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The Effects of Information Asymmetry on Audit Fees

Dongfang Zhang[1,a,*]

[1]*College of Letters and Science, University of California, Santa Barbara, California, 93106, United States*
a. dongfang@ucsb.edu
**corresponding author*

Abstract: Audit fees refer to the financial compensation received by accounting firms and auditors in return for the delivery of their professional services. These services encompass a range of operations, including the analysis of financial statements, evaluation of internal controls, and performance of numerous other tasks linked to auditing. Typically, organizations remunerate external audit firms for their services through fees, which can be either annual or based on the specific services rendered. The remuneration for audit services is commonly subject to variability, with adjustments made based on the particular audit engagement's scope and complexity. This paper delves into the correlation between information asymmetry and audit fees. The concept of information asymmetry arises when there is an unequal distribution of information between two parties involved in a transaction, leading to an imbalance in knowledge. This phenomenon has a notable influence on the determination of audit fees. This paper examines the theoretical underpinnings, empirical findings, and practical ramifications of the impact of information asymmetry on audit costs and the quality of audit services. The work analyzes the elements that contribute to information asymmetry by conducting a comprehensive review of current literature and empirical studies. Through this analysis, the study sheds light on the complex dynamics between information asymmetry, audit fees, and audit quality.

Keywords: Audit Fees, Information Asymmetry, BAS

1. Introduction

Financial statements play a crucial role in facilitating communication between firms and their investors. The supply of precise financial reports is of utmost importance in guaranteeing the efficiency and credibility of a corporation. The book "Financial Accounting" highlights the considerable importance of financial statements for both internal and external stakeholders. The establishment and sustenance of investor confidence is significantly contingent upon the caliber of these financial reports (3-10) [1]. Given the aforementioned assertion, the necessity for external auditing emerges as a crucial component in ensuring the integrity of financial accounts. However, the matter of establishing an equitable and logical audit charge has emerged as a complex subject of discourse.

The presence of information asymmetry is a prevalent concern within the realm of financial markets and organizations. The quantification of information asymmetry has garnered the interest of economists, as it is seen as a means to address trust issues and foster an improved corporate climate.

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Within the realm of audit services, the concept of information asymmetry pertains to the disparities in knowledge and information accessibility that exist between auditors and their clients. This discrepancy frequently results in heightened levels of audit risk. Audit fees, which refer to the remuneration provided by clients to external audit companies, are subject to the effect of multiple factors, with knowledge asymmetry being a crucial determinant. The objective of this paper is to offer a comprehensive analysis of the impact of information asymmetry on the price of audit services. This will be achieved through an examination of various empirical research and theoretical frameworks.

Upon reviewing Dr. Richardson's material, it becomes evident that certain firms frequently engage in the practice of presenting financial statements that lack transparency, with the intention of concealing information from both auditors and the general public [2]. As a result, auditors encounter difficulties when providing informed assessments regarding the dependability of these companies' reports. The study conducted by Alex Frino offers a valuable quantitative methodology for assessing and quantifying information asymmetry. This statement presents two well-established indicators of information asymmetry, namely the bid-ask spread (BAS) and the probability of informed trading (PIN). The study's empirical findings provide evidence of a positive relationship between knowledge asymmetry and audit fees [3].

The paper conducted an in-depth examination of pertinent research articles pertaining to the concept of information asymmetry and its relationship with audit fees. The main aim of this study was to acquire a more comprehensive understanding of quantitative indicators of information asymmetry and approaches to mitigate its impact, with the ultimate objective of enhancing the overall business and investment climate.

