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## The Factors Effecting Information Asymmetry in Financial Markets: An Empirical Study on Kurdish Region

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### Abstract

*Recent studies and regulators must focus on this aspect of asymmetric information in the financial markets, as it has become a significant issue affecting investors. Consequently, this article investigates the impact of the lack of transparency in company information and access to pertinent information on the asymmetry of financial market information in the Kurdish region. In addition, the study examines the moderating effect of lack of government support on lack of transparency in company information, lack of access to pertinent information, and asymmetric information regarding financial markets in the Kurdish region. The study collected primary data from investors in the financial markets using survey questionnaires. The article also employed smart PLS to examine the relationship between variables. The results demonstrated that the lack of transparency in company information and access to pertinent information positively correlated with asymmetric information. In the Kurdish region, the lack of government support moderates considerably the lack of transparency in company information, access to relevant information, and asymmetric information regarding financial markets. The article guides policymakers in developing policies to reduce the asymmetric information situation in financial markets by providing transparency in company information and access to pertinent financial market information.*

**Keywords:** *Lack of transparency in company information, lack of access to relevant information, asymmetric information, financial markets, Kurdish region, lack of government support*

### Introduction

Information asymmetries occur when the parties to a transaction or contract have completely or partially different knowledge of the objects, events, and states involved. Information asymmetry may also exist when one party has more information than the other regarding the objects, events, and circumstances relevant to the transaction (SimanTov-Nachlieli & Bamberger, 2021). To a certain extent, information asymmetry shields a company from risks or loss of reputation, aids in regaining financial fortitude, and facilitates future planning.

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However, if it persists or becomes more frequent, it will negatively impact the company's reputation and future performance. Whenever asymmetric information is revealed, it erodes the trust of stakeholders, particularly those with a financial stake in the company, harms potential relationships, and reduces public support (Felzmann et al., 2020). Information asymmetry is not always deliberate or intentional on the part of the organization; it can also result from negligence, inefficiency in the accounting department, or poor administration of the information and communication system (Kumar & Ganguly, 2021).

Two factors associated with the accounting and information & communication departments are the absence of transparency in company information and the dearth of access to pertinent information (Tsunoda & Zenny, 2021). The books of accounts of a business, including its income statement and balance sheet, detail its performance, financial worth, and future objectives. A company's documents are believed to provide information upon which its future behavior can be predicted. But if the company's employees are not forthcoming with information, the associated parties cannot form an opinion. This circumstance creates information asymmetries (Chod & Lyandres, 2021). When an agreement is reached, and a transaction is to be conducted, the parties involved require information pertinent to the subjects under discussion. Without access to pertinent information, information asymmetry causes complications (Bagues, Sylos-Labini, & Zinovyeva, 2019).

The study investigates the effects of a lack of government support, transparency in company information, and access to pertinent information on asymmetric information in the Kurdistan region's financial markets. The financial sector in Kurdistan is still relatively underdeveloped. This type of bazaar has never existed in the Iraqi Kurdistan region. In 1992, however, the Baghdad Stock Exchange became Iraq's first stock exchange, now known as the Iraqi Stock Exchange (ISX) (Sabir, 2022). The Erbil Stock Exchange (ESX) is the sole stock exchange in the Kurdistan Region and the second in Iraq. Although energy companies have expressed interest in issuing corporate bonds on the exchange, initial plans call for a focus on equity trade (stocks). Frequently, Kurdish investors invest in both residential and commercial properties. The financial market can contribute to the growth of the Kurdistan economy by channeling dormant public funds into newly public companies (Gardi et al., 2021).

The slow development of financial markets in the Kurdistan region is primarily due to a dearth of knowledge and a lack of trust in financial service providers (Faiq, 2021). There is a need for solutions to these problems. The present study sheds light on asymmetric information, which is the underlying cause of the issue mentioned above with the financial markets in the Kurdistan region.

This article is a significant contribution to the body of knowledge. In the previous literature, few authors have discussed the effects of the lack of transparency in company information and the lack of access to pertinent information on asymmetric information. The current study contributes to the body of knowledge by elaborating on the effects of the lack of transparency in company information and the lack of access to pertinent information on asymmetric information. The literature contributes to the literature by analyzing the moderating function of government support between the lack of transparency in company information, the lack of access to relevant information, and asymmetric information. In addition, the authors have examined the relationship between the factors mentioned above and the Kurdistan region's financial markets.

