong enforcement mechanisms. Recent evidence suggests that voluntary disclosure is especially valuable in enhancing investor confidence and improving market liquidity in emerging economies (Haddad et al., 2009).

Aslam and Brooks (2024) emphasize that emerging markets have become key contributors to global economic growth, accounting for nearly two-thirds of global output in the past year. Strengthened macroeconomic fundamentals—such as higher foreign reserves and improved policy frameworks—have increased the resilience of these markets to external shocks and policy uncertainty, making them highly relevant contexts for examining stock liquidity under uncertainty.

Tran et al. (2024) analyze the causal relationships among economic policy uncertainty, economic growth, and stock liquidity in ASEAN markets. Their results reveal no direct causal effect of policy uncertainty on either growth or liquidity; however, they confirm that economic growth has a significant influence on stock liquidity. The study underscores the resilience of emerging markets and recommends adopting broader indicators and strategic policy designs to indirectly promote liquidity.

Wagdi (2025) investigates the effects of economic policy uncertainty (EPU) and information asymmetry on stock price crash risk in the Egyptian Exchange. Using data from 21 firms over the period 2014–2023, the study finds that EPU significantly increases crash risk, and this effect is amplified under higher levels of information asymmetry. EPU alone accounts for approximately 30–47% of crash risk, whereas incorporating information asymmetry increases explanatory power to over 50–71%. The findings highlight the crucial role of transparent financial disclosures in mitigating crash risk during periods of heightened policy uncertainty.

Similarly, Shirmardi et al. (2024) examine the influence of systematic and unsystematic risk factors—including financial uncertainty, economic policy uncertainty, and the Fama–French five-factor components—on stock returns in the U.S. capital market using quarterly SVAR analysis. Their results indicate that in the short term, negative shocks from stock returns, profitability, SMB, and momentum dominate, while EPU exerts a positive short-term effect. In the long term, however, both economic policy uncertainty and broader economic uncertainty have pronounced negative impacts, whereas factors such as SMB, HML, and profitability generate positive shocks. These findings suggest that different types of uncertainty exert distinct effects on stock performance across varying time horizons.

Darabi and Naseri Nasab (2023) investigate the moderating role of information disclosure quality

in the relationship between economic policy uncertainty (EPU) and stock liquidity on the Tehran Stock Exchange. Using panel data from 146 firms over the nine years from 2013 to 2021, their causal analysis reveals a significant negative association between EPU and stock liquidity. However, higher-quality information disclosure mitigates this adverse effect by enabling more informed trading and reducing information asymmetry in the market.

3. Methodology

Given that this study examines the impact of economic policy uncertainty (EPU) on stock liquidity, with a particular focus on the role of financial information disclosure, its primary objective is fundamental, aiming to contribute to the development of theory aligned with the Iranian capital market context. Based on the data collection approach, the research is retrospective and descriptive, as the data used to test the hypotheses were obtained from existing sources, including firms' financial statements, Tehran Stock Exchange (TSE) reports (ordinary general meeting decisions and audited financial statements published by the Securities and Exchange Organization), and annual board reports. Data analysis is conducted using panel data techniques and multivariate regression models.

The statistical population consists of all non-financial firms listed on the TSE between 2007 and 2021. Companies in the financial sector were excluded due to differences in disclosure requirements and economic structure. The final sample comprises 64 firms that meet the selection criteria, resulting in a total of 660 firm-year observations.

3.1. Population and accessible statistical population

According to Table 1, the statistical population of this study comprises all companies listed on the Tehran Stock Exchange (TSE). The accessible population comprises firms that were actively operating between 2007 and 2021. No random sampling was performed; instead, firms meeting the following criteria were selected for inclusion in the final dataset:

1. Companies operating in financial intermediary sectors—such as investment firms, holding companies, leasing companies, insurance companies, and banks—were excluded due to differences in their economic nature, disclosure practices, and applicable accounting standards. These firms also exhibit distinct financial reporting and corporate governance structures compared to other industries.
2. Firms for which relevant financial or market data were unavailable were excluded from the sample.
3. Firms were required to have a fiscal year ending in March to ensure consistency and eliminate potential seasonal effects on the dependent variable.
4. Companies inactive in the TSE during the 2007–2021 period were excluded.
5. Firms whose stock trading symbols experienced long-term suspension (exceeding three months) were also excluded.

Table 1. Method of selecting the accessible statistical population

Description	Number	Number
Total number of listed companies on the Tehran Stock Exchange (2007–2021)		558
Companies that belong to banks, insurance companies, investment firms, and similar sectors	134	
Companies with impossible access to information	87	
Companies whose fiscal year ends in March aim to eliminate the effects of market anomalies on the dependent variable	79	
Companies that were not active in the Tehran Stock Exchange during the study period	52	
Companies that changed their activity or fiscal year	48	
Companies whose stock symbol experienced a long-term suspension (more than three months)	94	

Remaining companies (Accessible Statistical Population)	64

Models

The following regression models are employed to test the hypotheses in this study.

Model (1) is utilized to test the first hypothesis.

Model (1)

$$ILLIQ_{i,t} = \alpha_0 + \alpha_1 EPU_{i,t} + \alpha_2 SEN_{i,t} + \alpha_3 INS_{i,t} + \alpha_4 Pvol_{i,t} + \alpha_5 Rvol_{i,t} + \alpha_6 IndBoard_{i,t}$$
$$+ \alpha_7 MS_{i,t} + \alpha_8 MO_{i,t} + \alpha_9 SG_{i,t} + \alpha_{10} Size_{i,t} + \alpha_{11} AGE_{i,t} + \alpha_{12} LEV_{i,t} + \alpha_{13} ROA_{i,t}$$
$$+ \varepsilon_{i,t}$$

Model (2) is applied to test the second hypothesis.

$$ILLIQ_{i,t} = \alpha_0 + \alpha_1 EPU_{i,t} + \alpha_2 Disclosure_{i,t} + \alpha_3 EPU * Disclosure_{i,t} + \alpha_4 SEN_{i,t} + \alpha_5 INS_{i,t}$$
$$+ \alpha_6 Pvol_{i,t} + \alpha_7 Rvol_{i,t} + \alpha_8 IndBoard_{i,t} + \alpha_9 MS_{i,t} + \alpha_{10} MO_{i,t} + \alpha_{11} SG_{i,t}$$
$$+ \alpha_{12} Size_{i,t} + \alpha_{13} AGE_{i,t} + \alpha_{14} LEV_{i,t} + \alpha_{15} ROA_{i,t} + \varepsilon_{i,t}$$

3.2. Research variables

3.2.1. Independent variable: economic policy uncertainty (EPU):

This study examines the relationship between economic policy uncertainty (EPU) and stock liquidity by first constructing an Economic Policy Uncertainty Index for Iran based on the methodology developed by Baker et al. (2016). The evolution of this index was analyzed from Farvardin 2006 (March 2007) through the end of the research period. The index was developed using seven Persian-language national newspapers classified as categories A and B according to the Ministry of Culture and Islamic Guidance's ranking issued in February 2018, which represented the most recent classification available at the time of the study. The selected newspapers include Donya-e-Eqtesad, Iran, Shargh, Resalat, Kayhan, Etemad, and Jame Jam. Relevant articles were retrieved from the digital archives of these newspapers via the National Information and Publications Bank website, encompassing all news items and reports published by these outlets. To construct the EPU Index, three groups of keywords were employed: Economic Terms (E), Uncertainty or Risk Terms (U), and Policy Terms (P).

