

Investigating the Impact of Firm Characteristics on Internet Reporting and Social Media Disclosure Strategies

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Abstract

The development of Internet Financial Reporting (IFR) as a new reporting method is rapidly being exploited by large companies around the world. A number of accounting studies on the development of online reporting in different countries show that the specific motivations of the firm are the most important factors explaining this method of reporting. The purpose of this study is to investigate the impact of firm characteristics on the extent of online financial reporting and other social media. For this purpose, data related to 199 companies listed on the Tehran Stock Exchange during 2020 was tested. The results showed that firm size and stock beta have a positive and significant relationship, while financial leverage has a negative and significant relationship with the development of Internet reporting. But no significant relationship was found between the development of online reporting and the return on assets, board independence, or percentage of floating stock of the firm. This study helps the Iranian government and policymakers by considering the characteristics of the firm as well as modern disclosure tools that can be used by companies to reduce the problem of agency.

Key words; Internet Financial Reporting, Social Media, Disclosure, Voluntary Disclosure, Firm Characteristics

1. Introduction

For the past several decades, regulators of accounting standards have argued that for financial information to be useful for decision-making purposes, it must have certain key characteristics (Zedgenizova, et al., 2021; Mokrova, et al., 2021). However, in this regard, the rapidly changing nature of the global business environment means that traditional paper-based annual reports have serious limitations, and, in particular, as investors' geographical dispersion increases, information does not reach them in a timely manner (Thuy, et al., 2022).

As a result, the traditional paradigm of paper-based reporting will give way to Internet financial reporting (IFR). Increased demand for web-based financial reporting, combined with an increase in the number of investors globally, has resulted in an increase in market participants, which may lead to higher market efficiency (Ahmed et al., 2018: 575). With the development of the Internet over the last two decades, the disclosure of corporate information has been greatly affected and has grown significantly around the world. Countless businesses have launched websites to share information about their financial performance, social and environmental issues, governance, and other topics.

However, there is great variation in the type of information, volume, and quality of information disclosed on firm websites (Xiang and Birt, 2021: 44). The purpose of this study is to investigate the reasons for the differences in the disclosure of online reports and corporate social media strategies.

This study is important for two reasons. First, there are limited studies on internet reporting. Although

previous studies have examined the determinants of Internet reporting (e.g., Bollen et al., 2006; Cormier et al., 2009), their research has been largely based on Internet disclosure in the late 1990s or early 2000s. Due to the rapid development of information technology such as social media, changes in accounting standards related to disclosure, and changes in the disclosure environment of companies over the years, new evidence may be needed. For example, in the last decade, we have witnessed the emergence and global impact of social media, for example, Facebook, LinkedIn, Twitter, and Telegram, and so on. Social media is now a form of disseminating financial information to shareholders (Bartov et al., 2017: 27). This study also looks at social media as a type of online reporting. Because changes in information technology affect how information is produced, disseminated, and processed, the firm's core characteristics that influence its disclosure remain important (Xiang and Birt, 2021: 46). Second, this study offers recommendations for businesses to improve their firm websites for advanced reporting. Managers can compare and evaluate whether their firm's websites are complete in any area of online reporting by using a detailed checklist of current online reporting practices. This may increase the quantity, timeliness, or usability of their online reporting. In this regard, our findings may assist policymakers in developing guidelines for online reporting.

2. Theoretical foundations of research

2-1. Internet Financial Reporting Development (IFR)

Internet financial reporting is the distribution of financial information and firm performance through the Internet (Ashbaugh et al., 1999: 244). The development of Internet reporting has three important stages. In the first place, online reporting is just another way of distributing information for printed financial statements. Second, corporate websites become more interactive in that they allow web browsers to search for specific information. In the third stage, the firm's websites become even more user-friendly and efficient. For example, they may provide video and audio presentations in addition to standard printed financial statements. Evidence shows that most online reporting is in the first or second stage. Video/audio recording has become more common than corporate presentations on websites. A common example is the internet broadcast of the annual general meeting of shareholders (especially during the period when the COVID-19 virus has spread). This allows stakeholders to easily see and hear presentations by the CEO and the Chairman of the Board instead of reading data and documents or speeches. Companies are also increasingly supporting social media technologies to track stakeholders. This helps companies provide themselves with the most up-to-date information about their future performance prospects. Given the popularity of social media and its association with user-generated content such as Facebook and blogs, an important source of new information will be available to stakeholders about the firm's past and future performance (Xiang and Birt, 2021: 46-47). In general, today's disclosure requirements are best met through a balanced approach that includes news releases, corporate websites, and social media (Motley, 2011: 8).

