THE IMPACT OF MANDATORY AND VOLUNTARY DISCLOSURE OF HARD AND SOFT INFORMATION ON FINANCIAL STATEMENT USERS IN IRAQ

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ABSTRACT: It examined both mandatory and voluntary disclosure's effect on users of financial statements and paid a special consideration to distinguishing soft information from hard information. It was grounded in a literature review that highlighted disclosure quality as a key drivers in enhancing market efficiency and supporting investors' decision-making process. Empirical evidence was gathered on a sample size involving 20 non-financial firms listed on the Iraq Stock Exchange. The findings highlighted disclosure practices regarding both return on equity and return on assets. Specifically, firms that utilized vague or speculative forward-looking narratives exhibited a negative association with performance while disclosures that featured a positive orientation and firm value clarity exhibited a positive relationship with improved market performance. Additionally, objectivity and quantifiability of hard information was positively associated with firm performance. The research further exhibited that poorly performing firms highly relied upon vague and narrative disclosures whilst better-performing firms utilized full reporting verifiable and factual. Generally, research contributes to existing literature to the extent that quality of disclosure has a significant association with financial performance both within both mandatory and voluntary reporting paradigms and such association persisted especially where emerging markets were concerned.

Keywords: Mandatory Disclosure, Voluntary Disclosure, Hard and Soft Information, Financial Statement Users, Iraq Stock Exchange.

1. Introduction

For a number of decades now, reporting financial information has mostly involved reporting historical information regarding past and current performance (Bradshaw et al., 2021). Such information has long been thought to be verifiable and reliable and has given a simple basis upon which investment and credit decisions can be made. However, owing to rapid change in international business environments, mounting uncertainty has made it harder to make accurate predictions (Aviantara, 2021). Thus, historical reporting on a stand-alone basis can no longer satisfactorily serve most users of financial reports. Such a constraint has fueled calls for disclosures regarding intellectual capital, in addition to wider corporate socio-economic recognitions (Filomeni et al., 2024). Such a push in favour of wider disclosures has further been espoused on ethical opinions calling upon that fairness, justice, equity, and truthfulness be given importance (Chatpibal, Chaiyasoonthorn, & Chaveesuk, 2023). By such a perspective, social views identify societal consequences arising out of corporate operations while equity views note public interests (Seebeck & Kaya, 2023). Overall, such paradigms call attention to a need to report on socio-economic responsibilities and on social, cultural, and economical initiatives typically lacking in standard financial reports (Hanlon, Yeung, & Zuo, 2022). Accountants' regulators and professional institutions have thus increasingly placed a premium on reporting such information in a push to enhance stakeholder decision-making in cases of wider uncertainty (Li et al., 2025).

Therefore, policy-makers and researchers have both highlighted improving disclosures in capital markets to help investors and creditors make improved estimates regarding the timing, volume, and uncertainty associated with future cash flows (Estrin, Khavul, & Wright, 2022). Reflected correspondingly, disclosures tailored to what analysts predict or investors deem firm value and portfolio risk to be have become key features (Sun et al., 2023). Such a development signifies a move from traditional disclosure strategies to those that are either forward-oriented or responsibility-based (Bradshaw et al., 2021). Hard information in this study refers to things that are objectively verifiable and capable of measurement such as widely disseminated earnings, cash in hand, and dividends paid out. Such things are considered highly credible owing to numerical expressions and subjecting to an independent audit (Ashtiani & Raahemi, 2021). Soft information, on the other hand, consists of intangible and non-verifiable aspects such as an organisation's brand image, development initiatives on a strategic front or environmental initiatives (Krishnan, Myllymäki, & Nagar, 2021). Although such disclosures remain

subject to a higher degree of discretion on the part of managers and less credible compared to hard data, they remain informative in affecting how investors and others conceive a firm's long-term prospect (Han et al., 2023; Mehnaz, Scott, & Zang, 2024; Wen et al., 2022).