After identifying the relevant keywords, the number of news articles and reports containing at least one term from each of the three categories was counted for each month. The value of $X_{i,t}$ was then calculated by dividing the number of uncertainty-related articles by the total number of articles published in the same month by newspaper i. The standard deviation of uncertainty-related articles over the entire study period (2006–2021) for each newspaper was denoted as δ_i. Each monthly observation was standardized by dividing $X_{i,t}$ by δ_i, resulting in $Y_{i,t}$. Subsequently, the average of $Y_{i,t}$ across all newspapers in a given month was computed as z_t. Next, the average of all economic policy uncertainty news articles over the research period is calculated as M. Finally, the Economic Policy Uncertainty Index (EPU) for month t was derived using the following equation:

$$EPU_t = \frac{Z_t}{M} * 100$$

3.2.2. Dependent variable: stock liquidity (ILLIQ):

In this study, stock liquidity is measured using the Amihud Illiquidity Ratio (2018), which is among the most widely used and reliable proxies for stock liquidity in the finance literature and interpreted as the daily stock price response to trading volume.

$$ILLIQ_{i,m} = \frac{1}{D_{i,m}} \sum_{d=1}^{d_{i,m}} \frac{|R_{i,d,m}|}{P_{i,d,m} \ V_{i,d,m}}$$

Where:

$D_{i,m}$: The number of trading days for firm i's stock in month m.

$R_{i,d,m}$: The return on company i's stock in month m.

The daily return on firm i's stock in period t is calculated as follows (Asgarinejad, 2018):

$$R_{i,t} = \frac{(P_t - P_{t-1}) + D_t + \frac{(P_t - P_n)*N_c}{N} + \frac{N_e*P_{t-1}}{N}}{P_{t-1}}$$

$P_{i,d,m}$: Closing price of company i's stock in month m.

$V_{i,d,m}$: Trading volume of company i's stock in month m. Accordingly, a liquid stock is a stock that is traded in a relatively large volume without a significant impact on the price. Therefore, a lower value of this measure indicates higher asset liquidity.

3.2.3. Moderating variable: information disclosure (Disclosure):

In this study, information disclosure is measured using the indicators proposed by Botosan (1997), which were initially developed based on the recommendations of the Jenkins Committee. In the Botosan model, disclosure indicators were derived from corporate governance reports and the ranking figures of U.S. companies. However, due to the absence of such data sources in Iran—and given that the Iranian Audit Organization has issued a sample reporting format booklet that companies commonly use for preparing and disclosing information—the scope for voluntary disclosure within financial statements is considerably restricted. Consequently, this study employs the board of directors' activity reports as the primary source for extracting voluntary disclosure indicators. After verifying the non-mandatory nature of these indicators based on accounting standards and legal requirements, six main categories (comprising 71 indicators) were identified: (1) background information, (2) a summary of key historical results, (3) segment information, (4) key non-financial statistics, (5) forecast information, and (6) management discussion and analysis. The components and scoring procedures for each category are described below. The voluntary disclosure score for each firm is calculated by dividing the total score obtained across the six categories by the maximum possible score (134).

Voluntary Disclosure Indicators

Background Information: This category includes a summary of the company's activities, statements of goals or strategic plans, an overall description of corporate strategy, actions taken during the year to achieve stated objectives, and planned initiatives for future periods. It also covers timelines for achieving goals, the competitive environment, the effects of competition on current and future profitability, a general company overview, the main products or services and their distinguishing features, primary markets and their characteristics, inventory details, and the organizational structure, including the management hierarchy or organizational chart.

Summary of Key Historical Results: This category comprises indicators such as profitability ratios, financial structure ratios, liquidity ratios, and other key financial ratios. It also includes earnings per share forecasts, sales performance metrics, operating profit measures, and net profit results.

Key Non-financial Indicators: This category includes non-financial performance indicators such as average employee salary, average age of key personnel, market share of main products or services, units sold for primary products or services, selling price per unit, growth rate in units sold, break-even sales, production or delivery time, descriptions of production methods or techniques, and information about the company's primary customer base.

Sector Information: Description of assets, Liabilities or financing, Depreciation, Operating profit,

Investment, and Research and development.

Forecasting Information: This category covers forward-looking disclosures that provide insights into the company's future performance. It includes comparisons of previous profit and sales forecasts with actual results, assessments of how current opportunities and risk coverage influence future sales or profits, estimates of market share, cash flow, capital expenditures, and research and development expenditures, as well as projections of future profits and sales.

Management Discussion and Analysis: This category consists of narrative explanations provided by management regarding changes in key financial metrics. It encompasses discussions about changes in sales, operating income, cost of goods sold, gross profit, administrative and organizational expenses, interest expense or income, and net profit. It also includes explanations related to changes in inventory, accounts receivable, capital expenditures, research and development expenses, and market share. Furthermore, it covers the interpretation of liquidity ratios, other financial ratios, and earnings per share forecasts.

Summary of the Weighting System

Background Information: Each disclosed item is assigned one point. An additional point is granted in cases where the disclosed information is scarce or limited.

Summary of Historical Performance: One point is awarded for ratios and earnings per share (EPS) forecasts referring to the most recent period (X). If the information pertains to the previous period (X–1), an additional point is granted. A further point is awarded for references to period X–2. For sales, operating income, and net profit, one point is also assigned if the disclosure refers to period X–2.

Sector Information: One point is assigned for each item of sector-related information disclosed.

Core Non-Financial Information: Two points are granted for each reported item.

Forecast Information: Qualitative items 1 and 2 each receive one point, while items 3 through 10 receive two points each. Quantitative forecast items are awarded one point each. Items 9 and 10, when referring to the main business sectors, receive an additional point each.

Management Discussion and Analysis: Qualitative items 1–14 each receive one point, which also applies to the corresponding quantitative items, except for sales and operating income. For the main sections, two items receive one point each; if the disclosure is based on aggregate totals, half a point is awarded. For items 15–19, one point is granted when ratios for period X are disclosed, and an additional point is assigned if trends are also analyzed.

3.2.4. Control variables

In the present study, and consistent with Balakrishnan et al. (2014) and Nagar et al. (2019), several control variables are employed to capture the effects of business risk, informational environment, corporate governance, and the firm's financial conditions. The control variables are defined as follows:

Investor Sentiment (SEN):

Consistent with Riedl et al. (2021), investor sentiment is measured using the indices developed by Baker and Wurgler (2006). The relevant indices are presented in Table 2. The natural logarithm of the average value of these five indicators is calculated to represent investor sentiment. Accordingly, the variable SEN denotes the investor sentiment index in the stock market.

$$\text{SEN} = \text{Ln} (\text{TURN} + \text{PDND} + \text{S} + R_f + \text{CPI})$$

Table 2. Investor sentiment indicators and their measurement methods

Variable	Measurement Method
TURN	The natural logarithm of the average annual trading volume was obtained from the Rahavard Novin database.
PDND	Excess dividend, defined as the natural logarithm of the difference between distributed and undistributed dividends, was also extracted from the Rahavard Novin database.
S	The ownership ratio and total financial activity were calculated by dividing shareholders' equity by the sum of total equity and long-term debt, and the resulting value was converted into a percentage (multiplied by 100).
Rf	The risk-free interest rate, based on the one-year deposit rate, was obtained from the Central Bank of Iran's official website.
CPI	The Consumer Price Index (CPI), used as a measure of inflation, was also collected from the Central Bank's website.

Institutional Ownership (INS):

According to Bushee (1998), institutional investors comprise banks, insurance companies, investment firms, pension funds, and other similar entities. Operationally, institutional ownership is defined as the percentage of shares held by institutional investors. Institutional ownership affects both the extent of corporate information disclosure and stock liquidity (Ellul & Panayides, 2018). Institutional shareholders enhance stock liquidity by improving the firm's information environment and exerting pressure on management to increase the level of disclosure.