Globally, several professional organizations and groups have funded Internet reporting studies, including the US Financial Accounting Standards Board (FASB, 2004), the Institute of Chartered Accountants in England and Wales (ICAEW, 2004), and the Accounting Standards Committee International (IASC, 1999) and the Canadian Institute of Chartered Accountants (CICA, 1999). More recently, the US Securities and Exchange Commission has required companies to file using the EDGAR database to effectively provide quick access to K-10 and Q-10 reports and files required by Provide for commissions on stock exchanges and securities or other organizations.

The Securities and Exchange Commission has also mandated the use of the eXtensible Business Reporting Language (XBRL), where managers upload financial statement data electronically to facilitate investors' ability to process accurate financial statement information (Xiang and Birt, 2021:

47).

2-2. Factors Affecting the Development of Internet Financial Reporting

Determinants of voluntary disclosure by the firm have been one of the most relevant issues in the field of accounting and finance. Voluntary disclosure by the firm means providing information beyond the amount required by law and regulations. As a result, all information disclosed by companies, even if mandatory, through websites is a voluntary disclosure. The development of Internet financial reporting as a new method of corporate reporting was rapidly exploited by the world's major stock exchange companies. A number of online reporting development accounting studies in different countries were analyzed and showed that firm-specific motivations are the most important factors explaining online reporting practices. Since the 1990s, corporations all over the world have been using the World Wide Web (WWW) as a new backbone for corporate information dissemination, as well as adopting Internet Financial Reporting (IFR) methods that allow public reporting of operations and financial data by a corporation via the World Wide Web or internet-based communication media. In this regard, Internet financial reporting was regarded as a type of voluntary disclosure (Khlifi, 2021: 3).

Internet financial reporting was enabled by the eXtensible Business Reporting Language (XBRL), which revolutionized the distribution and security of corporate information on the Internet. Compared to traditional print reports, the Internet offers many more opportunities for financial communication, and its importance in this area is growing rapidly. In particular, companies can transfer information quickly, directly, and at low cost to investors and stakeholders. This allows investors and other stakeholders to obtain firm information more easily and interactively, which ensures flexibility and timeliness of firm information.

The widespread acceptance of website publishing methods has piqued the interest of accounting professionals and academics worldwide, and researchers are analyzing managers' motivations to distribute business and financial information through websites in various countries, with the results indicating that these measures are functional. It is one of the country's companies with distinguishing features (Xiang and Birt, 2021: 48).

3. Research Background

In this section, empirical studies conducted in the field under study are referred to:

Xiang and Birt (2021) examined the role of firm characteristics in internet and social reporting policies. They cross-sectionally analyzed data from 200 Australian companies in 2018. This research creates a disclosure index that shows a wide range of financial and non-financial disclosures, including social media strategies.

The findings show that a firm's level of online reporting has a positive relationship with its size and the beta of its shares but a significant negative relationship with its financial performance and analyst coverage. However, the firm's online disclosure policy has not been significantly influenced by the board of directors' independence, financial leverage, or floating shares.

Khlifi (2021) examined the role of firm characteristics in the development of Internet reporting. Data from 152 Tunisian companies in 2019 was selected as the research sample. He used fuzzy logic and genetic algorithms to determine the factors affecting Internet financial reporting. The results of the linear relationship showed that there is a positive and significant relationship between size and concentration of ownership in online financial reporting. While there was no significant relationship found between liquidity, profitability, or audit quality and online reporting, when the relationship between the variables was examined nonlinearly using the fuzzy method and a genetic algorithm, it was observed that all explanatory variables affect the development of internet financial reporting.

Sarifudeen (2021) conducted a comparative analysis of the quality of corporate Internet financial

reporting practices in Asia and the Pacific. In this study, the effect of firm size and age, internationalization, and auditor size on online financial reporting performance was investigated. In this study, the community consists of all publicly traded companies in Australia, Singapore, and Indonesia. The sample includes 95 Australian companies, 87 Singaporean companies, and 85 Indonesian companies in 2019. The results show that Singaporean and Indonesian companies have higher Internet financial reporting disclosures than Australian companies. This study showed that some of the characteristics of the firm explain the level of disclosure in Internet financial reporting. Firm size, internationalization, and type of auditor have a significant positive effect on the disclosure of online financial reporting in Asia and the Pacific, while the age of the firm does not explain the level of online financial reporting.