2. Factors Causing Information Asymmetry

To begin with, numerous studies have underscored the importance of financial reporting in influencing the level of information asymmetry. The scholarly article titled "The Impact of Financial Statements Quality on Information Asymmetry and Investment Efficiency: A Moderating Variable Analysis in the Mining Industry" explores the theoretical framework of Agency Theory. This theory investigates the dynamics between a principal and an agent, emphasizing the inherent conflict of interests that arises when both parties strive to maximize their individual gains. In instances of this nature, the agent may deviate from the principal's initial intentions in order to pursue their own personal advantages. In the present scenario, the occurrence of information asymmetry becomes evident [4]. Within a corporate context, the concept of information asymmetry refers to a situation when the financial statements of a company fail to accurately depict the true operational condition of the organization. As a result, this can have detrimental effects on decision-making processes related to future investments. When internal reports contain mistakes, it results in a loss of trust from investors and the public. The Agency Theory can be more readily comprehended when viewed through the lens of moral considerations. Farid Sumantri provides a comprehensive explanation of the idea known as "Moral Hazard," which pertains to the phenomenon where managers and other individuals with insider knowledge has a greater understanding of a company's problems and prospects compared to external parties. Furthermore, it is possible that there exist certain pieces of information that have not been presented to the principal [5]. The presence of external auditors plays a vital role in rectifying these mistakes. Nevertheless, it can be argued that companies that possess intricate financial statements and lack transparent disclosures are more likely to have information asymmetry. Consequently, these organizations may require more comprehensive audit services, resulting in higher associated costs.

Moreover, when dealing with larger and more intricate organizational entities, auditors may encounter difficulties in terms of accessing and comprehending the substantial amount of information available. An expansion in corporate size is accompanied by a corresponding rise in staff count, which

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consequently raises the probability of ethical issues arising. The efficacy of internal control systems may be compromised, particularly in situations where a significant number of knowledgeable personnel work inside a single department. Despite the high level of trustworthiness exhibited by workers within a huge corporation, the information emanating from such an organization can significantly augment the workload of auditors. As a result, this frequently results in increased audit fees for clients with these characteristics. However, it is crucial to acknowledge that information asymmetry extends beyond instances where auditors deliberately receive inaccurate information. Furthermore, it is worth noting that it can also be construed as supplementary labor, so exemplifying an additional facet of information asymmetry.

3. Relationship Between Information Asymmetry and Audit Fees

To comprehensively examine the impact of information asymmetry on audit fees, it is important to go into specific aspects. The presence of information asymmetry results in an elevation of the inherent audit risk, prompting auditors to spend additional efforts in order to mitigate this risk. The increased perception of audit risk serves as a significant determinant for elevated audit fees. According to Greg Clincha, it has been seen that auditors with substantial financial stakes in litigation, commonly referred to as "deep pockets," are more motivated to give accurate findings, resulting in the production of superior outcomes [6]. This statement suggests that auditors bear the responsibility of potential legal action arising from the audits they do. When auditors are confronted with a less transparent report from a sizable corporation, they assume the responsibility and potential repercussions for any mistakes contained within the reports disseminated to the public, irrespective of whether these inaccuracies are primarily derived from the material furnished by the company. On the contrary, auditors have the option to collaborate with corporations in order to generate deceptive audit reports, so misleading investors. Audit risk is influenced by the presence of information asymmetry between the company and the auditor, which arises from both parties. Regardless of the circumstances, auditors are obligated to assume responsibility for this additional risk. The increased level of risk associated with a certain situation always leads to a corresponding increase in compensation, specifically in the form of audit fees.

Moreover, in the presence of information asymmetry, auditors are faced with the necessity of employing supplementary audit processes to safeguard the veracity of the financial statements under scrutiny. The additional procedures often entail a more comprehensive and thorough examination of the data provided by the client organization. The primary objective of this endeavor is to identify any anomalies or inconsistencies that may not be readily evident in the financial records that are already characterized by a higher level of transparency. For instance, the analysis extensively examines the financial data in order to identify any indications of fraudulent behavior or misuse of financial resources. The process encompasses methodologies such as data analytics and pattern recognition in order to detect suspected illicit activity. The implementation of these supplementary audit procedures is characterized by a significant expenditure of time and resources. It is imperative for auditors to allocate more time to the audit procedure. Furthermore, the implementation of these comprehensive procedures frequently necessitates the utilization of specialist equipment and technology, as well as additional human resources, resulting in supplementary expenses. These several elements all add to an increased cost associated with executing the audit.