Stock Price Volatility (PVOL):

The standard deviation of the monthly price over the year.

$$PVOL = \sigma P_{i,t}$$

Where:
σ: Standard deviation
P: Stock price[1]

Stock Return Volatility (RVOL):

The standard deviation of the monthly return over the year.

$RVOL = \sigma R_{i,t}$

The stock return of company i in period t is derived from the following relationship (Asgarinejad, 2018):

$$R_{i,t} = \frac{(P_t - P_{t-1}) + D_t + \frac{(P_t - P_n) * N_c}{N} + \frac{N_e * P_{t-1}}{N}}{P_{t-1}}$$

P_t: The closing price of the stock at the end of the period;
P_{t-1}: The stock price at the beginning of the period (end of the previous period);
P_n: The nominal value of each share;
D_t: The gross cash dividend per share;
N_e: The number of shares increased through reserves or retained earnings;
N_c: The number of shares increased through cash contributions;
N: The number of shares before the capital increase.

This study employs the return variable calculated using the formula mentioned above in the

---

[1] The stock price is the price at which each company share is bought and sold on the stock market. This price reflects the current value that investors place on that share.

Rahavard Novin software. Increased volatility in stock returns and prices heightens uncertainty and information asymmetry, which in turn adversely affects stock liquidity. In addition, consistent with prior studies, this research incorporates corporate governance variables, as corporate governance has been shown to influence stock liquidity (Prommin et al., 2014; Ali et al., 2017).

Independent Directors (IndBoard): The percentage of non-executive directors divided by the total number of directors.

Government Ownership (MS): The percentage of shares held by the government and state-owned companies.

Managerial Ownership (MO): The percentage of shares held by managers (Wang *et al.*, 2022).

Sales Growth (SG): The current year's sales minus the previous year's sales divided by the previous year's sales.

$Sales_{i,t}:$ The total sales of the company i in the current year;

$Sales_{i,t-1}:$ The total sales of the company i in the previous year.

Firm Size (SIZE): The natural logarithm of the company's assets.

Firm Age (AGE): The natural logarithm of the years the company has been listed on the stock exchange since its inception.

Financial Leverage (LEV): The ratio of total liabilities (current and non-current) to total assets.

Return on Assets (ROA): The operating profit ratio to total assets.

3.3. Econometric Approach and Estimation Methods

To empirically test the research hypotheses, this study employs panel data econometric techniques, given that the dataset comprises both cross-sectional (firms) and time-series (years) dimensions. The following econometric models and diagnostic tests were applied:

- Multivariate regression analysis was applied to examine the main and interaction effects among the study variables.
- Augmented Dickey–Fuller (ADF) tests were conducted to assess the stationarity of the variables.
- Variance Inflation Factor (VIF) values were calculated to detect potential multicollinearity among the independent variables.
- The Jarque–Bera test was performed to verify the normality of the regression residuals.
- Breusch–Pagan (for heteroscedasticity) and Durbin–Watson (for autocorrelation) tests were used to evaluate the validity of key regression assumptions.
- Given the presence of both heteroscedasticity and autocorrelation, the study adopted the Estimated Generalized Least Squares (EGLS) method to obtain robust coefficient estimates.
- Model selection between pooled OLS, fixed effects, and random effects specifications was carried out using the F-Limer and Hausman tests. The results confirmed that the random effects model was appropriate for both hypotheses.

3.4. Regression Models

Two regression models were developed to test the study's hypotheses:

- **Model 1** examines the direct effect of economic policy uncertainty (EPU) on stock liquidity (ILLIQ).
- **Model 2** tests the moderating effect of voluntary disclosure (DISCLO) on the relationship between EPU and stock liquidity through the interaction term (EPU × DISCLO).

The empirical models are as follows:

Model 1:

$$ILLIQ_{i,t} = a_0 + a_1 EPU_{i,t} + \sum_{k=2}^{13} X_k + \beta_{i,t,k} + \varepsilon_{i,t}$$

Model 1:

$$ILLIQ_{i,t} = (\beta_0 + \beta_1 EPU_{i,t} + \beta_2 DISCLO_{i,t} + EPU) \times \beta_3 DISCLO_{i,t} + a_{i,t} + \sum_{k=4}^{15} X_k + \beta_{i,t,k} + \varepsilon_{i,t}$$

Where:
ILLIQ: denotes Amihud's stock illiquidity measure.
EPU: represents the Economic Policy Uncertainty index.
DISCLO: captures the voluntary financial disclosure score.
X_k: stands for a vector of control variables, including investor sentiment, institutional ownership, return volatility, board independence, government and managerial ownership, sales growth, firm size, firm age, leverage, and return on assets.

4. Data analysis
4.1. Descriptive statistics of the variables

Table 3. Descriptive statistics of the variables

Variable	Symbol	Mean	Maximum	Minimum	Standard Deviation	Skewness	Kurtosis
Liquidity	ILLQ	0.001	0.044	-0.003	0.005	3.928	23.576
Information Disclosure	DISCLO	0.257	0.443	0.120	0.061	0.403	2.895
Economic Policy Uncertainty	EPU	89.400	201.926	0.974	50.095	0.212	3.291
Investor Sentiment	SEN	13.988	21.179	9.311	2.101	0.279	2.786
Institutional Ownership	INS	70.412	99.580	0.000	27.751	-1.391	3.867
Return Volatility	Rvol	0.088	36.192	-3.420	3.537	5.737	44.184
Board Independence	INDBO	0.663	1.000	0.000	0.191	-0.335	3.021
Managerial Ownership	MS	6.969	87.550	0.000	15.686	2.398	7.869
Sales Growth	SG	0.318	9.114	-0.996	0.669	8.753	62.954
Firm Size	SIZE	6.325	8.887	4.620	0.840	0.420	2.762
Firm Age	AGE	1.508	1.903	0.954	0.221	-0.634	2.319
Leverage	LEV	0.490	0.987	0.019	0.242	-0.108	2.109
Return on Assets	ROA	0.174	0.956	-0.404	0.201	0.673	0.867

The descriptive statistics presented in Table 3, based on 660 firm-year observations, show that the average stock liquidity of the sample firms is 0.0016, indicating a relatively low level of liquidity. The maximum and minimum liquidity values are 0.0446 and –0.0032, respectively. The skewness and kurtosis statistics suggest that the distribution of stock liquidity is more peaked and asymmetric compared to a normal distribution, reflecting the non-normal nature of the data.

4.2. Unit root test for the variables
The Augmented Dickey-Fuller (ADF) test examines the presence of unit roots in the variables (Ryan and Giles, 1999).
Table 4 presents the results of the unit root tests, indicating that all variables are stationary, as their significance values are below the 5% threshold. The economic uncertainty variable, which is based

on matrix-type data, also exhibits stationarity and therefore does not require additional testing.

4.3. Multicollinearity diagnostic test
Table 5 presents the results of the multicollinearity diagnostic test for the study variables.