Moreover, the digital revolution over the past three decades has significantly accelerated the expansion of voluntary disclosure practices (Chung, Bayne, & Birt, 2023). Firms now communicate financial and non-financial information through multiple channels, including corporate websites, analyst meetings, conference calls, executive statements, and press releases (Primec & Belak, 2022). In addition, social media platforms such as Twitter, Instagram, and LinkedIn have become influential tools for disseminating disclosure (Lin & Qamruzzaman, 2023). These platforms have reshaped both the accessibility and immediacy of financial information, allowing stakeholders to obtain, evaluate, and interpret data more efficiently, thereby supporting investors and creditors in anticipating economic developments (Bask, Forsberg, & Östling, 2024; Jiang & Ji, 2024; Macchioni, Prisco, & Zagaria, 2024; Wen et al., 2022).

1.1. Research Problem

Publicly listed firms are obligated to issue periodic audited financial statements, which serve as the principal mandatory channel of disclosure (Breijer & Orij, 2022). Although these reports supply verified quantitative information essential for regulatory compliance and comparative analysis, they frequently fall short of capturing the broader qualitative and forward-looking insights demanded by stakeholders (Macchioni et al., 2024). Alongside statutory disclosures, a substantial amount of additional information is circulated voluntarily, often through financial media, investor discussions, analyst briefings, company presentations, and online platforms, where narratives and interpretations may spread rapidly, in some cases even before the release of formal documentation (Gomez et al., 2024).

Co-existence between formal and voluntary disclosure channels presents opportunities and challenges to financial statement users (Wagenhofer, 2024). Mandatory disclosures are verifiable and reliable but stale or shallow. Voluntary disclosures, particularly those made via media reports, typically include forward-looking and integrated disclosures but doubtful credibility and reliability, due primarily to institutional control and regulatory enforcement in emerging economics lacking (Müller, Voget, & Zental, 2024). It is within this context that this study contributes to a conspicuous gap by investigating media-based voluntary disclosures and statutory financial reporting interactive relationships primarily in consideration of both having a concurrent impact on investment and analysis decision-making. It seeks further insight into how these two disclosure channels could function alongside each other to improve capital market efficiency, particularly to mitigate information asymmetry, and influence financial behavior.

1.2. Research Objectives

Three main objectives lie behind this research. First, to identify how media-produced information such as news reports, investors' forums and analysts' commentaries influence users' decision-making while reviewing financial statements. Secondly, to examine whether informal media-based data serves to complement or contradict formal financial reports and to gauge its influence on investors' and other users' views. Thirdly, to examine media disclosures and financial reporting relationship and to grant special attention to testing how much financial statements still remain informative to market participants and to investors' decision-making.

1.3. Research Contributions

It contributes to the literature on accounting and finance by advancing new insights into how media-based disclosures affect decision-making processes among investors and analysts. It demonstrates how media like financial newspapers, news agencies, internet media, and analysts' reports complement traditional financial reporting and influence decisions within the capital markets. By examining how voluntary and mandatory disclosures intersect, research demonstrates how both serve to enhance transparency, eliminate information-based asymmetry, and increase overall informativeness within financial reports. By doing so, it broadens disclosure theory beyond the typical narrow perspective on officially mandated reporting schemes. It further demonstrates how technological change and digital media have transformed how financial information is captured, conveyed, and recalled.

2. Literature Review

Hard and soft information have become increasingly differentiated in recent accounting literature in efforts to integrate both quantitative and qualitative features of disclosures (Cui et al., 2021). Hard information has long been depicted as objective, verifiable, and numeric such as reported earnings, cash flows, and balance sheet data (Jayasuriya & Sims, 2022). It is valued owing to objectivity and congruence across firms and periods. Soft information comprises qualitative, subjective, and often narrative disclosures like forecasts, discussion by managers, strategies, and environmental compliance (Branstetter, Li, & Ren, 2023). Though these disclosures remain inherently imprecise, they can contain forward-looking information highly valuable to financial report users. Recent work posits soft information becoming increasingly credible owing to electronic media penetration facilitating investors and analysts to scrutinize narratives of managers in parallel to financial information (Bozanic, Kraft, & Tillet, 2023; Macchioni et al., 2024).