This investigation consists of five sections: In the second section, the relationship between lack of transparency in company information, lack of access to pertinent information, and asymmetric information is reviewed. The authors' chosen research methodologies are briefly described in the third section, and in the following section, appropriate analysis is conducted to ensure valid results. Results are described and validated by previous studies in the fifth section. This section concludes with the study's Implications, conclusion, and limitations.

## Literature Review

Information asymmetry exists when the parties involved in a transaction or agreement do not possess identical or proportionally equivalent information. This situation is detrimental to a company's image and performance because, upon exposure, stakeholders such as investors, lenders, shareholders, etc., become dissatisfied and cease doing business with the company (Majdzadeh Tabatabaei, Rezaei, & Zrinkolah, 2019). The primary causes of asymmetric information are government support, lack of transparency in company information, and lack of access to pertinent information. There are hints of a relationship between the absence of government support, transparency in company information and access to pertinent information, and asymmetric information in previous research.

Books of accounts and reports provide information about a company's business activities and market value. These documents are anticipated to convey the company's position. However, if these documents fail to provide transparent information, stakeholders cannot obtain quality data, resulting in information asymmetry (Mensi et al., 2021). Ullah et al. (2020) investigate the relationship between company information transparency and information asymmetry, in addition to input markets, innovation, and land use. In Khyber Pakhtunkhwa, Pakistan, 395 respondents were surveyed using a multistage random sampling technique. In addition, Mood's median test and the Mann-Whitney U test were used to analyze the data. The study asserts that where there is no regard for transparency in the information provided to stakeholders, there is no accountability and responsibility among employees. Therefore, it is conceivable that they disregard the right of outsiders to receive complete information during contract negotiations. In this case, there is asymmetric information. Aben et al. (2021) investigate asymmetric information due to a lack of transparency. Using information processing theory (IPT), the authors analyzed four cases of public-private relationships in the Dutch infrastructure sector. The study hypothesizes that sometimes a company's personnel engage in fraudulent behavior and provide imprecise information about the company's assets and liabilities. Many company representatives and constituents are placed in an asymmetrical relationship due to the lack of transparency in company information. Based on the discussion above, the following can be hypothesized:

**H1:** *The lack of transparency in company information is positively linked to asymmetric information.*

Information of high quality plays a crucial function in transactions between parties. If any of the parties lacks pertinent information, it creates an imbalance in their understanding of the transaction's particulars, difficulty making decisions, and risk of loss. Consequently, lacking access to pertinent information results in information asymmetry (Tchamyu, 2019). Lack of access to pertinent information, environmental uncertainty, and asymmetric information are analyzed by Fatima (2023). A proxy introduced by Khan and Watts was utilized for conservative accounting. The sample comprised companies listed on the Pakistan Stock Exchange, and the research period spanned from 2010 to 2021. The study suggests that if a

company's communication and information system is feeble, it cannot organize quality information for the company and instead provides irrelevant information; accountants may fail to accurately depict the company's economic situation and the likelihood of their plans' success. This could result in information asymmetry. In a research article, Huynh, Wu, and Duong (2020) examine the relationship between lack of access to pertinent information, firm value, and information asymmetry. Between 2008 and 2017, data was collected from 250 non-financial companies and 2,500 firm-year observations using documents from Vietnam's stock exchanges. The study reveals that businesses, particularly those dealing with financial instruments, rely on the quality of information they possess and provide to their stakeholders. They may be forced to deal with asymmetric information and its futility if they do not have access to pertinent information. Consequently, the subsequent hypothesis can be presented.