Table 4. Augmented Dickey-Fuller (ADF) Unit Root Test

Variable	Symbol	Test Statistic	Significance	Result
Liquidity	ILLQ	-6.618	0.000	Stationary
Information Disclosure	DISCLO	-6.441	0.000	Stationary
Investor Sentiment	SEN	-9.734	0.000	Stationary
Institutional Ownership	INS	-6.710	0.000	Stationary
Return Volatility	Rvol	-20.565	0.000	Stationary
Board Independence	INDBO	-9.369	0.000	Stationary
Managerial Ownership	MS	-6.230	0.000	Stationary
Government Ownership	MO	-6.337	0.000	Stationary
Sales Growth	SG	-23.626	0.000	Stationary
Firm Size	SIZE	-5.299	0.000	Stationary
Firm Age	AGE	-5.683	0.000	Stationary
Leverage	LEV	-9.270	0.000	Stationary
Return on Assets	ROA	-9.917	0.000	Stationary

Table 5. Multicollinearity Diagnostic Test

Variable	Symbol	VIF	1/VIF	Result
Economic Policy Uncertainty	EPU	1.465	0.682	No Multicollinearity
Investor Sentiment	SEN	1.593	0.627	Weak Multicollinearity
Institutional Ownership	INS	2.100	0.476	Weak Multicollinearity
Return Volatility	Rvol	1.112	0.899	No Multicollinearity
Board Independence	INDBO	1.201	0.832	No Multicollinearity
Managerial Ownership	MS	1.225	0.816	No Multicollinearity
Government Ownership	MO	1.354	0.738	No Multicollinearity
Sales Growth	SG	1.311	0.762	No Multicollinearity
Firm Size	SIZE	1.834	0.545	Weak Multicollinearity
Firm Age	AGE	1.074	0.930	No Multicollinearity
Leverage	LEV	1.359	0.735	No Multicollinearity
Return on Assets	ROA	1.093	0.914	No Multicollinearity
Mean VIF	-	1.390	-	No Multicollinearity

The results of the VIF test indicate that the values for all variables, as well as for the model's mean errors, are below the threshold of 10. Therefore, multicollinearity is not a concern, and the independent variables can be considered orthogonal, ensuring the reliability of the regression estimates.

4.4. Normality test of residuals
The Jarque–Bera test was employed to assess the normality of the regression residuals. Figure 1 presents the descriptive statistics of the residuals along with the corresponding Jarque–Bera statistic for the sample data.

4.5. Heteroscedasticity and autocorrelation test
The results of the heteroscedasticity and autocorrelation tests for Model 1, as presented in Table 6, indicate the presence of both heteroscedasticity and serial autocorrelation in the residuals. The significance level of the test is below the 5% threshold, suggesting that the Ordinary Least Squares (OLS) estimator is inefficient. To correct this issue, the Generalized Least Squares (EGLS) method was employed. Similarly, for Model 2, the test results confirm the presence of heteroscedasticity and

autocorrelation, indicating that the OLS technique is also inappropriate for this model. Consequently, the EGLS estimator was applied to obtain consistent and efficient coefficient estimates.
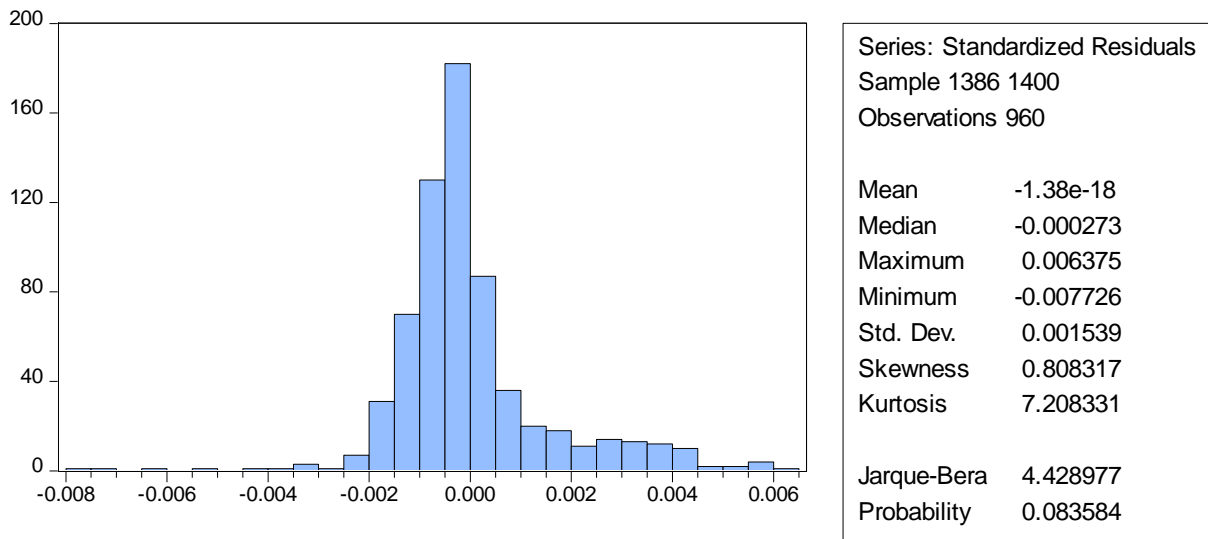

Series: Standardized Residuals	
Sample 1386 1400	
Observations 960	
Mean	-1.38e-18
Median	-0.000273
Maximum	0.006375
Minimum	-0.007726
Std. Dev.	0.001539
Skewness	0.808317
Kurtosis	7.208331
Jarque-Bera	4.428977
Probability	0.083584

Figure 1. Distribution of residuals based on the Jarek-Bara method

Table 6. Heteroscedasticity and Autocorrelation Test

Model	Test Type	F-Statistic	P-Value	Obs*R-squared	Result
Model 1	Heteroscedasticity Test	13.930	0.000	452.218	Presence of heteroscedasticity
	Autocorrelation Test	3.407	0.033	6.899	Presence of autocorrelation
Model 3	Heteroscedasticity Test	10.499	0.000	457.947	Presence of heteroscedasticity
	Autocorrelation Test	3.224	0.040	6.554	Presence of autocorrelation

4.6. Selection of the appropriate model for hypothesis testing

The results presented in Table 7 indicate that, except for Model 1, which is estimated using pooled data, hypothesis testing for the remaining models should be conducted using panel data under the random effects specification.

Table 7. F-Limer and Hausman Test

Model	F-Limer Statistic	Significance	Result	Hausman Statistic	Significance	Result
Model 1	1.489	0.000	Pooled	1.740	0.835	Random Effects
Model 2	18.090	0.001	Pooled	1.394	0.824	Random Effects

4.7. Hypothesis testing in the research

This study tests two hypotheses using the random effects statistical model. Based on the diagnostic tests conducted on the data collected through library research methods, it was determined that the Generalized Least Squares (EGLS) regression model is the most appropriate approach for model estimation.

4.7.1. Testing the First Hypothesis of the Research

H1. Economic policy uncertainty negatively affects stock liquidity.

The results of testing the first hypothesis, presented in Table 8, indicate that the estimated coefficient for the economic uncertainty variable is –0.0915, suggesting a negative relationship between economic uncertainty and stock liquidity. This implies that stock liquidity decreases as economic uncertainty increases. The t-statistic for this variable is –4.2597, which exceeds the critical

value in absolute terms, confirming the statistical significance of the coefficient at the 5% level. Therefore, it can be concluded with 95% confidence that economic policy uncertainty has a significant negative impact on stock liquidity, supporting the first hypothesis. Among the control variables, investor sensitivity (coefficient = 1.4599), board independence (0.0756), sales growth (0.0349), and firm size (0.0901) all exhibit positive and statistically significant effects on stock liquidity, as their p-values are below the 0.05 threshold. In contrast, stock return volatility (–0.6014) and financial leverage (–0.1805) have significant negative effects on stock liquidity. Other control variables—including institutional ownership, government ownership, managerial ownership, firm age, and return on assets—do not have statistically significant effects on stock liquidity, as their p-values exceed 0.05.