Hannoon et al. (2021) examined the relationship between board composition (board gender diversity and board independence) and the level of financial disclosure on social media by UAE companies. The survey data was collected from 103 companies listed in the UAE financial markets for the 2019 period. The results show that the relationship between the gender diversity of the board and the independence of the board with respect to social media financial disclosure is positive and significant.

Hasan and Islam (2021) investigated the impact of stakeholder pressures on online reporting timeliness. A content analysis technique was used in this study to track the online reporting practices of non-financial corporations listed on the Dhaka Stock Exchange. To demonstrate the timeliness of online reporting, a 14-item disclosure index was created. The researchers gathered relevant data from a variety of sources, including the firm's websites, monthly review reports, and 2019 annual reports. They discovered that pressures from foreign investors, the government, the general public, and relationships with parent multinational corporations were all positively related to online reporting timeliness.

Sandhu and Singh (2019) examined the impact of board composition on the level of corporate online reporting practices. This study uses content analysis to examine the online reporting practices of Indian companies on the Mumbai Stock Exchange for 2015. Findings show that larger committees, committees with fewer family members, and audit committees that meet more often are more likely to engage in online reporting practices. In addition, larger companies and companies that use less debt tend to disclose more information on their websites.

Khoufi and Khrifech (2018) examined and explained the differences between website-based financial disclosure practices in developed European countries. The study was conducted on 205 companies in 2013. The results showed that firm-specific motivations are the most important factors explaining Internet reporting practices; however, the importance of socio-political conditions was overlooked as other factors also played a role. This study examines an empirical study that confirms the impact of culture and institutional factors on the level of financial disclosure through corporate websites in France, Germany, Italy, the Netherlands, Spain, and the United Kingdom. This highlights the importance of technology and media delivery as components of the web-based communication index. The findings showed that environmental factors are significantly related to the technology index of websites, and economic development is an important factor that determines the differences in the methods of financial disclosure of websites.

Al-Sartawi and Reyad (2018) examined the role of Islamic banks in the GCC countries that have online financial disclosure practices. Data were gathered by visiting the websites of 48 Islamic banks that are publicly traded on the stock exchanges of the GCC countries. The study covered a three-year period from 2015 to 2017. This study showed that the overall level of online financial disclosure by Islamic banks in the GCC is 72.4%. The results also report a significant and positive relationship with firm size. On the other hand, the results show that online financial disclosure practices do not have a significant relationship with profitability, leverage, or age.

Bekiaris et al. (2014) investigated the role of firm characteristics in the online financial reporting practices of Greek and Cypriot construction companies. A total of 36 companies were studied in 2011. Findings show that internet-related financial disclosure is significantly associated with profitability, leverage, firm age, and ownership dispersion. Financial leverage and the age of the firm have a positive effect, and profitability and dispersion of ownership have a negative effect on Internet disclosure.

In Iran, limited studies have been conducted on the factors affecting the disclosure of internet financial reporting. Most studies have examined the impact of online financial reporting on other factors, such as corporate value.

Mahdavi-pour et al. (2010) examined the amount of information disclosed through the Internet on the websites of 100 companies listed on the Tehran Stock Exchange and its relationship with some of the characteristics of the firm, including size, leverage, profitability, and type of industry. The results show that the size of the firm has a positive effect and the financial leverage of the firm has a negative effect on the disclosure of financial information through the Internet, but profitability and the type of industry in which the firm operates do not play an important role in the level of Internet disclosure.

Kamali Ardakani et al. (2017) ranked the factors influencing the quality of online financial reporting on the websites of Tehran Stock Exchange-listed companies. The number of research samples was judged by 12 people, the majority of whom were associate and assistant professors of accounting and finance. The fuzzy Delphi method was used to analyze the data. According to the findings, the ability to download or print financial information, as well as links to relate institutions' websites and the firm's vision document, are the most important factors influencing the quality of online financial reporting.

