Evaluation of the Effects of Corporate Governance on Financial Reporting Quality

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Corporate governance is designed to stimulate the investment environment and to create a stable financial situation in the capital markets by increasing the level of reliability, transparency, and accountability at the firm level. This study aims to examine whether corporate governance leads to higher quality financial reporting. This research has been performed using companies listed on Borsa İstanbul (BIST). For this purpose, two samples from the publicly held companies on BIST, which are included in the Corporate Governance Index and which are not included in this index, have been formed. Thus, we examined whether there is any difference between the financial reporting quality of the companies listed in Borsa Istanbul Corporate Governance Index and the financial reporting quality of the enterprises that are not included in this index. Since the quality of financial reporting is a multi-dimensional concept, it can be evaluated by different measurement methods focusing on different dimensions in the literature.

One of these approaches used to measure the quality of financial reporting is the quality of earnings. The evaluation of the financial reporting quality of the enterprises included in the BIST Corporate Governance Index and the enterprises not included in the index were evaluated through different methods to compare two different samples in the context of the earnings quality approach. Panel data analysis was used to evaluate the financial reporting quality of the two samples by means of earnings quality methods. The data related to the models used in the assessment of financial reporting quality were obtained from the Public Disclosure Platform (KAP) and Equity RT database. The research covers 72 enterprises, 36 of which are in the Corporate Governance Index and 36 of which are not in the Corporate Governance Index.

Keywords: financial reporting quality, corporate governance, accounting quality, earnings quality, panel data analysis

Introduction

Statement of the Problems

In theory, it is stated that one of the most important functions of corporate governance is to improve the financial reporting quality of enterprises. Therefore, in this study, it is examined whether there is a difference between the financial reporting quality of companies with high compliance with Corporate Governance Principles and those with low compliance with these principles.

Objectives

The purpose of this study is to examine whether there is a difference between the financial reporting...
quality of the companies included in Borsa Istanbul (BIST) Corporate Governance Index and the financial reporting quality of the companies not included in this index.

Scope of the Study

In this research, the companies listed on BIST were examined. For this purpose, two separate samples were created from the companies listed on the BIST, which were included in the Corporate Governance Index and not included in the Corporate Governance Index. Nine out of 47 enterprises included in the BIST Corporate Governance Index operate in the financial sector. Since the financial statements of the enterprises operating in the financial sector were different, these enterprises were excluded from the research scope. The two enterprises within the scope of the study were excluded from the scope due to the fact that the study did not have continuous data in the time interval. Therefore, a total of 72 enterprises data were used, 36 of which were included in the Corporate Governance Index and 36 of which were not included in the Corporate Governance Index. The data related to the variables in the models used to compare the financial reporting quality of the enterprises in both sample groups were obtained from Public Disclosure Platform (KAP) and Equity RT database. Since the calculation date of the first corporate governance index of the enterprises was 31.08.2007, the research covered a period of 11 years including the years 2008-2018.

Literature Review

Financial Reporting Quality

Since financial reporting quality is a multi-dimensional concept, there is no generally accepted definition in the literature. Generally, financial reporting quality can be defined as the extent to which an entity’s reported financial performance reflects an entity’s performance and is useful in predicting future cash flows (Robinson & Henry, 2009, p. 724). An entity is considered to have good financial reporting quality if it has reports that provide complete, objective, and error-free information about its overall economic condition and performance (Gaynor, Kelton, Mercer, & Yohn, 2016, p. 2). As can be seen from the definition, quality financial reports have dimensions of “completeness”, “predictive and confirmatory”, and “neutrality and freedom from error”.

Since financial reporting quality has three dimensions as “predictive and confirmatory”, “neutrality and freedom from error”, and “completeness”, there are various approaches in the literature focusing on measuring these dimensions of financial reporting quality. These approaches can be categorized into three categories as qualitative characteristics of useful financial information, measurement of earnings quality, and external indicators of financial reporting quality. Each methodology in each approach that evaluates the quality of financial reporting focuses on the different characteristics of useful financial information outlined in the Conceptual Framework. The approach based on the qualitative characteristics of useful financial information also accepts that the reports bearing the basic and supporting qualitative characteristics of the financial information specified in the Conceptual Framework are of high-quality (Beest, Braam, & Boelen, 2009, pp. 5-8).