From the perspective of decision-makers, soft information may at times be more timely and relevant than hard information, making it potentially more useful (Liberti & Petersen, 2018). Some studies suggest that soft information is particularly credible when it conveys negative developments, whereas optimistic narratives are perceived as reliable only when supported by concrete financial data (Chatpibal et al., 2023). Other research has compared the relative importance of hard and soft disclosures, demonstrating that investors rely on both forms of information, while also noting that the significance of soft information often increases the level of accompanying hard disclosures (Brockman & Cicon, 2013; Edmans, Heinle, & Huang, 2016). Although hard information retains its traditional role as the foundation of financial reporting, more recent studies highlight the complementary role of soft disclosures. Evidence shows that investors consider textual narratives as important as quantitative performance measures, particularly when evaluating expectations of future performance (Seebeck & Kaya, 2023). Analyses of corporate disclosures and conference call transcripts further confirm that forward-looking soft information significantly influences stock prices and analysts' revisions (Huang et al., 2022). Moreover, narrative elements in managerial commentary often provide early signals of risk exposure, strategic adjustments, or innovation activities not yet reflected in hard financial data (Song, Li, & Yu, 2021). Research further supports the view that financial markets process hard and soft information together, with both types jointly shaping investor behaviour (French, 2023).

Quality of disclosures, where credibility and verifiability act as central features, has been an area of continued interest over recent years (Lin & Qamruzzaman, 2023). Although hard information is widely regarded as more credible due to having undergone audits and objectivity-based foundations, a certain level of credibility is relative rather than absolute within a particular context (Primec & Belak, 2022). Strategic losses or risks associated with soft disclosures are likely regarded as more trustworthy than overly positive disclosures (Tan & Yeo, 2023). Such a phenomenon is in line with evidence in favor of investors' and analysts' acceptance of negative projections rather than positive projections lacking associated hard evidence in support. Text analysis of digital material, such as natural language processing (NLP), has further enhanced empirical evaluation of soft disclosures' subjectivity, readability, and tone such that verifiability is enhanced (Frankel, Jennings, & Lee, 2022).

One of the most interesting developments in literature has been the application of computational linguistics and machine learning to analyze soft disclosures (Pizzi, Rosati, & Venturelli, 2021). Machine-based tools can now be employed to measure disclosure features like sentiment, readability, forward-looking orientation, and linguistic complexity (Branstetter et al., 2023). Such methods can be applied to discriminate informative soft disclosures from managerial obfuscation. For instance, research on NLP finds vague or ambiguous linguistic style to be inversely related to market performance while accurate and transparent textual content to be positively related to firm value (Cohen, Lou, & Malloy, 2020). Similarly, machine learning techniques have been applied to discriminate between quantitative aspects imbedded within textual disclosures and pure qualitative narratives to generate better classifications of disclosure type (Schmitz et al., 2023).

The role of intangible assets and non-financial reporting has also become central to the hard–soft information framework (Breijer & Orij, 2022). Intangible resources such as goodwill, intellectual property, and brand equity are inherently difficult to measure and verify, yet they represent an expanding share of corporate value in knowledge-driven economies (Estrin et al., 2022). Research highlights that disclosures relating to intangibles rely heavily on soft information, making their credibility and reliability more complex (Sun et al., 2023). However, consistent and transparent reporting of such resources has been shown to strengthen investor confidence and reduce information asymmetry (Tsang et al., 2024). With the increasing inclusion of environmental, social, and governance (ESG) data in corporate reporting, the boundary between hard and soft disclosures has become blurred, resulting in hybrid disclosures that combine quantitative and narrative components. Financial analysts play a

crucial role in interpreting and integrating hard and soft disclosures (Krishnan et al., 2021). Studies emphasise that analysts rely on hard financial data for baseline forecasting but also incorporate managerial narratives into their assessments (Cui et al., 2021). Analysts often consider forward-looking statements, strategic plans, and qualitative indicators of market conditions when hard data does not capture emerging risks (Ashtiani & Raahemi, 2021). Evidence further suggests that overly optimistic managerial tone is discounted unless supported by verifiable evidence, whereas negative forward-looking disclosures are often accepted as early warning indicators (Ardia, Bluteau, & Boudt, 2022). This interaction illustrates the need for balance between disclosure types, with each complementing the other in shaping market expectations.