Consequently, the heightened risk, allocation of efforts, allocation of resources, and allocation of time devoted to mitigating the issues arising from knowledge asymmetry are manifested in the audit costs levied onto the client organization.

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4. Quantify Information Asymmetry and Effect on Audit Fees

Numerous empirical studies continuously reveal a positive association between information asymmetry and audit fees, indicating that companies with higher levels of knowledge asymmetry tend to experience higher audit costs. In order to gain a deeper understanding of this correlation, Professor Alex Frino developed the utilization of proxy variables, namely the Bid-Ask Spread (BAS) and the Probability of Informed Trading (PIN) [3]. BAS, widely recognized as a measure of market transparency, functions as a tool for assessing market dynamics. The concept being discussed involves the measurement of the disparity between the maximum price at which a purchaser is willing to acquire a security or asset (known as the bid) and the minimum price at which a seller is willing to sell (known as the ask) [7]. A lower bid-ask spread in a market reflects a decrease in information asymmetry, as it indicates that trade takes place within a relatively limited price range, hence implying a more transparent trading environment. On the other hand, a more extensive dispersion indicates an increased level of information asymmetry. This is due to the fact that a wider spread suggests a broader range of prices in trading, which is generally linked to a market that lacks transparency and involves several uneducated players making varied selections. PIN measures market information asymmetry by estimating the probability that a trade is informed [8]. Information asymmetry affects audit expenses, as shown by the association between market proxies BAS and PIN and audit fees. Information disclosure and transparency, with a narrow BAS and less PIN, sometimes lead to lower audit fees. As information asymmetry increases, audit costs rise in markets with larger BAS and increased PIN. This tendency acknowledges auditing's increased complexity and risks.

The inclusion of BAS and PIN as established proxies in Professor Frino's regression model provides more evidence supporting their validity in assessing information asymmetry and its influence on audit fees. The findings are consistent with anticipated outcomes, illustrating a favorable and direct relationship between knowledge asymmetry and audit fees. This empirical evidence substantiates the proposition that greater information asymmetry is associated with heightened audit expenses. This highlights the pragmatic and dependable nature of employing these proxies to objectively evaluate the financial ramifications of knowledge asymmetry within the framework of audit fees.

The equation presented below represents the linear regression model employed by Professor Frino in order to compute the correlation between information asymmetry and audit fees. The regression model facilitates the examination of the impact of different factors on audit fees and the comprehension of their statistical associations by researchers. The coefficients associated with each variable in the model offer insights into their respective effects on audit fees.

$$\begin{aligned}\mathrm{Afee}_{i,t} = {} & \alpha_0 + \alpha_1 \mathrm{Asymmetry}_{i,t} + \alpha_2 \mathrm{Debt3}_{i,t} + \alpha_3 \mathrm{Rating}_{i,t} + \alpha_4 \mathrm{Size}_{i,t} + \alpha_5 \mathrm{Growth}_{i,t} + \\ & \alpha_6 \mathrm{Leverage}_{i,t} + \alpha_7 \mathrm{Current}_{i,t} + \alpha_8 \mathrm{Quick}_{i,t} + \alpha_9 \mathrm{YE}_{i,t} + \alpha_{10} \mathrm{Segment}_{i,t} + \alpha_{11} \mathrm{Foreign}_{i,t} + \\ & \alpha_{12} \mathrm{ROA}_{i,t} + \alpha_{13} \mathrm{Big4}_{i,t} + \alpha_{14} \mathrm{CloseShare}_{i,t} + \alpha_{15} \mathrm{Debtq}_{i,t} + \alpha_{16} \mathrm{Icweak}_{i,t} + \alpha_{17} \mathrm{Specialist}_{i,t} + \\ & \alpha\ \mathrm{Year\ Effects} + \alpha\ \mathrm{Industry\ Effects} + \varepsilon_{i,t}\end{aligned} \tag{1}$$