4. Research Hypotheses

Previous research has provided valuable insights into the selection of determinants of corporate disclosure, which of course have different results (Khan and Ismail, 2012: 6). In addition, the determinants of Internet reporting are unclear due to their complexity and lack of regulation. In this research, the relationship between common and specific factors of the firm and the amount of online reporting is investigated as follows:

4-1. Size of the Firm

Firm size has been a common variable used in disclosure studies that has been positively correlated with disclosure rates for a variety of reasons. The first reason is that the size of the firm reflects its information environment of a firm. For example, Ajinkya and Gift (1984) and Hutton (2005) state that managers of larger companies are more in demand for information and therefore likely to offer more voluntary disclosure. The second is the cost of disclosure. Larger companies will be able to disclose more due to their higher financial capacity. Third, in terms of the risks of litigation, large corporations are more likely to sue than small corporations, so they may disclose more to avoid litigation (Rogers and Stocken, 2005: 1244). In addition, according to agency theory and signaling theory, managers in larger companies face higher agency costs and therefore tend to disclose more information. They also have stronger motivations to build a reputation for higher quality disclosure (Xiang and Birt, 2021: 50). Therefore, the first theory would be as follows:

Hypothesis 1: There is a significant relationship between firm size and the scope of Internet reporting.

4-2. Financial Performance

A firm's financial performance can also influence its disclosure decision. According to signaling theory, profitable companies have incentives to differentiate themselves from less profitable companies. However, when potential competitors enter the same industry, they may face higher specific costs due to their high profitability. In other words, online reporting may contain useful

information for a firm's competitors, to attract more competitors to their industry, and lead to the loss of a firm's competitive advantage. Theoretically, good financial performance can both increase disclosure motivation and deter it.

In addition, previous studies have found different results from the relationship between corporate performance and online reporting (Xiang and Birt, 2021: 50). Therefore, the second hypothesis is formulated as follows:

Hypothesis 2: There is a significant relationship between the financial performance of the firm and the scope of online reporting.

4-3. Corporate Governance

According to agency theory, corporate governance will influence corporate disclosure policy. Previous research has examined the impact of corporate governance mechanisms on various aspects of a firm's overall disclosure policy, such as the quality of disclosure (Klein, 2002), the timing of disclosure (Sengupta, 2004), and the willingness to disclose voluntarily (Ajinkya et al., 2005). When it comes to online reporting, companies with better corporate governance are likely to offer higher-quality disclosures due to closer scrutiny and a higher demand for transparent disclosure. In particular, online reporting is directly related to the higher percentage of independent directors and the more diligent audit committee. Similarly, Cormier et al. In 2009 show that financial disclosure is related to corporate governance performance. Therefore, it is expected that an increase in the quality of corporate governance will lead to an increase in the rate of Internet reporting (Xiang and Birt, 2021: 51). Given that a higher percentage of independent board members guarantees a higher quality of corporate governance, the third hypothesis is as follows:

Hypothesis 3: There is a significant relationship between board independence and the extent of online reporting.

4-4. Debt Ratio

Debt ratios were commonly used in previous research to represent agency costs. Internet reporting is a mechanism that can be used by creditors to continuously and complexly monitor a firm's performance. It is predicted that with increasing debt ratios, the demand for timely disclosure of firm information will increase (Xiang and Birt, 2021: 51). Therefore, the fourth hypothesis is expressed as follows:

Hypothesis 4: There is a significant relationship between debt ratio and the extent of online reporting.

4-5. Percentage of Free Float Stock

Free float is a portion of the stock of a corporation whose holders are willing to offer and sell that portion of the stock, are expected to be traded in the near future, and are not in permanent ownership. According to agency theory, agency costs are reduced by the percentage of free float because investors with a higher percentage of shares have more power to influence management decisions. As a result, the percentage of free-floating stocks is predicted to be positively correlated with the level of Internet reporting (Xiang and Birt, 2021: 52). Therefore, the fifth hypothesis will be as follows:

Hypothesis 5: There is a significant relationship between the percentage of free float and the extent of online reporting.

4-6. Beta Coefficient

The performance of a particular stock during the overall market movement is measured by the beta coefficient, according to its definition. To decrease investor uncertainty and improve risk assessment, a company can increase information disclosure (Marston and Polei, 2004: 293). Given the advantages of online reporting, business executives with higher beta may be more inclined to divulge more information on corporate websites (Xiang and Birt, 2021: 53). As a result, the following is presented as the sixth research hypothesis:

Hypothesis 6: There is a significant relationship between the firm's stock beta and the extent of online reporting.