In the approach of evaluating the quality of financial reports in terms of quality of earnings, if the reported earnings are high quality, the financial reporting quality is accepted high (Baxter, 2007, p. 28). Earnings quality is evaluated by measurement methods in two main groups: accounting and market-based (Francis, Olsson, & Schipper, 2006, p. 38; Gaynor et al., 2016, pp. 3-4; Beest et al., 2009, pp. 5-8). Based on accounting measurement methods, earnings management is the quality of accrual, persistence of earnings, smoothness of
earnings, predictability earnings, and meeting or exceeding earnings targets. Researches assessing the quality of financial reports through accrual quality, persistence of earnings, smoothness of earnings, and predictability earnings, focus on the “predictive and confirmatory dimension of reporting quality”. The predictive and confirmatory dimension is related to compliance with the need from the basic qualitative characteristics of useful financial information. Earnings management and methods to meet or exceed earnings objectives focus on the “neutrality and freedom from error” dimension of reporting quality. The dimension of neutrality and freedom from error is related to the fair presentation of useful financial information (Francis et al., 2006, p. 38; Gaynor et al., 2016, pp. 3-4; Beest et al., 2009, pp. 5-8).

Based on market-based measurement methods in earnings quality approach, there are earnings response coefficient, value relevance, timely loss recognition, and conservatism. The value relevance and earnings response coefficients of market-based methods focus on “neutrality and freedom from error”, “completeness”, and “predictive and confirmatory” dimension of reporting quality. Timely loss recognition and conservatism methods focus on the “predictive and confirmatory dimension of reporting quality”. Market-based measures of earnings quality aim to measure perceived financial reporting quality (Francis et al., 2006, p. 38; Gaynor et al., 2016, pp. 3-4; Beest et al., 2009, pp. 5-8). In the financial statements, restatements, errors, frauds, misrepresentation of earnings, disclosure of internal control weaknesses, and voluntary disclosure level methods are classified as approaches based on external indicators of financial reporting quality. The voluntary disclosure level of these measurements focuses on the completeness dimension of reporting quality, while other measurements focus on the neutrality and freedom from error of reporting quality (Gaynor et al., 2016, pp. 3-4; Beest et al., 2009, pp. 5-8; Dechow, Ge, & Schrand, 2010, p. 346).

In this research, evaluation of financial reporting quality is in the context of earnings quality approach. It is examined whether corporate governance provides high-quality financial reporting by using persistence of earnings and value relevance methods, and measurement of the quality earnings quality methods.

The Relationship Between Corporate Governance and Financial Reporting Quality

According to the Conceptual Framework for Financial Reporting, Turkey Financial Reporting Standards, and Turkey Accounting Standards, the purpose of general purpose financial reporting is to provide financial information that will be useful in making decisions to fund existing and potential investors, lenders, and other lending parties (Kamu Gözetimi Muhasebe ve Denetim Standartları Kurumu, 2018, p. 7). The financial information presented to the users of the financial statements is useful if the financial information indicated in the conceptual framework has the basic and supporting qualitative characteristics. Qualitative characteristics of useful financial information reflect characteristics of financial reporting quality. Relevance one of the basic qualitative characteristics of useful financial information is indicates the “predictive and confirmatory dimension financial of financial reporting quality. The “the neutrality and freedom from error” and “completeness” dimension of financial reporting quality are related to the presentation of useful financial information in a faithful representation. Since financial reporting is the basis of economic decision-making by the stakeholders of the enterprise, the usefulness of the information provided by the enterprises depends on the high-quality of the information provided. The provision of high-quality financial information is important as it positively affects capital markets and other stakeholders, making investment, financing and similar allocation decisions that increase overall market efficiency (Akeju & Babatunde, 2017, p. 3749).
The incidence of accounting scandals around the world, such as Enron, Worldcom, Marconi, and Parmalat has reduced the trust of business partners and investors in the financial reporting quality of enterprises. Establishing a corporate governance mechanism in enterprises has become important in order to provide relevant, reliable, and accurate information to the stakeholders of the enterprises (Akeju & Babatunde, 2017, p. 3749). Corporate governance is a management approach related to the creation of a value during the operations of the enterprise and the participation of the parties involved in this process in the most effective and efficient manner, the establishment, control, and maintenance of mechanisms that ensure the equitable sharing of the resulting value\(^1\). The basis of this management approach is based on representation theory.