**H2:** *Unable access to relevant information is positively linked to asymmetric information.*

Government support for the economy motivates it to regulate businesses in various industries routinely. When there is a lack of government support, and business organizations are free to conduct their operations, sloppy bookkeeping is possible. This results in a lack of transparency in the company's information, and if stakeholders are provided with imprecise data, they may form erroneous beliefs and make poor decisions. Thus, information is asymmetric (Al Guindy, 2021). MA Musleh Al-Sartawi (2019) examines the connection between the absence of government support, the lack of transparency in company information, and asymmetric information. To address the research topics, the authors collected cross-sectional data in 2017 from a sample of 241 firms registered on the financial stock markets of the GCC. The study explains that if an organization operates in a region without government support, it is not subject to any regulations. This self-satisfaction diminishes a sense of accountability, and company information becomes opaque. When the government does not play a significant role, asymmetric information becomes prevalent due to the lack of transparency in business information. Zhang et al. (2019) also indicate that external, impartial parties regulate businesses effectively in nations where the government does not play an active role in the economy and does not support business organizations. Consequently, there may be a lack of transparency in the information businesses report via their books of accounts. And if there is no dread of legal proceedings, information asymmetry has a greater chance of prevailing. Therefore, the absence of government support exacerbates the effects of asymmetric information's lack of transparency. Therefore,

**H3:** *The lack of government support is a significant moderator between the lack of transparency in company information and asymmetric information.*

If organizations in an economy receive government support, they may have access to a developed information and communication system to obtain pertinent data. However, without government support, obtaining the pertinent information required for business management and transactions is challenging. In this circumstance, differences grow, and information asymmetries emerge (Bergh et al., 2019). In an article on information asymmetry in Bitcoin transactions, Ante (2020) discussed the relationship between the absence of government support, the lack of access to pertinent information, and asymmetric information. During the year between 2018 and 2019, data were collected from 2132 large Bitcoin blockchain transactions involving 500 or more Bitcoins. The study revealed that concealment, fraud, and deception are conceivable without government support and organization monitoring. In such situations, access to pertinent information may be lacking, resulting in information asymmetry.

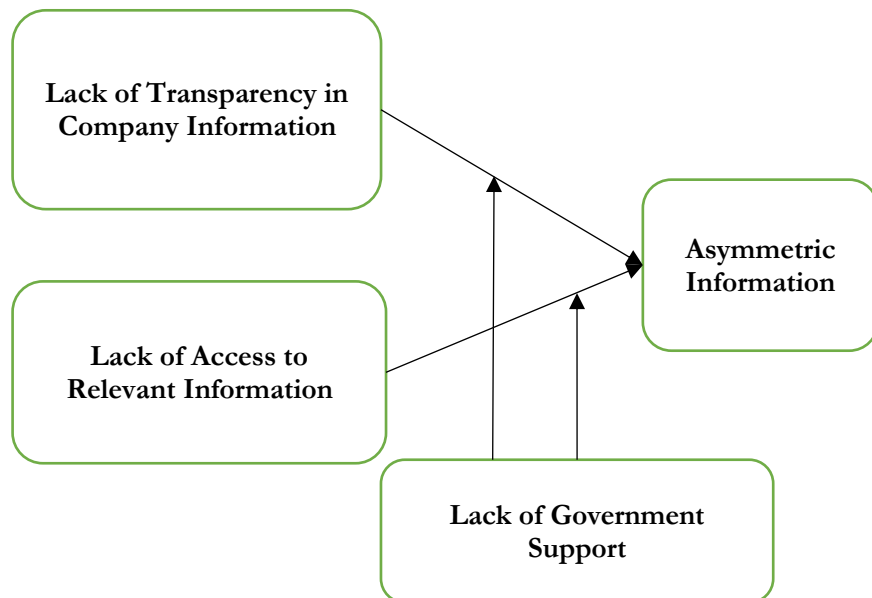
Therefore, the absence of government support strengthens the relationship between the dearth of access to pertinent information and asymmetric information. Shen, Choi, and Minner (2019) conducted a study to determine the connection between the lack of government support, access to pertinent information, and asymmetric information. The study suggests that infrastructure development and the information and communication network are weakened when certain business organizations are unconcerned with economic stability within a nation and do not provide economic or legal support. Consequently, there is a lack of access to information pertinent to the objects, transactions, or events at hand, which creates issues such as asymmetric information during certain transactions or contracts between parties. Thus, the absence of government support establishes a connection between the lack of access to pertinent information and information asymmetry.

**H4:** *Lack of government support moderates the lack of access to relevant information and asymmetric information.*

## Research Methods

The article examines the impact of lack of transparency in company information and lack of access to relevant information on asymmetric information, as well as the moderating role of lack of government support about lack of transparency in company information, lack of access to relevant information, and asymmetric information about financial markets in the Kurdish region. The study collected primary data from investors in the financial markets using survey questionnaires. Lack of transparency in company information is measured with four items extracted from Caputo et al. (2021). Lack of access to relevant information is measured with five items taken from Sievers, Wieschowski, and Strech (2021), lack of government support is measured with eight items extracted from Guenat, Dougill, and Dallimer (2020) and asymmetric information is measured with five items extracted from Sievers et al. (2021).