Media has also become an important vector for the transmission of both hard and soft information (Aviantara, 2021). Financial news, press releases, and online platforms frequently disseminate narrative content that influences investor expectations about firm value. Empirical evidence shows that media tone, particularly when pessimistic or uncertain, significantly affects financial outcomes by shaping investor sentiment (Call et al., 2024). At the same time, developments in media analytics have provided researchers with tools to measure the economic relevance of disclosures distributed through media sources. For example, sentiment indicators extracted from financial news are increasingly used as proxies for soft information in empirical models, alongside traditional financial data (Xu, 2023). These findings suggest that capital markets rely not only on formal corporate disclosures but also on narratives spread through broader media platforms.

The expansion of data sources has also reshaped accounting research itself (Thottoli & Ahmed, 2021). Earlier studies were based largely on conventional databases of financial statements, but recent work incorporates large-scale datasets of textual, social, and behavioural information. Digital archives of conference calls, company websites, and social media activity provide researchers with extensive unstructured data (Jayasuriya & Sims, 2022). This shift has transformed methodologies, encouraging empirical approaches that quantify the linguistic and narrative aspects of disclosure (Huang et al., 2022). Recent work has shown that systematic use of such textual datasets enables the development of innovative measures for assessing disclosure quality and credibility (French, 2023). These advancements have allowed accounting research to capture the dynamic relationships between firms, markets, and information intermediaries.

Patterns of voluntary disclosure have also been significantly reshaped by the digital era (Pizzi et al., 2021). Beyond regulatory filings, companies increasingly employ websites, social media, and other online channels to disseminate information. These platforms often release soft disclosures, such as management's views on strategy or responses to emerging risks, before corresponding hard data is published (Song et al., 2021). Empirical findings indicate that voluntary digital disclosures help reduce information asymmetry, improve market liquidity, and enhance firm valuation (Löffler, Norden, & Rieber, 2021). Nonetheless, concerns remain regarding the credibility of such disclosures when verification mechanisms are lacking (Lin & Qamruzzaman, 2023). Proposed solutions include the use of blockchain-based reporting and automated assurance systems to improve the reliability of digital disclosures. Investor decisions are strongly influenced by the interplay of hard and soft disclosures (Hanlon et al., 2022). While hard information forms the quantitative foundation of valuation, soft information shapes perceptions of future performance, risk exposure, and strategic direction (Chung et al., 2023). Research shows that markets often respond more strongly to negative soft disclosures than to positive ones, reflecting the asymmetric credibility assigned to bad versus good news (Call, Sharp, & Shohfi, 2021). Additionally, the tone and sentiment embedded within managerial narratives can significantly affect investment flows, even when financial outcomes remain constant (Wagenhofer, 2024).

In conclusion, the literature increasingly recognises that the distinction between hard and soft information is becoming less clear. With the rise of intangible assets, ESG reporting, and digital disclosure practices, financial markets are required to interpret hybrid disclosures that merge quantitative data with qualitative narratives (Bradshaw et al., 2021). At the same time, advances in computational techniques have expanded the ability to measure the credibility and market impact of soft information. Overall, both hard and soft disclosures are indispensable in modern reporting practices, and their interaction plays a crucial role in supporting efficient capital markets and informed investor decision-making (Blankespoor, deHaan, & Marinovic, 2020).

3. Methodology

3.1. Study Population and Sample

The study population comprises all Iraqi firms listed on the stock exchange between 2016 and 2023. The sample was determined according to several selection criteria: (i) continuous trading activity during the study period, (ii) availability of closing share prices for the entire period, (iii) accessibility of financial statements throughout the period, and (iv) completeness of the required data for measuring the study variables. Applying these criteria produced a final sample of 20 firms across various sectors, namely industry, agriculture, tourism, and services, yielding a total of 160 firm-year observations. Financial institutions, including banks, insurance companies, investment firms, and financial services entities, were excluded, since they are subject to distinct legislative frameworks and additional supervision by specialised regulatory bodies alongside the Securities Commission. Table 1 presents the sectoral distribution of the sampled firms.