5. Research Methodology

The method of the present study is descriptive-correlational, and its design is experimental using a post-event approach. In order to test the research hypotheses, multiple linear regression based on combined data was used, which has been examined and tested using statistical and econometric methods.

This study's statistical population consists of all companies listed on the Tehran Stock Exchange. In order to select a sample from among the member companies of the statistical community, companies that met the following conditions were selected for the study, and then the data of these companies was collected and tested in the period 2020.

- (1) Have been listed on the Tehran Stock Exchange before 2020.
- (2) Companies should not be of the type of investment, financial intermediation or banks, etc., because the disclosure of financial information and the nature of the activities of this type of companies are different.
- (3) With the aim of controlling the time effect and environmental interfering variables caused by time conditions, the end of their fiscal year should end on March 20.
- (4) Do not have a trading interval of more than six months.

According to the studies, 199 companies had high conditions during the specified time period and were chosen for the research sample. The necessary information about the companies was collected through the official website of the Stock Exchange Organization and the companies' websites, and the data were analyzed using the Eviews software.

6. Research Models and Variables

In this research, the following multiple regression relationship has been used to test the hypotheses:

$$IR-SUM_j = \beta_0 + \beta_1 Firm\ Size_j + \beta_2 ROA_j + \beta_3 Independent\ Board_j + \beta_4 Leverage_j + \beta_5 Free\ Float_j + \beta_6 Beta_j + \epsilon_j \quad (1)$$

Where IR-SUM represents the scope of Internet reporting, firm size represents the size of the firm, ROA represents financial performance, and an independent board represents the independence of the board, Leverage represents the debt ratio, free float represents the floating stock percentage, and beta is the beta of the stock. How to calculate the above variables is described below.

6-1. Dependent Variable

Scope of Internet Reporting (IR-SUM): The scope of Internet reporting was categorized into 7 main groups according to a checklist derived from the Xiang and Birt (2021) research, which is calculated as described in Table (1).

Table (1) Details of the online reporting scope checklist

(1) Information related to investors						
Current Annual Notes	Past Annual Financial Statements	Current Annual Financial Statements				
Report Last Six Months	Report Current Six Month	Accompanying Notes Last Annual				
Current Management / Board Report	Last Quarterly Report	Current Quarterly Report				
Past Audit Report	Current Audit Report	Past Management / Board Report				
Financial Ratios	Report of Previous Sections	Report of Current Sections				
Dividend Information	Shareholder Portal	Stock Price History				

(2) Disclosure of Social Responsibility

Company Financial Support	Past Corporate Social Responsibility Report	Social	Current Social Responsibility Report
Social Reporting, Safety, Health of Employees			Non-Commercial Partnerships Company

(3) Corporate governance information

Results of the Annual General Assembly Votes	Announcement of the General Assembly	Annual	Stakeholder Structure
Corporate Statements	Governance Conference abstracts	documents or	Management lectures at the Annual General Assembly
Corporate regulations	governance Rewards managers		Management resume and board
Information on significant change of ownership of managers			Manager transaction information

(4) Timeliness of information

Calendar of upcoming events	Sign up to receive the latest news	Online stock prices
Company-related press releases		

(5) Company-related press releases

Fax and postal address to communicate with investors and customers	Phone number to contact the investor And customers	Email to communicate with investors and customers
	Frequently Asked Questions	Multilingual site

(6) Social media services

WhatsApp	Telegram	Instagram
		Other social media

(7) Usability and convenience of the website

Provide video or audio	Internal search engine	Table of contents and site map
	Online information ordering services for investors and clients	Financial data in the form of processability (Excel)

By examining the websites of the companies under study, if any of the indicators in the table above had that number, it would be assigned to one, and then the total points of the firm would be divided by the sum of the indicators (52) to obtain a score related to the firm's online reporting.

6-2. Independent Variable

- Firm Size: Equivalent to the natural logarithm of the firm's stock market value (Xiang & Birt, 2021: 54).
- Firm Performance (ROA): To calculate the firm's performance, the return on assets is used, which is calculated by dividing the net profit by the total assets at the end of the period (Xiang and Birt, 2021: 54).
- Independent Board (Independent Board): The ratio of non-executive board members to total board members (Xiang and Birt, 2021: 54).
- Leverage ratio: Calculated from the ratio of total debt to total assets at the end of the financial period (Xiang and Birt, 2021: 54).