Table 8. Testing the First Hypothesis of the Research

Variable	Symbol	Coefficient	Standard Error	t-Statistic	p-Value
Intercept	C	-0.051	0.004	-2.786	0.044
Economic Uncertainty	EPU	-0.091	0.017	-4.259	0.000
Investor Sentiment	SEN	1.459	0.074	5.486	0.000
Institutional Ownership	INS	-0.001	0.000	-0.918	0.358
Return Volatility	RVOL	-0.060	0.024	-7.375	0.000
Board Independence	INDBO	0.075	0.016	3.438	0.000
Government Ownership	MS	-0.000	0.000	-0.778	0.436
Managerial Ownership	MO	-0.000	0.000	-0.044	0.964
Sales Growth	SG	0.034	0.008	2.408	0.016
Firm Size	SIZE	0.090	0.006	3.175	0.000
Firm Age	AGE	0.000	0.000	0.085	0.993
Leverage	LEV	-0.180	0.079	-6.644	0.000
Return on Assets	ROA	0.001	0.000	1.335	0.150
R-squared: 0.619			Durbin-Watson Statistic: 1.930		
F-statistic: 66.713			F-statistic p-value: 0.000		

Table 9. Testing the second hypothesis of the research

Variable	Symbol	Coefficient	Standard Error	t-statistic	Probability
Intercept	C	-0.301	0.067	-4.343	0.000
Economic Uncertainty	EPU	-0.141	0.057	-2.190	0.041
Information Disclosure	DISCLO	0.073	0.002	2.996	0.015
Economic Uncertainty × Disclosure	EPUDIS	-0.091	0.004	-3.432	0.001
Investor Sensitivity	SEN	1.194	0.086	4.661	0.000
Institutional Ownership	INS	-0.001	0.001	-0.488	0.625
Stock Return Volatility	RVOL	-0.731	0.275	-6.702	0.000
Board Independence	INDBO	0.066	0.013	3.157	0.002
Government Ownership	MS	-0.000	0.000	-1.177	0.239
Managerial Ownership	MO	0.001	0.001	0.703	0.597
Sales Growth	SG	0.056	0.006	2.471	0.029
Firm Size	SIZE	1.225	0.0428	6.579	0.000
Firm Age	AGE	0.024	0.018	1.317	0.886
Leverage	LEV	-0.106	0.026	-5.652	0.000
Return on Assets	ROA	0.001	0.000	1.276	0.141
R-squared: 0.5831			Durbin-Watson Statistic: 1.97		
F-statistic: 22.6816			F-statistic p-value: 0.0000		

The results of the R-squared statistic for Model 1 indicate that the explanatory variables account for 61.9% of the variation in stock liquidity. The Durbin–Watson statistic equals 1.93, which is close to 2, suggesting that the residuals are approximately uncorrelated and randomly distributed—hence, there is no evidence of serial autocorrelation. Furthermore, the p-value of the F-statistic is 0.0000, which is below the 5% significance level. Therefore, the null hypothesis is rejected at the 95%

confidence level, confirming that the overall regression model is statistically significant.

4.7.2. Hypothesis testing for the second hypothesis

H2. The increase in information disclosure significantly moderates the negative relationship between economic policy uncertainty and stock liquidity.

According to Table 9, the estimation results for Model 2 reveal that economic policy uncertainty has a significant negative effect on stock liquidity, with a coefficient of –0.1411, a t-statistic of –2.1905, and a p-value of 0.0416. Information disclosure has a positive effect on stock liquidity, as evidenced by its coefficient of 0.0730 and a t-statistic of 2.9961, which exceeds the critical value at the 5% significance level. The interaction term Economic Uncertainty × Information Disclosure has a coefficient of –0.0913 and a t-statistic of –3.4329, both of which are significant at the 95% confidence level. This finding suggests that information disclosure mitigates the adverse impact of economic policy uncertainty on stock liquidity, resulting in a reduction of the negative coefficient from –0.1411 to –0.0913. Therefore, information disclosure serves as a moderating variable that weakens the negative relationship between economic policy uncertainty and stock liquidity, supporting the study's second hypothesis. Among the control variables, investor sensitivity (coefficient = 1.1948; t-statistic = 4.6615) and firm size (coefficient = 1.2254; t-statistic = 6.0579) exhibit the strongest positive influence on stock liquidity. Conversely, stock return volatility (coefficient = –0.7314; t-statistic = –6.7025) and financial leverage (coefficient = –0.1065; t-statistic = –5.6522) exert the strongest negative effects. Additionally, board independence and sales growth both have positive and statistically significant impacts on stock liquidity at the 5% level. The R-squared value (0.5831) indicates that the independent, moderating, and control variables collectively explain 58.31% of the variation in stock liquidity. The Durbin–Watson statistic (1.97) suggests that the residuals are approximately uncorrelated and randomly distributed, indicating no significant autocorrelation. Finally, the F-statistic (22.68) with a p-value of 0.0000 confirms that the estimated model is statistically significant overall.

5. Discussion and conclusion

Economic policy uncertainty exerts detrimental effects on the stock market, primarily through two transmission channels. The first channel involves the disruption of firms' business operations and market activity, as uncertainty shocks tend to destabilize macroeconomic conditions and private investment (Ahmadi et al., 2025). The second channel operates through investor expectations: heightened uncertainty intensifies market pessimism and amplifies perceived risks. The empirical findings confirm that economic policy uncertainty has a significant negative impact on stock liquidity. This relationship can be interpreted from several perspectives. Under uncertain economic conditions, managers may be reluctant to disclose investment or operational decisions, fearing they will trigger negative market reactions. Consequently, firms facing high uncertainty often delay or withhold information, thereby exacerbating the information asymmetry between insiders and investors. Increased information asymmetry hinders potential investors' ability to evaluate a firm's quality, leading to reduced trading activity and lower bid prices. As a result, stocks become less liquid, especially among firms with weak disclosure practices. Therefore, in uncertain policy environments, limited corporate transparency restricts the flow of information and contributes to thinner markets through the informational channel, ultimately reducing stock liquidity. These findings are consistent with Mbanyele (2023), who reported that higher economic policy uncertainty raises firms' cost of capital due to a greater risk premium demanded by investors. As uncertainty rises, investors' negative sentiment widens the bid–ask spread in compensation for elevated liquidity risk. Similarly, Zhang et al. (2023) found that higher levels of economic policy uncertainty are associated with lower stock

liquidity, particularly among firms operating in environments with ambiguous information, where investor attention and risk tolerance are reduced. Overall, uncertainty surrounding government economic policies fosters cautious trading behavior and diminished market participation, resulting in lower stock liquidity.

The findings of this study provide several important implications for different stakeholder groups. Corporate managers are encouraged to implement more transparent and consistent disclosure practices, particularly during periods of heightened economic policy uncertainty. Such practices can reduce information asymmetry, strengthen investor confidence, and ultimately enhance stock liquidity. Investors, on the other hand, should view the quality of firm-level disclosure as a strategic signal of resilience under uncertain conditions and adjust their portfolio allocations accordingly. Policymakers and regulators are advised to strengthen and enforce disclosure frameworks that ensure the timeliness, accuracy, and comprehensiveness of financial reporting. Moreover, improving the institutional environment and maintaining consistent macroeconomic communication can help mitigate the adverse effects of policy uncertainty on capital market performance. Future research could further refine these recommendations by examining industry-specific characteristics and behavioral responses among stakeholders, providing more tailored policy and managerial insights.