Agency theory refers to the emergence of agency problems due to the separation of ownership and control in enterprises. Shareholders want managers to aim to maximize their business activities and wealth. However, since shareholders are dispersed, they do not have the ability to directly monitor and control the actions of managers. At the same time, managers play an effective role in making decisions about the business, such as the choice of accounting policies, because they have more information than shareholders. This information asymmetry between managers and shareholders is costly for shareholders and adversely affects the right decisions. Therefore, shareholders need a corporate governance mechanism in order to monitor and evaluate the activities of managers. In the corporate governance mechanism, financial reports are an important tool for increasing the accountability of the manager in the whole process of managing the business, eliminating the costs of agency problem among the shareholders and managers and shaping the decisions of the decision-makers including the shareholders (Ariefiara & Utama, 2018, p. 171).

Transparency and accountability, which are one of the principles of corporate governance, provide financial reports which are a tool among business stakeholders to be more reliable and accurate and provide quality reports to information users. Therefore, it is argued that one of the most important functions of the corporate governance mechanism is to improve the quality of financial reporting (Cohen, Krishnamoorthy, & Wright, 2004, p. 1). Figure 1 shows the corporate governance structure and its impact on financial reporting quality.

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\(^1\) See http://www.spk.gov.tr/Duyuru/Goster/20111011/0, access date 01.06.2019.
Other elements shown in Figure 1 also affect corporate governance effectively outside the enterprise and form part of a whole to protect the interests of the stakeholders of the enterprise. External stakeholders, such as regulators, legislators, financial analysts, stock exchanges, courts, and the legal system and shareholders are influential in shaping the interaction between more directly involved elements of the enterprise management. In summary, Figure 1 shows the elements of the corporate governance process and highlights the potential interactions between these elements. This interaction between corporate governance actors positively affects the quality of financial reporting by the implementation of transparency and accountability principles (Cohen et al., 2004, pp. 1-3).

In our country, the Corporate Governance Principles issued by the Capital Markets Board in July 2003 were prepared for publicly-held joint stock companies and their implementation was made optional. With the entry into force of the Turkish Commercial Code No.6102 in 2011, these principles were revised in detail by the CMB Communiqué Serial: IV, No.54 on the Determination and Implementation of Corporate Governance Principles. As a result of this regulation, some of the corporate governance principles have become compulsory to be applied except for the banks whose shares are listed in Borsa İstanbul and listed in BIST 30 index. BIST Corporate Governance Index covers the prices and the prices of the companies whose shares are traded on

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Borsa İstanbul markets (except for the Close Monitoring Market and C and D requests) and whose corporate governance rating is at least 7 out of 10 and at least 6.5 out of 10 in each main title. It was created to measure the return performance. The Corporate Governance Principles compliance rating is given by the rating agencies listed in the list of rating agencies determined by the CMB as a result of the assessment of the company’s compliance with all corporate governance principles. The calculation of the Corporate Governance Index has started on 31.08.2007.3

Research Hypotheses

In the studies that deal with the relationship between corporate governance and financial reporting quality, the impact of variables, such as board characteristics, audit committee characteristics, and ownership structure, which are the elements of corporate governance, is tested as indicators of corporate governance. In this research, whether there is a difference between the financial reporting quality of companies with compliance score between 7 and 10 and those with compliance score less than 7 is tested with different methods used to evaluate financial reporting quality.