- Percentage of floating shares (free float): percentage of shares of a firm that can be traded on the stock exchange and do not have permanent ownership (Xiang and Birt, 2021: 55).
- Beta of the firm (Beta): obtained by dividing the covariance between the return of the firm's shares and the return of the market index on the market variance. (Xiang and Birt, 2021: 55).

7. Research Findings

7-1. Descriptive Statistics

Table (2) shows the descriptive statistics of the research variables, which express the descriptive parameters of each variable. These statistics provide an overview of the status of research data distribution.

Table (2) Descriptive statistics of research variables

Symbol	Average	Medium	Maximum	Minimum	Standard Deviation
IR-SUM	0/398	0/480	0/673	0/02	0/153
Firm Size	31/23	30/84	35/94	25/47	1/50
ROA	0/197	0/203	0/646	-0/229	0/152
Independent Board	0/66	0/6	1	0	0/185
Leverage	0/47	0/506	0/94	0/036	0/216
Free Float	30/56	25/43	100	3	4/31
Beta	0/98	1/04	1/38	-0/13	0/248

As can be seen, less than half of the desired indicators are covered by the typical Internet reporting scope, which is about 40%. The company Iran Merinos has the best rating for online reporting. The typical asset return was around 20%. Only Saipa required participation from every board member. The percentage of free-floating stocks is lowest and highest in Khorasan Steel and the supply of foundry sand, respectively. The average stock price responds to the market on average, according to the average beta of 0.98. Free-floating stocks have the highest standard deviation of the study's variables.

7-2. Check for the existence of alignment

Alignment between independent research variables is one of the regression assumptions. Therefore, in order to investigate the lack of alignment between the research variables, the variance inflation factor has been calculated for the research variables, the results of which are shown in Table (3).

Table (3) values of variance inflation factor

Table (3) values of variance inflation factor

Symbol	Variance Inflation Factor (VIF)
Firm Size	1/29
ROA	1/97
Independent Board	1/05
Leverage	1/96
Free Float	1/32
Beta	1/04

The value of variance inflation factor for all variables is less than 5, which indicates that there is no alignment between the research variables.

7-3. Analysis of Variance

One of the assumptions of linear regression is that all error statements have equal variance. Table (4) shows the results of the Bruges-Pagan test to investigate the variance heterogeneity.

Table (4) variance heterogeneity test

Test	Test statistics	Significance level
Bruges-Pagan test	1/09	0/367

Since the significance level of the research model test is greater than 5%; As a result, the null hypothesis that the variances are homogeneous is accepted and OLS is used to fit the model.

7-4. Results of Research Model Estimation

Due to the fact that the research data is cross-sectional, the surveyed companies are surveyed once in a year. To estimate the model, an unstructured data model and the ordinary least squares regression method are used. Table 5 shows the results of estimating the multivariate regression model of the research.

Table (5) Research model test results

$IR - SUM_j = 1\beta_0 + \beta_1 FirmSize_j + \beta_2 ROA_j + \beta_3 IndependentBoard_j + \beta_4 Leverage_j + \beta_5 FreeFloat_j + \beta_6 Beta_j + \epsilon$			
Variable	Coefficient value	Statisticst	Significance level
C	1/05	3/37	0/001
Firm Size	0/018	1/99	0/047
ROA	-0/148	-1/65	0/098
Independent Board	-0/066	-1/08	0/277
Leverage	-0/177	-2/95	0/003
Free Float	-0/009	-0/122	0/903
Beta	0/093	2/17	0/030
Dorbin-Watson Statistics			1/62
Modified determination coefficient			0/25
Statistics F			3/05
probability level F			0/003