**Figure 1:** Research model



The investors of the financial market are selected as respondents for the investigation. The selection of these investors is based on straightforward random sampling. The questionnaires were distributed via personal visits and correspondence. The researchers sent approximately 546 questionnaires, but only 294 valid responses were received, or 53.84 percent. In addition, smart-PLS was employed to investigate the association between variables. It is a powerful statistical instrument that deals with primary data and provides the most accurate estimation using large data sets and complex models (Hair et al., 2017). The article employs two independent variables: lack of transparency in company information (LTCI) and access to pertinent information (LARI). In addition, one moderating construct, such as lack of government support (LGS), and one dependent variable, such as asymmetric information (ASI), were employed in the study. Figure 1 depicts the presented variables.

## Research Findings

The research investigates the convergent validity that revealed the correlation between items. It is validated using average variance extracted (AVE), and both tests' factor loadings and values exceed 0.50. Additionally, it is examined using composite reliability (CR) and Alpha, and the results of both tests are greater than 0.70. There was a strong correlation between these values. These numbers are presented in Table 1.

**Table 1:** Convergent validity

Constructs	Items	Loadings	Alpha	CR	AVE
Asymmetric Information	ASI1	0.705	0.853	0.885	0.693
	ASI2	0.799			
	ASI3	0.642			
	ASI4	0.639			
	ASI5	0.631			
	ASI6	0.661			
	ASI7	0.766			
	ASI8	0.752			
Lack of Access to Relevant Information	LARI1	0.934	0.935	0.953	0.836
	LARI2	0.915			
	LARI4	0.898			
	LARI5	0.909			
	LARI3	0.909			
Lack of Government Support	LGS1	0.901	0.921	0.937	0.681
	LGS2	0.827			
	LGS3	0.783			
	LGS4	0.928			
	LGS5	0.718			
	LGS6	0.874			
	LGS7	0.721			
	LGS8	0.721			
Lack of Transparency in Company Information	LTCI1	0.952	0.936	0.959	0.887
	LTCI2	0.929			
	LTCI3	0.944			
	LTCI4	0.944			

The research examines the discriminant validity that revealed the correlation between variables. It is validated using Fornell Larcker, and cross-loadings and values that reveal the construct's associations are greater than those that reveal the construct's associations with other constructs. These values indicated a weak relationship between variables. These numbers are provided in Tables 2 and 3.

**Table 2:** Fornell Larcker

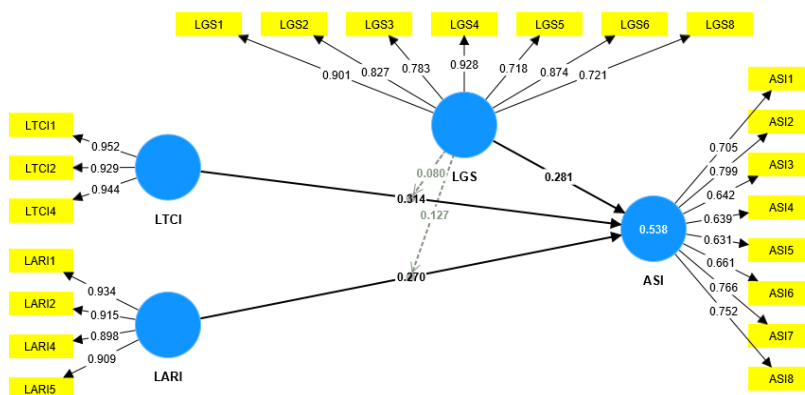
	ASI	LARI	LGS	LTCI
ASI	0.702			
LARI	0.427	0.914		
LGS	0.589	0.233	0.825	
LTCI	0.598	0.220	0.647	0.942