The results of the hypothesis tests demonstrate that increased information disclosure moderates the negative relationship between economic policy uncertainty and stock liquidity. Higher levels of policy uncertainty intensify information asymmetry in the capital market, thereby reducing the efficiency of securities trading. When economic policy uncertainty rises, ambiguity surrounding firm valuation increases, prompting traders to withdraw from the market and leading to lower liquidity. In such circumstances, enhanced information disclosure mitigates information asymmetry by providing market participants with more timely and reliable information. As investors gain access to higher-quality disclosures, they can better assess stock valuations, which narrows the bid–ask spread and consequently improves stock liquidity. Thus, the interaction between information disclosure and economic policy uncertainty enhances stock liquidity by facilitating informed trading and improving market transparency. Investors' aversion to uncertainty shocks can theoretically explain this finding. As uncertainty increases, investors' demand for accurate and comprehensive financial information intensifies. Consistent with Nagar et al. (2019), increased disclosure during periods of high policy uncertainty enables managers to respond to exogenous shocks by supplying more information to the market, thereby reducing both information asymmetry and investor uncertainty. Similarly, Wang et al. (2022) found that greater transparency improves the informational efficiency of stock prices, reduces ambiguity regarding intrinsic value, and encourages informed trading. Overall, in periods of heightened economic policy uncertainty, transparent firms are valued more highly by investors and tend to exhibit greater stock liquidity. This outcome arises because enhanced information disclosure reduces asymmetry among traders, increases trading willingness and efficiency, and lowers transaction costs—ultimately resulting in narrower bid–ask spreads and more liquid markets. Considering the demonstrated negative impact of economic policy uncertainty on stock liquidity, as evidenced in this and previous studies, effective governance mechanisms should aim to eliminate barriers to market liquidity by promoting transparency in decision-making, ensuring timely communication, and avoiding abrupt regulatory interventions. Given the adverse effect of policy uncertainty on information disclosure, it is plausible that, under conditions of elevated uncertainty, managers may attempt to portray the firm's financial position more favorably to reassure investors, analysts, creditors, and other external stakeholders. This behavior increases the risk of financial reporting manipulation and biased disclosure. Accordingly, market regulators should strengthen oversight mechanisms and require more comprehensive and timely disclosure from firms. It is also worth noting that the quality and availability of data used in such analyses may be limited. Measures

of policy uncertainty often contain noise or measurement error and may not fully capture all dimensions of the concept. Furthermore, the time period chosen for the study can influence the results, as specific political and economic events during the observed years may affect the relationships among the variables examined.

Moreover, the heightened potential for earnings management and manipulated disclosure during periods of elevated economic policy uncertainty warrants careful consideration. When managers intentionally withhold or distort financial information to present a more favorable image of the firm's performance, investors may be misled about the company's true risk profile and underlying value. Such practices compromise the integrity of capital markets, erode investor confidence, and heighten perceived investment risk. Over time, these distortions can lead to market inefficiencies, the misallocation of capital, and increased financing costs for firms due to higher uncertainty premiums demanded by investors. Accordingly, both regulators and investors must remain vigilant and emphasize the need for transparency, especially in volatile macroeconomic environments, to safeguard market credibility and ensure efficient capital allocation.

While this study provides empirical evidence on the moderating role of information disclosure in the relationship between economic policy uncertainty and stock liquidity, it does not account for several other key determinants of market liquidity. Factors such as aggregate market liquidity conditions, the stance of monetary policy, and the behavior of institutional investors may also influence stock liquidity—either directly or through their interaction with policy uncertainty. Future research is encouraged to integrate these broader macro-financial variables to develop a more comprehensive framework for understanding stock liquidity dynamics under uncertainty. Expanding the analytical scope in this direction could also yield more robust policy insights aimed at enhancing capital market resilience, particularly in emerging economies.

References

1. Ahmadi, Z., Salehi, M. and Rahmani, M. (2025). The relationship between economic complexity and green economy with earnings management. *Journal of Facilities Management*, 23(1), pp. 160-180. https://doi.org/10.1108/JFM-04-2023-0045
2. Akey, P. and Lewellen, S. (2017). Policy uncertainty, political capital, and firm risk-taking. *Political Capital, and Firm Risk-Taking*. University of Toronto, Toronto, Canada.
3. Ali, S., Liu, B. and Su, J. J. (2017). Corporate governance and stock liquidity dimensions: Panel evidence from pure order-driven Australian market. *International Review of Economics & Finance*, 50, pp. 275-304. https://doi.org/10.1016/j.iref.2017.03.005
4. Amihud, Y. (2018). Illiquidity and stock returns: a revisit. critical finance review, forthcoming. New York University, New York. *Available at SSRN*: https://ssrn.com/abstract=3257038
5. Arianpoor, A., Salehi, M. and Daroudi, F. (2023). Nonfinancial sustainability reporting, management legitimate authority and enterprise value. *Social Responsibility Journal,* 19(10), pp. 1900-1916. https://doi.org/10.1108/SRJ-09-2022-0374
6. Armstrong, C. S., Core, J. E., Taylor, D. J. and Verrecchia, R. E. (2011). When does information asymmetry affect the cost of capital?. *Journal of Accounting Research*, 49(1), pp. 1-40. https://doi.org/10.1111/j.1475-679X.2010.00391.x
7. Aslam, A. and Brooks, P. K. (2024). Emerging markets on the global stage. *Finance & Development*, 61(003), pp. 1-22.
8. Baker, M. and Wurgler, J. (2006). Investor sentiment and the cross-section of stock returns. *The Journal of Finance,* 61(4), pp. 1645-1680. https://doi.org/10.1111/j.1540-6261.2006.00885.x
9. Baker, S. R., Bloom, N. and Davis, S. J. (2016). Measuring economic policy uncertainty. *The*

Quarterly Journal of Economics, 131(4), pp. 1593-1636. https://doi.org/10.1111/j.1540-6261.2006.00885.x

10. Balakrishnan, K., Core, J. E. and Verdi, R. S. (2014). The relation between reporting quality and financing and investment: Evidence from changes in financing capacity. *Journal of Accounting Research,* 52(1), pp. 1-36. https://doi.org/10.1111/1475-679X.12031

11. Bonaime, A., Gulen, H. and Ion, M. (2018). Does policy uncertainty affect mergers and acquisitions? *Journal of Financial Economics*, 129(3), pp. 531-558. https://doi.org/10.1016/j.jfineco.2018.05.007

12. Botosan, C. A. (1997). Disclosure level and the cost of equity capital. *Accounting Review*, 72(3), pp. 323-349.

13. Brunnermeier, M. K. and Pedersen, L. H. (2009). Market liquidity and funding liquidity. *The Review of Financial Studies*, 22(6), pp. 2201-2238. https://doi.org/10.1093/rfs/hhn098

14. Bushee, B. J. (1998). The influence of institutional investors on myopic R&D investment behavior. *Accounting Review*, 73(3), pp. 305-333.