Applying data from over 200 firms to the regression model (1) yielded results that align with the expected outcomes. The result is shown in table 1. Notably, when the bid-ask spread (BAS) increases by 1%, audit fees exhibit a significant 6 percent increase. This revealed the positive correlation between information asymmetry and audit fees. Moreover, the positive correlation between audit fees and company size from this table confirms the concept mentioned in the beginning of this article, said that larger companies tend to incur higher audit costs.

An intriguing note in the findings is the presence of a negative link between debt and audit fees. The observed inverse correlation indicates that there is a tendency for audit fees to decrease as a

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company's amount of debt grows. The seeming paradoxical correlation can be elucidated by the influence of debt as a mechanism for external oversight or regulatory supervision. Debt entails the involvement of supplementary stakeholders that possess a vested interest in monitoring the fiscal well-being of the organization. The heightened level of external monitoring has the potential to enhance information transparency, hence diminishing the necessity for comprehensive audit services and consequently resulting in reduced audit prices.

To summarize, the empirical results obtained from examining data from more than 200 firms shed light on several key observations. Firstly, they underscore the substantial influence of information asymmetry on audit fees. Secondly, they establish a positive association between audit fees and company size. Lastly, they suggest that debt may have advantageous effects in promoting information transparency, thereby potentially leading to a decrease in audit fees. The findings of this study offer significant contributions to the understanding of the financial consequences associated with information asymmetry and audit expenses.

Table 1: Regression results: audit fees and information asymmetry [3]

		Panel A: BAS			Panel B: PIN		
		Dep. Var.: Afee			Dep. Var.: Afee		
Variable	Exp. Sign	Coeff.	p-Value	Sign.	Coeff.	p-Value	Sign.
Intercept	+	-3.5154	0.000	1%	-3.3524	0.000	1%
BAS	+	0.0635	0.027	5%			
PIN	+				0.1263	0.070	10%
Debt3	-	-0.2603	0.000	1%	-0.3293	0.000	1%
Rating	-	-0.0195	0.000	1%	-0.0169	0.008	1%
Size	+	0.5848	0.000	1%	0.5904	0.000	1%
Growth	-	-0.0004	0.637		-0.0006	0.557	
Leverage	+	0.4976	0.010	1%	0.7238	0.002	1%
Current	+	0.9516	0.000	1%	0.8897	0.000	1%
Quick	-	-0.1699	0.000	1%	-0.1535	0.000	1%
YE	-	0.0284	0.301		0.0549	0.086	10%
Segment	+	0.1274	0.000	1%	0.1294	0.000	1%
Foreign	+	0.1048	0.000	1%	0.1058	0.000	1%
ROA	-	-0.0734	0.718		-0.2418	0.296	
Big4	+	0.0829	0.000	1%	0.0933	0.001	1%
CloseShare	-	0	0.998		0.0000	0.060	10%
Debteq	+	-0.0003	0.433		-0.005	0.538	
Icweak	+	0.2409	0.038	5%	0.2963	0.024	5%
Specialist	+	0.1136	0.000	1%	0.1052	0.000	1%
Year Indicators		Included			Included		
Industry Indicators		Included			Included		
Adj R^2		0.8			0.81		
F-Stat		86.52			69.65		
N		1481			1114		

To validate the model's accuracy, Professor Frino and his research team conducted robustness tests. Table 2 presents the findings of a particular examination, which luckily indicate few faults or variances. This result enhances the dependability of the model and indicates that its conclusions are resilient and uniform across many circumstances or modifications. This finding enhances the level of

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confidence in the model's capacity to effectively capture the correlation between the variables and audit fees.