Research Methodology

Method of Research

In the research, balanced panel data analysis is used to estimate the models used to measure financial reporting quality. Panel data analysis was performed using Eviews 9 Package Program. The models were tested for variance and autocorrelation problems before estimating the models. In the presence of these statistical problems, the models were estimated by correcting them. In the panel data analysis, pooled regression, fixed effect, and random effect model regression approaches are used to estimate coefficients. If the horizontal cross-sectional dimension is drawn randomly from a large mass, random-effects model are preferred, and if a more specific data set is used, it is preferred to use fixed-effect models (Tatoğlu, 2016, p. 79). Since the companies included in the corporate governance index and the companies not included in the Corporate Governance Index operate in different sectors, a random-effect model approach is used in this research.

Models Used to Evaluate Quality of Financial Reporting

Since financial reporting quality is a multi-dimensional concept, it is evaluated with different measurement methods focusing on different dimensions in the literature. One of these approaches used to measure financial reporting quality is earnings quality. This approach recognizes that the higher the quality of reported earnings is, the higher the quality of financial reports is. The financial reporting quality of the companies included in the BIST Corporate Governance Index and non-index companies formed within the scope of this research are evaluated within the context of the earnings quality approach. In the context of earnings quality, persistence of earnings is used from accounting based methods and value relevance is used from market-based methods.

Earnings Persistence

Persistence of earnings is a method based on the quality of earnings used to evaluate the financial reporting quality. Persistence of earnings can be defined as the extent to which current period earnings continue in the future (Ewert & Wagenhofer, 2010, p. 28). In the accounting literature, if a portion of the current period’s earnings (for example, an increase in sales revenue) is sustainable in future periods, the earnings are continuous.

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Sustainable earnings are more permanent and of high-quality. Temporary gains are less permanent and of low-quality (Schipper & Vincent, 2003, p. 2; Perotti & Wagenhofer, 2011, p. 6). Generally, it is accepted that the earnings from the continuous operations of the enterprise can be more sustainable and the earnings from unusual operations cannot be sustainable in every period. Operating earnings in the income statement is a good indicator of future earnings; earnings are quality (Penman & Zhang, 2002, p. 237). Reports with high earnings quality are considered high-quality financial reporting. The measure of persistence of earnings focuses on the predictive and confirmatory dimension of financial reporting quality (Gaynor et al., 2016, p. 4). Within the scope of the research, the continuity of earnings is measured by using the earnings of the $i$ entity in the period $t$ and $t+1$. The model used to measure the persistence of earnings is given below. In the model, earnings are proportioned to the value of the total assets of the enterprises or the number of shares. In this research, earnings are proportioned to total asset value of enterprises. In this measurement equation, the closer the coefficient $\beta_1$ is to 1, the more persistence the earnings are. As this value approaches 0, the persistence of earnings decreases (Dechow et al., 2010, p. 352; Francis et al., 2006, p. 43).

$$Earnings_{i,t+1} = \beta_0 + \beta_1 Earnings_{i,t} + \epsilon_{i,t}$$

$Earnings_{i,t+1} =$ Earnings from continuing operations for the year $t + 1$ of the enterprise $i$

$Earnings_{i,t} =$ Earnings from continuing operations for the year $t$ of the enterprise $i$

$\epsilon_{i,t} =$ error term

$i =$ enterprise indicator

$t = 1, \ldots, t_i$ indicator for years

It is accepted that if the earnings of the enterprise are close to 1 according to the $\beta_1$ coefficient, the earnings are considered to be continuous and have high earnings quality and high financial reporting quality.