The results of Fisher's F test indicate the significance of the research model, and the results of the Watson camera test also indicate a lack of autocorrelation between the perturbation sentences. The modified coefficient of determination of the model is 25%. This means that 25% of the changes in the scope of Internet reporting are explained by the explanatory variables of the model. β_1 is positive and 95% significant at the confidence level, indicating that firm size has a direct impact on the use of online financial reporting. Therefore, the first hypothesis of the research is accepted. β_2 is negative and is not significant at a 95% confidence level (although it is significant at a 90% confidence level), and this indicates that the return on assets does not have a significant effect on the use of Internet financial reporting. Therefore, the second hypothesis of the research is not accepted. β_3 is negative and not significant at a 95% confidence level and therefore the extent of online financial reporting is not affected by the independence of the board. Therefore, the third hypothesis of the research is not accepted. β_4 is negative and significant at a 95% confidence level, indicating that the level of online reporting decreases with increasing debt ratio. Therefore, the fourth hypothesis of the research is accepted. β_5 is negative and, at a 95% confidence level, is not significant, so floating stock percentage has no significant effect on the extent of online financial reporting. Therefore, the fifth hypothesis of the research is not accepted. β_6 is positive and 95% significant at the confidence level, indicating that the firm's stock beta has a direct impact on the use of online financial reporting. Therefore, the sixth hypothesis of the research is accepted. According to the coefficient obtained from the explanatory variables, the debt ratio has the greatest impact on the dependent variable.

8. Conclusions and Suggestions

Internet reporting has grown dramatically around the world in recent decades. Companies use the Internet to disseminate information such as financial performance, social and environmental issues, corporate governance, and social media strategies. The importance of online disclosures to international economies is growing. Investors are looking for investment opportunities internationally, thus increasing the demand for easily accessible information. Empirical evidence shows that the relationship between investors and companies operating in developed countries is very complete, appropriate, user-friendly, accurate, and beautiful. Social media usage has increased significantly compared to previous years as a result of the quick and widespread development of smartphones. Social media is still viewed by some as a test run and a fad for the younger generation. However, social media has developed into a technology that is used by people of all ages (Seyed Nezhad Fahim, 2019: 42). The impact of firm-specific factors on the growth of Internet reporting was examined in this study, along with a wide range of information type, volume, and quality disclosed on the firm's websites.

The results of the hypotheses show that firm size is directly related to the extent of Internet reporting. It is confirmed that, according to agency theory and signage theory, managers in larger companies face higher agency costs and therefore tend to disclose more information. The results of this hypothesis are consistent with the studies of Al-Sartawi and Riyadh (2018), Sando and Singh (2019), Sarifudeen (2021), Khlifi (2021), Xiang and Birt (2021), and Mahdavi-pour et al. (2010). Profitability has no significant relationship with the level of use of Internet reporting. This issue is studied with the results of Al-Sartawi and Riyadh (2018), Khlifi (2021), and Mahdavi-pour et al. (2010). Board independence also does not affect online reporting. That is, an independent board has no role in making more use of information technology. Xiang and Birt (2021) had achieved the same result, but Hannon et al. (2021) acknowledged the positive impact of board independence. Contrary to many people's beliefs, financial leverage has a negative relationship with Internet reporting, and companies with higher risk levels are less likely to disclose voluntarily. Sandhu and Singh (2019) and Mahdavi-pour et al. (2010) reached the same conclusion. The percentage of floating stocks also has no effect on the level of internet disclosure. That is, investor pressure does not affect the level and quality of firm management disclosure. This result is consistent with the study of Xiang and Birt (2021). Finally, the results indicate that companies with higher beta, in order to reduce uncertainty, were more inclined to disclose information through the firm's websites. Xiang and Birt (2021) had reached a similar conclusion.

The findings of this study demonstrate that there is significant room for companies to enhance the quantity and nature of information disclosed on their websites. Findings can help companies improve the disclosure of their online reports by providing a comprehensive list of disclosures. Additionally, it aids regulators in comprehending some of the firm's Internet reporting-related factors. This study provides guidance for standard regulators to take into account when creating Internet reporting standards by creating a thorough index.

It goes without saying that effective decision-making is aided by the timely and appropriate transfer of firm-specific information. It is suggested to the Exchange Organization that with the advancement of information technology, the creation of new information channels, and its legalization in the stock exchange, it will play an effective role in reducing information asymmetry, increasing investor satisfaction, and, consequently, increasing market efficiency and the economic development of the country. This is because the general level of internet disclosure in Iran is not appropriate.

This research is a limited cross-sectional study and cannot study the longitudinal data of online reports. The field of Internet reporting is exciting research, and future studies could further explore

more comprehensive areas such as social media strategies and environmental and social disclosure. The results of this study showed the reluctance of some governance indicators to report online future studies can examine the impact of ownership structure on online reporting procedures.

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