15. Campbell, J. L., Chen, H., Dhaliwal, D. S., Lu, H. M. and Steele, L. B. (2014). The information content of mandatory risk factor disclosures in corporate filings. *Review of Accounting Studies*, 19(1), pp. 396-455. https://doi.org/10.1007/s11142-013-9258-3

16. Chen, S., Matsumoto, D. and Rajgopal, S. (2011). Is silence golden? an empirical analysis of firms that stop giving quarterly earnings guidance. *Journal of Accounting and Economics*, 51(1-2), pp. 134-150. https://doi.org/10.1016/j.jacceco.2010.10.006

17. Chen, X. and Chiang, T. C. (2020). Empirical investigation of changes in policy uncertainty on stock returns—evidence from China's market. *Research in International Business and Finance*, 53(1), 101183. https://doi.org/10.1016/j.ribaf.2020.101183

18. Cho, H. and Kim, R. (2021). Asymmetric effects of voluntary disclosure on stock liquidity: evidence from 8-K filings. *Accounting & Finance*, 61(1), pp. 803-846. https://doi.org/10.1111/acfi.12594

19. Chordia, T., Roll, R. and Subrahmanyam, A. (2008). Liquidity and market efficiency. *Journal of financial Economics,* 87(2), pp. 249-268. https://doi.org/10.1016/j.jfineco.2007.03.005

20. Dang, V. D. and Nguyen, K. Q. B. (2021). Monetary policy, bank leverage and liquidity. *International Journal of Managerial Finance*, 17(4), pp. 619-639. https://doi.org/10.1108/IJMF-06-2020-0284

21. Darabi, R. and Naseri Nasab, S. (2023). The role of information disclosure quality on the relationship between economic policy uncertainty and stock liquidity. *Accounting and Corporate Governance Researches*, 2(5), pp. 1-16 (In Persian) https://doi.org/10.71600/JACGR.2024.977451

22. Dash, S. R., Maitra, D., Debata, B. and Mahakud, J. (2021). Economic policy uncertainty and stock market liquidity: Evidence from G7 countries. *International Review of Finance*, 21(2), pp. 611-626. https://doi.org/10.1111/irfi.12277

23. Debata, B. and Mahakud, J. (2018). Economic policy uncertainty and stock market liquidity: does financial crisis make any difference?. *Journal of Financial Economic Policy*, 10(1), pp. 112-135. https://doi.org/10.1108/JFEP-09-2017-0088

24. Diamond, D. W. and Verrecchia, R. E. (1991). Disclosure, liquidity, and the cost of capital. *The Journal of Finance*, 46(4), pp. 1325-1359. https://doi.org/10.1111/j.1540-6261.1991.tb04620.x

25. Dixit, A. K. and Pindyck, R. S. (1994). *Investment under uncertainty. Princeton University Press*. New Jersey, United States

26. Drechsler, I. (2013). Uncertainty, time-varying fear, and asset prices. *The Journal of Finance*,

68(5), pp. 1843-1889. https://doi.org/10.1111/jofi.12068

27. Duong, H. N., Krishnamurti, C., Nguyen, J. H., Nguyen, M. and Rhee, S. G. (2018). The impact of economic policy uncertainty on stock liquidity: cross-sectional effects and economic channels. Monash University, Melbourne, Australia. *Available at SSRN 3088922*. https://dx.doi.org/10.2139/ssrn.3088922

28. Ellul, A. and Panayides, M. (2018). Do financial analysts restrain insiders' informational advantage?. *Journal of Financial and Quantitative Analysis*, 53(1), pp. 203-241. https://doi.org/10.1017/S0022109017000990

29. Elshandidy, T. and Neri, L. (2015). Corporate governance, risk disclosure practices, and market liquidity: Comparative evidence from the UK and I taly. *Corporate Governance: An International Review,* 23(4), pp. 331-356. https://doi.org/10.1111/corg.12095

30. Fan, Y., Huang, Y., Jiang, Y. and Liu, F. H. (2020). Watch out for bailout: TARP and bank earnings management. *Journal of Financial Stability,* 51(1), 100785. https://doi.org/10.1016/j.jfs.2020.100785

31. Fu, H., Cai, J., Xia, S. and Zhou, L. (2025). Investor network attention, information disclosure quality, and stock liquidity in enterprises. *Finance Research Letters*, 79, 107246. https://doi.org/10.1016/j.frl.2025.107246

32. Ghosh, D. and Olsen, L. (2009). Environmental uncertainty and managers' use of discretionary accruals. *Accounting, Organizations and Society*, 34(2), pp. 188-205. https://doi.org/10.1016/j.aos.2008.07.001

33. Glosten, L. R. and Milgrom, P. R. (1985). Bid, ask and transaction prices in a specialist market with heterogeneously informed traders. *Journal of Financial Economics*, 14(1), pp. 71-100. https://doi.org/10.1016/0304-405X(85)90044-3

34. Goodell, J. W. (2020). COVID-19 and finance: agendas for future research. *Finance Research Letters,* 35, 101512. https://doi.org/10.1016/j.frl.2020.101512

35. Gulen, H. and Ion, M. (2016). Policy uncertainty and corporate investment. *The Review of Financial Studies*, 29(3), pp. 523-564. https://doi.org/10.1093/rfs/hhv050

36. Haddad, A. E., AlShattarat, W. K. and Nobanee, H. (2009). Voluntary disclosure and stock market liquidity: evidence from the Jordanian capital market. *International Journal of Accounting, Auditing and Performance Evaluation,* 5(3), pp. 285-309.

37. Hameed, A., Kang, W. and Viswanathan, S. (2010). Stock market declines and liquidity. *The Journal of Finance*, 65(1), pp. 257-293. https://doi.org/10.1111/j.1540-6261.2009.01529.x

38. Healy, P. M. and Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics,* 31(1-3), pp. 405-440. https://doi.org/10.1016/S0165-4101(01)00018-0

39. Jens, C. E. (2017). Political uncertainty and investment: causal evidence from US gubernatorial elections. *Journal of Financial Economics*, 124(3), pp. 563-579. https://doi.org/10.1016/j.jfineco.2016.01.034

40. Julio, B. and Yook, Y. (2012). Political uncertainty and corporate investment cycles. *The Journal of Finance*, 67(1), pp. 45-83. https://doi.org/10.1111/j.1540-6261.2011.01707.x

41. Kelly, B. and Ljungqvist, A. (2012). Testing asymmetric-information asset pricing models. *The Review of Financial Studies,* 25(5), pp. 1366-1413. https://doi.org/10.1093/rfs/hhr134

42. Khajavi, S., Weysihesar, S. and Nasirifar, H. (2022). Effect of shareholders' structure on stock liquidity with an emphasis on the role of financial constraints. *Financial Accounting Research*, 13(4), pp. 67-92. (In Persian). https://doi.org/10.22108/far.2022.133883.1892

43. Kim, K., Pandit, S. and Wasley, C. E. (2016). Macroeconomic uncertainty and management earnings forecasts. *Accounting Horizons,* 30(1), pp. 157-172. https://doi.org/10.2308/acch-51311

44. Kubick, T. R., Lynch, D. P., Mayberry, M. A. and Omer, T. C. (2015). Product market power and tax avoidance: Market leaders, mimicking strategies, and stock returns. *The Accounting Review*, 90(2), pp. 675-702. https://doi.org/10.2308/accr-50883

45. Lambert, R., Leuz, C. and Verrecchia, R. E. (2007). Accounting information, disclosure, and the cost of capital. *Journal of Accounting Research*, 45(2), pp. 385-420. https://doi.org/10.1111/j.1475-679X.2007.00238.x

46. Lang, M. and Maffett, M. (2011). Economic effects of transparency in international equity markets: A review and suggestions for future research. *Foundations and Trends® in Accounting*, 5(3), pp. 175-241. http://dx.doi.org/10.1561/1400000016

47. Lang, M., Lins, K. V. and Maffett, M. (2012). Transparency, liquidity, and valuation: International evidence on when transparency matters most. *Journal of Accounting Research,* 50(3), pp. 729-774. https://doi.org/10.1111/j.1475-679X.2012.00442.x

48. Leuz, C. and Verrecchia, R. E. (2000). The economic consequences of increased disclosure. *Journal of Accounting Research,* 38(2), pp. 91-124. https://doi.org/10.2307/2672910

49. Li, K., Xia, B., Chen, Y., Ding, N. and Wang, J. (2021). Environmental uncertainty, financing constraints and corporate investment: Evidence from China. *Pacific-Basin Finance Journal*, 70(1), pp. 101665. https://doi.org/10.1016/j.pacfin.2021.101665