**Value Relevance**

Value relevance is used as the second criterion in the measurement of financial reporting quality. The value relevance is a market-based measure of earnings quality and is one of the perceived approaches to financial reporting quality measurement. The value relevance can be defined as the power of accounting numbers figures to explain the change in stock returns. When the value relevance has the capacity to disclose the market price and/or market return of the entity, the reported earnings of the enterprises are considered to be of high-quality (Francis et al., 2006, p. 46). The high-quality of earnings in financial reports is an indication of the high-quality of the reports. The value relevance focuses on relevance and fair presentation from the basic qualitative characteristics of financial reporting quality, since earnings are considered to be relevant and reliable if the earning information discloses the market value of the enterprise (Beest et al., 2009, p. 7). Therefore, it can be stated that the reporting quality of this method focuses on dimension “completeness”, “predictive and confirmatory”, and “neutrality and freedom from error”. The models used to measure the value relevance focus on the economic relationship between stock prices and accounting figures. The model used to measure the quality of financial reports based on the value relevance criterion is the Ohlson Model. In the scope of this research, the most commonly used Ohlson Model was used in the measurement of value relevance. The representation of the Ohlson Model is in the following equation:

$$MVPS_{i,t} = BVPS_{i,t} + EPS_{i,t} + \epsilon_{i,t}$$

$MVPS_{i,t} =$ market value per share in $t$ year of enterprise $i$

$BVPS_{i,t} =$ book value per share in $t$ year of enterprise $i$
$\text{EPS}_{i,t} = \text{earnings per share in } t \text{ year of enterprise } i$

$\varepsilon_{i,t} = \text{error term}$

$i = \text{enterprise indicator}$

$t = 1, \ldots, t; \text{indicator for years}$

In this model, $R^2$ and the adjusted $R^2$ value of the model are used as indicators of the value relevance. The higher this value is, the higher the perceived financial reporting quality of the entity is. The fact that this value is low indicates that the perceived financial reporting quality is low.

**Results**

In this part of the research, the findings of the models used in the evaluation of financial reporting quality are presented. The first method used to evaluate the financial reporting quality is the persistence of earnings. The estimation result of the companies included in the corporate governance index by using the persistence of earnings method and not included in the index is given in Tables 1 and 2.

Table 1

*Results of the Persistence of Earnings Model for the Companies in the Corporate Governance Index*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>$t$ statistic</th>
<th>Probability V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$c$</td>
<td>0.023362</td>
<td>0.005402</td>
<td>4.324414</td>
<td>0.0000</td>
</tr>
<tr>
<td>Earnings</td>
<td>0.624490</td>
<td>0.113177</td>
<td>5.517807</td>
<td>0.0000</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.393366</td>
<td></td>
<td>F statistic</td>
<td>232.1413</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.391671</td>
<td></td>
<td>Probability V. (F)</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Table 2

*Results of Persistence of Earnings Model for Companies not Included in Corporate Governance Index*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>$t$ statistic</th>
<th>Probability V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$c$</td>
<td>0.037186</td>
<td>0.005988</td>
<td>6.210481</td>
<td>0.0000</td>
</tr>
<tr>
<td>Earnings</td>
<td>0.272277</td>
<td>0.126428</td>
<td>2.156689</td>
<td>0.0317</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.106984</td>
<td></td>
<td>F statistic</td>
<td>42.88552</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.104489</td>
<td></td>
<td>Probability V. (F)</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

When the results obtained according to the persistence of earnings measurement are examined, it is seen that the coefficients of the earnings explanatory variable of the enterprises included in the Corporate Governance Index are 0.624490. On the other hand, the coefficient of the earnings variable of the enterprises not included in the Corporate Governance Index is 0.272277. According to these results, it is seen that the company’s compliance with corporate governance principles is high and the earnings of the enterprise are persistence. Persistence earnings are in a good quality. The reporting of quality earnings indicates that the financial reporting quality of the enterprise is high because the persistence of earnings improves decision
usefulness. Since the earnings of the companies included in BIST Corporate Governance Index are more continuous than the ones not included in the index, it is seen that corporate governance is effective on the predictive and confirmatory dimension of the financial reporting quality of the companies included in the index.

Another method used to evaluate the quality of financial reporting within the scope of the research is the value relevance. The estimation result of companies that are included and not included in the Corporate Governance Index of the Ohlson Model, which is used to measure the value relevance, which is one of the market-based methods, is given in Tables 3 and 4.