Table 2: Robustness Test [3]

		Panel A: BAS			Panel B: PIN		
		Dep. Var.: Afee			Dep. Var.: Afee		
Variable	Exp. Sign	Coeff.	p-Value	Sign.	Coeff.	p-Value	Sign.
Intercept	+	-1.4445	0.067	10%	-1.3939	0.059	10%
BAS	+	0.0953	0.022	5%			
PIN	+				0.0972	0.063	10%
Debt3	-	-0.4648	0.083	10%	-0.4978	0.054	10%
Rating	-	-0.0014	0.008	1%	-0.0045	0.005	1%
Size	+	0.5702	0.000	1%	0.5679	0.000	1%
Growth	-	-0.0033	0.258		-0.0036	0.283	
Leverage	+	0.3582	0.013	1%	0.3153	0.019	1%
Current	+	0.4460	0.010	1%	0.4884	0.009	1%
Quick	-	-0.1302	0.015	1%	-0.1263	0.008	1%
YE	-	-0.2111	0.010	1%	-0.2195	0.001	1%
Segment	+	0.2418	0.000	1%	0.2428	0.000	1%
Foreign	+	0.2187	0.000	1%	0.2156	0.000	1%
ROA	-	-0.0936	0.315		-0.1057	0.299	
Big4	+	0.0971	0.001	1%	0.1274	0.002	1%
CloseShare	-	0.0003	0.586		0.0003	0.452	
Debteq	+	-0.0009	0.779		-0.0020	0.600	
Icweak	+	0.3943	0.022	5%	0.3603	0.021	5%
Specialist	+	0.0541	0.021	5%	0.0608	0.033	5%
Adj R^2		0.60			0.60		
F-Stat		66.89			77.11		
N		1481			1114		

In essence, Professor Frino's study effectively establishes a robust correlation between knowledge asymmetry and audit fees. Consequently, this study posits that organizations can employ this understanding to potentially reduce forthcoming operating expenses. Audit fees commonly represent a substantial proportion of corporations' administrative expenditures. By implementing efficient internal controls in their daily operations, organizations have the ability to achieve cost reduction while also significantly improving their market credibility. Furthermore, the research indicates that there is a possibility of deliberate manipulation of information asymmetry by specific organizations in order to obtain competitive advantages. This highlights the significance of mitigating such conduct through the implementation of regulatory measures. It is worth noting that the existence of debt has the capacity to alleviate information asymmetry, suggesting that the implementation of more stringent regulatory measures, with the exception of auditing, may have the ability to decrease information asymmetry. Furthermore, the utilization of the research findings can serve as a means for auditing organizations to optimize their operational efficiency. The provided information can be employed to evaluate the risk associated with organizations and allocate suitable personnel for the execution of audit services.

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5. Conclusion

The primary focus of this paper pertained to the concept of information asymmetry and its correlation with audit fees. This observation underscores the notion that variables such as the accuracy and reliability of financial statements, the magnitude of a company's operations, and the extent of its transparency can all play a role in the presence of information asymmetry. The article substantiated the existence of a positive association between audit fees and information asymmetry by an extensive examination of relevant scholarly works. Nevertheless, the article acknowledges its inherent constraints. The method employed in this study is predominantly centered around a comprehensive analysis of current literature, so ensuring that the information and conclusions drawn are firmly grounded in established research and empirical evidence. In order to enhance the currency and comprehensiveness of findings, forthcoming research endeavors may get advantages from conducting empirical investigations utilizing authentic, real-world datasets. Engaging in novel research endeavors would facilitate the acquisition of current and comprehensive data. The crucial importance of accounting in fostering trust within the economy cannot be overstated. It is crucial to acknowledge the association between information asymmetry and audit fees. Transparency measures can be implemented by companies in order to improve market efficiency and reduce audit expenses. In order to bridge the divide between firms and investors, auditors are required to uphold a high standard of honesty. In summary, the establishment of collaborative efforts between corporations and auditors serves to enhance transparency, mitigate information asymmetry, and foster economic trust.

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