50. Loni, S., Abbasian, E. and Haji, G. (2021). The effect of economic policy uncertainty on corporate investment: evidence from companies listed on the Tehran Stock Exchange. *Financial Research Journal*, 23(2), pp. 249-268 (In Persian). https://doi.org/10.22059/frj.2021.310437.1007069

51. Luo, Y. and Zhang, C. (2020). Economic policy uncertainty and stock price crash risk. *Research in International Business and Finance*, 51(1), 101112. https://doi.org/10.1016/j.ribaf.2019.101112

52. Mbanyele, W. (2023). Economic policy uncertainty and stock liquidity: the role of board networks in an emerging market. *International Journal of Emerging Markets,* 18(1), pp. 122-147. https://doi.org/10.1108/IJOEM-05-2020-0492

53. Md Zaini, S., Samkin, G., Sharma, U. and Davey, H. (2018). Voluntary disclosure in emerging countries: a literature review. *Journal of Accounting in Emerging Economies*, 8(1), pp. 29-65. https://doi.org/10.1108/JAEE-08-2016-0069

54. Merton, R. C. (1987). *A simple model of capital market equilibrium with incomplete information*. Working Paper, New Orleans, Louisiana

55. Moradi, B., Bahri Sales, J., Jabbarzadeh Kangarlooi, S. and Ashtab, A. (2022). Explaining and proposing a market liquidity prediction model in Tehran Stock Exchange. *Financial Research Journal,* 24(1), pp. 134-156 (In Persian) https://doi.org/10.22059/frj.2021.323611.1007184

56. Mousavi, M., Zimon, G., Salehi, M. and Stępnicka, N. (2022). The effect of corporate governance structure on fraud and money laundering. *Risks*, 10(9). https://doi.org/10.3390/risks10090176

57. Muzaffar, Z. and Malik, I. R. (2024). Market liquidity and volatility: does economic policy uncertainty matter? evidence from Asian emerging economies. *Plos one*, 19(6), e0301597. https://doi.org/10.1371/journal.pone.0301597

58. Nagar, V., Schoenfeld, J. and Wellman, L. (2019). The effect of economic policy uncertainty on investor information asymmetry and management disclosures. *Journal of Accounting and Economics,* 67(1), pp. 36-57. https://doi.org/10.1016/j.jacceco.2018.08.011

59. Nguyen, C. P., Le, T. H. and Su, T. D. (2020). Economic policy uncertainty and credit growth: Evidence from a global sample. *Research in International Business and Finance*, 51(1), 101118. https://doi.org/10.1016/j.ribaf.2019.101118

60. Pastor, L. and Veronesi, P. (2012). Uncertainty about government policy and stock prices. *The

journal of Finance, 67(4), pp. 1219-1264. https://doi.org/10.1111/j.1540-6261.2012.01746.x

61. Phan, D. H. B., Iyke, B. N., Sharma, S. S. and Affandi, Y. (2021). Economic policy uncertainty and financial stability–Is there a relation? *Economic Modelling*, 94, pp. 1018-1029. https://doi.org/10.1016/j.econmod.2020.02.042

62. Prommin, P., Jumreornvong, S. and Jiraporn, P. (2014). The effect of corporate governance on stock liquidity: The case of Thailand. *International Review of Economics & Finance*, 32, pp. 132-142. https://doi.org/10.1016/j.iref.2014.01.011

63. Qian, B., Tan, Y., Power, G. and Mandal, A. (2025). Economic policy uncertainty, information production, and transparency. *International Review of Financial Analysis*, 103, 104203. https://doi.org/10.1016/j.irfa.2025.104203

64. Riedl, E. J., Sun, E. Y. and Wang, G. (2021). Sentiment, loss firms, and investor expectations of future earnings. *Contemporary Accounting Research*, 38(1), pp. 518-544. https://doi.org/10.1111/1911-3846.12618

65. Rogers, J. L., Skinner, D. J. and Van Buskirk, A. (2009). Earnings guidance and market uncertainty. *Journal of Accounting and Economics*, 48(1), pp. 90-109. https://doi.org/10.1016/j.jacceco.2009.07.001

66. Ryan, K.F. and Giles, D.E.A. (1999). Testing for unit roots in economic time-series with missing observations. *Advances in Econometrics*, Vol. 13, pp. 203-242. https://doi.org/10.1108/S0731-9053(1999)0000013010

67. Salehi, M., Ammar Ajel, R. and Zimon, G. (2023). The relationship between corporate governance and financial reporting transparency. *Journal of Financial Reporting and Accounting*, 21(5), pp. 1049-1072. https://doi.org/10.1108/JFRA-04-2021-0102

68. Schoenfeld, J. (2017). The effect of voluntary disclosure on stock liquidity: new evidence from index funds. *Journal of Accounting and Economics*, 63(1), pp. 51-74. https://doi.org/10.1016/j.jacceco.2016.10.007

69. Setayesh, M. H., Kazemnejad, M. and Zolfaghari, M. (2011). Investigating the effects of disclosure quality on stock liquidity and cost of capital of the companies listed in Tehran Stock Exchange. *Financial Accounting Research*, 3(3), pp. 55-74 (In Persian) https://far.ui.ac.ir/article_16921.html

70. Shirmardi, S. N., Sameti, M. and Sharifi Renan, H. (2024). The role of financial uncertainty shocks, Fama French five factor model and momentum in the capital market and its effects on stock returns. *Financial Accounting and Auditing Research*, 16(61), pp. 1-50 (In Persian) https://doi.org/10.30495/faar.2024.709442

71. Taheri Bazkhaneh, S. and Sadrara, M. (2025). Economic policy uncertainty and stock market returns in Iran: New Evidence Based on Wavelet Transform and Time-Frequency Analysis. *Economic Policies and Research*, 3(4), pp. 1-30. (In Persian) https://doi.org/10.22034/jepr.2024.142461.1201

72. Tran, P., Tam, P. H. and Hong, T. P. (2024). Causality between economic policy uncertainty, economic growth and stock liquidity: Evidence from ASEAN markets. *WSB Journal of Business and Finance,* 58(1), pp. 133-150. http://dx.doi.org/10.2478/wsbjbf-2024-0013

73. Verrecchia, R. E. (1980). The rapidity of price adjustments to information. *Journal of Accounting and Economics*, 2(1), pp. 63-92. https://doi.org/10.1016/0165-4101(80)90015-4

74. Wagdi, O. (2025). The impact of economic policy uncertainty on stock price crash risk with information asymmetry as a moderating variable: evidence from Egyptian Exchange. *MSA-Management Sciences Journal*, 4(1), pp. 1-44. https://dx.doi.org/10.21608/msamsj.2024.317379.1076

75. Wang, F., Mbanyele, W. and Muchenje, L. (2022). Economic policy uncertainty and stock

liquidity: the mitigating effect of information disclosure. *Research in International Business and Finance*, 59, 101553. https://doi.org/10.1016/j.ribaf.2021.101553

76. Yang, Z., Yu, Y., Zhang, Y. and Zhou, S. (2019). Policy uncertainty exposure and market value: Evidence from China. *Pacific-Basin Finance Journal*, 57(1), 101178. https://doi.org/10.1016/j.pacfin.2019.101178

77. Zahedi, J., Salehi, M. and Moradi, M. (2023). Identifying and classifying the financial resilience measurement indices using intuitive fuzzy DEMATEL. *Benchmarking: An International Journal*, 30(4), pp. 1300-1321. https://doi.org/10.1108/BIJ-07-2021-0395

78. Zhang, L., Chen, W. and Hu, N. (2023). Economic policy uncertainty and stock liquidity: evidence from China. *International Journal of Emerging Markets*, 18(1), pp. 22-44. https://doi.org/10.1108/IJOEM-06-2020-0625