**Table 3:** Cross-loadings

	ASI	LARI	LGS	LTCI
ASI1	<b>0.705</b>	0.201	0.448	0.324
ASI2	<b>0.799</b>	0.316	0.310	0.358
ASI3	<b>0.642</b>	0.312	0.477	0.565
ASI4	<b>0.639</b>	0.224	0.370	0.203
ASI5	<b>0.631</b>	0.288	0.364	0.360
ASI6	<b>0.661</b>	0.333	0.448	0.477
ASI7	<b>0.766</b>	0.377	0.429	0.474
ASI8	<b>0.752</b>	0.289	0.407	0.450
LARI1	0.364	<b>0.934</b>	0.194	0.151
LARI2	0.430	<b>0.915</b>	0.256	0.234
LARI4	0.423	<b>0.898</b>	0.218	0.215
LARI5	0.323	<b>0.909</b>	0.171	0.193
LGS1	0.464	0.140	<b>0.901</b>	0.497
LGS2	0.368	0.114	<b>0.827</b>	0.402
LGS3	0.581	0.271	<b>0.783</b>	0.656
LGS4	0.504	0.170	<b>0.928</b>	0.523
LGS5	0.429	0.299	<b>0.718</b>	0.466
LGS6	0.434	0.134	<b>0.874</b>	0.498
LGS8	0.536	0.182	<b>0.721</b>	0.595
LTCI1	0.575	0.193	0.622	<b>0.952</b>
LTCI2	0.543	0.197	0.609	<b>0.929</b>
LTCI4	0.571	0.229	0.597	<b>0.944</b>

The research examines the discriminant validity that revealed the correlation between variables. Using the Heterotrait Monotrait (HTMT) ratio, it is determined that the values are less than 0.90. These values indicated a weak relationship between variables. These numbers are presented in Table 4.

**Figure 2:** Measurement model assessment



**Table 4:** Heterotrait Monotrait ratio

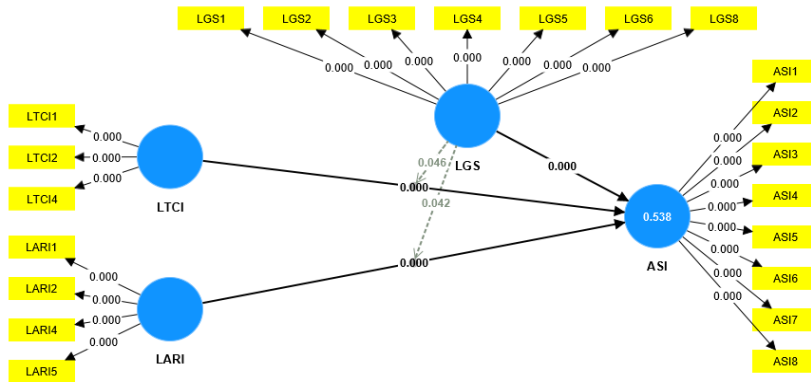
	ASI	LARI	LGS	LTCI
ASI				
LARI	0.460			
LGS	0.640	0.241		
LTCI	0.639	0.232	0.680	

The article's findings revealed that the lack of transparency in company information and access to pertinent information positively correlates with asymmetric information and supports Hypotheses 1 and 2. In addition, the results demonstrated that the absence of government support moderates the relationship between lack of transparency in company information, lack of access to relevant information, and asymmetric information regarding financial markets in the Kurdish region considerably and supports hypotheses H3 and H4. These connections are shown in Table 5.

**Table 5:** A path analysis

Relationships	Beta	Standard deviation	T statistics	P values
LARI -> ASI	0.270	0.043	6.237	0.000
LGS -> ASI	0.281	0.057	4.908	0.000
LTCI -> ASI	0.314	0.056	5.569	0.000
LGS x LARI -> ASI	0.127	0.062	2.042	0.042
LGS x LTCI -> ASI	0.080	0.040	1.998	0.046

**Figure 3:** Structural model assessment



## Discussions

The article examines the impact of lack of transparency in company information and lack of access to relevant information on asymmetric information, as well as the moderating role of lack of government support about lack of transparency in company information, lack of access to relevant information, and asymmetric information about financial markets in the Kurdish region. The results revealed a correlation between the lack of transparency in company information and asymmetric information. These results align with Cui et al.'s (2020) findings. The study demonstrates that when a company fails to superintend its operations and provides information through its documents without transparency, its stakeholders experience information asymmetry. These findings are also consistent with Seifert, Kahle, and Hüttel's



(2021) examination of the relationship between the absence of transparency in company information and information asymmetry. The study suggests that a lack of transparent information about a company's activities and conditions makes it difficult to communicate with third parties. This results in dissimilar information.