Table 3
Results of the Value Relevance Model for the Companies in the Corporate Governance Index

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>t statistic</th>
<th>Probability V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$c$</td>
<td>4.404958</td>
<td>1.376898</td>
<td>3.199190</td>
<td>0.0015</td>
</tr>
<tr>
<td>BVPS</td>
<td>0.481746</td>
<td>0.081278</td>
<td>5.927174</td>
<td>0.0000</td>
</tr>
<tr>
<td>EPS</td>
<td>5.388717</td>
<td>1.055634</td>
<td>5.104722</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

$R^2$ 0.414311 F statistic 139.0022
Adjusted $R^2$ 0.411330 Probability V. (F) 0.000000

Table 4
Results of Value Relevance Model for Companies not Included in Corporate Governance Index

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>t statistic</th>
<th>Probability V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>$c$</td>
<td>2.957037</td>
<td>4.100330</td>
<td>0.721171</td>
<td>0.4712</td>
</tr>
<tr>
<td>BVPS</td>
<td>3.554929</td>
<td>1.177242</td>
<td>3.019709</td>
<td>0.0027</td>
</tr>
<tr>
<td>EPS</td>
<td>-1.342662</td>
<td>1.533536</td>
<td>-0.875534</td>
<td>0.3818</td>
</tr>
</tbody>
</table>

$R^2$ 0.123275 F statistic 27.62964
Adjusted $R^2$ 0.118814 Probability V. (F) 0.000000

The $R^2$ value of the model explaining the market value per share of the enterprises included in the Corporate Governance Index is 41% and the adjusted $R^2$ value is 41%. The $R^2$ value of the model explaining the market value per share of the enterprises not included in BIST Corporate Governance Index is 12% and the adjusted $R^2$ value is 11%. At the same time, it is seen that the variable that has an effect on the disclosure power of the model is the book value per share. It is seen that the companies whose earnings per share variable is not included in the index have no significant effect on the disclosure of market value per share. Based on these results, it can be said that the inclusion of enterprises in BIST Corporate Governance Index positively affects the quality of the perceived financial reports of the enterprise. In other words, it is seen that the companies with at least seven compliance and corporate governance principles in BIST Corporate Governance Index have higher perceived financial reporting quality than enterprises with corporate governance compliance grade less than 7. Since the value relevance method focuses on measuring all three dimensions of financial reporting
quality, the inclusion of enterprises in the Corporate Governance Index positively affects all three dimensions of financial reporting quality.

**Discussion and Conclusion**

Corporate governance is important for protecting the rights of business stakeholders. Financial reports are an effective information and communication tool among the stakeholders of the enterprise. By presenting the information contained in the financial reports in relevance, in a faithful representation, understandable, comparable, and timely, it is ensured that the value arising as a result of business activities is shared in a fair manner. Therefore, corporate governance mechanisms have an effective function in producing high-quality financial reports. For this purpose, in this research, the effect of Corporate Governance on the financial reporting quality of the enterprises is investigated with different methods used to evaluate the financial reporting quality. Financial reporting quality is evaluated through different methods as it has different dimensions. Within the scope of this research, financial reporting quality is discussed with the persistence of earnings and value relevance methods in terms of earnings quality. According to the results obtained from the earnings persistence model, it is concluded that the earnings in BIST Corporate Governance Index are more persistence than the ones not in the index. Persistence earnings are indicative of the high-quality of financial reporting because it represents good quality earnings. According to the results obtained from the value relevance model, the inclusion of enterprises in the Corporate Governance Index also creates a difference in the perceived financial reporting quality of enterprises. Results obtained from two models used in the assessment of financial reporting quality having a high level of compliance with the regulations made within the scope of Corporate Governance Principles confirms that the financial reporting quality of enterprises increases. In line with these findings, in order to further improve the financial reporting quality of enterprises, compliance with Corporate Governance Principles should be further increased. Increasing compliance with corporate governance principles in enterprises is important in terms of the information provided by the business stakeholders and the market trust. Stakeholders’ trust in the information provided will enable the market to function properly, reduce capital costs of enterprises, and reduce information asymmetry among stakeholders, making effective and accurate decisions about the business.

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