The results revealed a correlation between a lack of access to pertinent information and asymmetric information. These results align with Ripamonti's (2020) findings, which shed light on the role of quality information in reducing asymmetric information. The study explains that if a company cannot organize and provide pertinent information to interested parties, it unintentionally keeps them in the dark about its position, financial worth, and brand quality. Due to a dearth of information, information is asymmetric. These results are also consistent with Lakkakula, Bullock, and Wilson's (2022) assertion that some companies are cautious about internal matters and keep many company-related details confidential. In such a scenario, the parties involved in a contract cannot obtain facts and suffer from asymmetric information.

The absence of government support was a significant moderator between the lack of transparency in company information and asymmetric information. These results correspond to Cheung et al.'s (2021) findings. This previous study demonstrates that the dearth of government support for small and large business owners and organizations worsens economic conditions and reduces company information transparency. In the absence of government support, businesses advance toward information asymmetry. Therefore, when there is a lack of government support, there is a lack of transparency and asymmetries in company information. According to Zuo and Lin (2022), a company lacks a sense of responsibility and accountability if there is a lack of government support and legal security for the financial rights of investors, lenders, the general public, and other stakeholders. There is a lack of transparency in company information in this situation. And the absence of transparent information results in an informational imbalance.

The findings demonstrated that a lack of government support moderates the relationship between a lack of access to pertinent information and asymmetric information. These results are consistent with Jiang, He, and Huang's (2022) assertion that without government support, there is no specific legal check on businesses, and businesses at various phases cannot protect their rights to access quality information. As a consequence of the absence of pertinent information, there is an information asymmetry in the economy. These results are also consistent with Chundakkadan and Sasidharan's (2020) assertion that when the government is irrelevant and does not regulate the actions of individuals and businesses as legal support, many of the entities lack access to relevant information and exchange asymmetric information more frequently.

## **Implications**

The study has significant theoretical implications because it substantially contributes to the body of knowledge. The study investigates the effects of the lack of transparency in company information and the lack of access to pertinent information, along with a moderator such as government support, on asymmetric information. The study is also important to developing economies such as Iraqi Kurdistan. This article is a helpful guide for businesses and governments to avoid asymmetric information and its negative consequences. To reduce asymmetric information, the study advises businesses to overcome the dearth of transparent data. The study also provides a guideline that companies must engage in self-regulation to prevent a lack of access to pertinent data. It would reduce information asymmetry. Current research suggests that government must demonstrate a supportive attitude toward economic

entities and the general public. It would reduce the lack of transparency and asymmetry in company data. The article guides policymakers in developing policies to reduce the asymmetric information situation in financial markets by providing transparency in company information and access to pertinent financial market information. In addition, the study suggests that supportive government policies are necessary to reduce the lack of access to relevant information and its function in asymmetric information.

## Conclusion

The study aims to examine the effects of a company's lack of transparent information and the inaccessibility of pertinent information on asymmetric information. The authors are also interested in analyzing the relationship between the lack of transparency in company information, access to pertinent information, asymmetric information, and the lack of government support. The financial markets of the Kurdistan region served as the source of information for the research framework's factors. Data analysis revealed a correlation between a lack of transparency in company information, access to pertinent information, and asymmetric information. The results indicated that if a company does not demonstrate a sense of responsibility and provides less transparent information to parties associated with it, it is possible that those parties do not have complete information and that there is information asymmetry. If a company cannot access pertinent information or share relevant information with others, resulting in asymmetric information, then there is an imbalance of information between the parties. The study also concluded that a significant moderator between the lack of transparency in company information, the lack of access to pertinent information, and asymmetric information is the absence of government support. If government support is lacking, there may be a lack of transparency in company information and access to pertinent data. In this circumstance, it is more common for there to be asymmetries in information.

## Limitations

Despite its implications, this study has some limitations. Hopefully, these restrictions will be eliminated in future literature. First, the authors examined only two factors influencing asymmetric information: the lack of transparency in company information and access to pertinent information. Future researchers must pay close attention and increase the number of variables in their research models to produce reliable results. The information for the article was obtained from respondents in the Kurdistan region's financial markets. For the study's implications to be expanded, authors must examine the relationship between these factors in more economies.

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