Table 1: Study Simple.

N	Sector	Total Companies	Total Sample	Sample Ratio for the Sector	Sample Percentage of the Population
	Services	10	5	50%	
	Industry	25	5	20%	
	Hotels	10	5	50%	
	Agriculture	6	5	83%	
		51	20		40%

Source: Prepared by the researcher.

3.2. Study Variables and Method of Measurement

The independent variable in this study is represented by the disclosure of hard and soft information, whereas the dependent variable relates to the users of financial statements. The researcher outlines the methodology applied to measure each of these variables as follows.

3.2.1. Disclosure of Hard and Soft Information

The level of disclosure of hard and soft information in the financial reports of the Iraqi companies in the study sample can be measured as follows:

3.2.1.1. Disclosure of Soft Information

Firm valuation, expressed in logarithmic form, enables entrepreneurs to articulate their views regarding the company's worth, thereby influencing the determination of equity investment costs. The measurement of this construct can be operationalised through the following indicators:

i. Vagueness: assessed through the use of an uncertainty-related word list, which includes terms such as roughly, imprecise, likely, someplace, unique, and varied. Ambiguity is measured by calculating the proportion of sentences that contain at least one of these terms.
ii. Tonal Content: determined by the percentage of sentences classified as either positive or negative in tone.
iii. Explanatory Content: measured as the proportion of words devoted to clarifying or justifying outcomes, decisions, or managerial achievements, identified through a causal keyword list that incorporates terms such as so, aim, and outcome.
iv. Firm Value: calculated as the natural logarithm of the firm's market value, which is obtained by multiplying the number of outstanding shares by the share price at the end of the financial year.
v. Growth in Employees: measured by the percentage change in the number of employees in the current financial year relative to the preceding year.

3.2.1.2. Disclosure of Hard Information

The construct can be evaluated through the following indicators:

i. Numerical Intensity: a sentence is classified as numerical if it contains a digit or a numerical expression. Numerical intensity is then calculated as the proportion of numerical sentences to the total number of sentences.
ii. Objectivity: this dimension reflects the nature of hard information, which is generally factual and less susceptible to manipulation. Each statement is categorised as either objective, when it presents verifiable facts, or subjective, when it expresses opinions that may be open to interpretation. The overall measure is derived from the classification ratio, which indicates the extent of objectivity in the material.
iii. Firm Age: determined by subtracting the year of incorporation from the financial year under consideration.
iv. Industry: represented through a dummy variable, where a value of one indicates that the company belongs to the industrial sector, and a value of zero denotes firms from all other sectors.

3.2.1.3. Financial Statement Users

Financial statements serve multiple purposes and are utilised by diverse groups of users, including company management, competitors, customers, and employees. To assess financial statement users, two key indicators are considered. First, the return on shares, which is calculated as the ratio of the share price to the earnings per share. Second, the return on assets, derived by dividing the net profit after taxes by the total assets of the company.

3.2.1.4. Control Variables

This study incorporated several control variables to support the analysis of data:

i. Firm Size: Measured as the natural logarithm of total assets at the end of the financial year.
ii. Financial Leverage: Calculated as the ratio of total liabilities or obligations to total assets at the conclusion of the financial year.
iii. Market to Book: Used as a proxy for accounting conservatism, this measure is obtained by dividing the market value of total assets at the end of the financial year by their corresponding book value.

To conduct the applied study, the researcher collected data from financial reports and companies' stock prices for each period spanning from 2016 to 2023. These data were obtained from the Iraq Stock Exchange website and the official websites of the respective companies. The control variables outlined above provide valuable insights for both analysts and investors and are essential for evaluating all firms listed on the stock exchange.

4. Data Analysis

4.1. Descriptive Statistics

In this study, Table 2 provides a summary of the key descriptive statistics for the research variables. The analysis relied on the content analysis approach, which transforms written theoretical materials into quantifiable data, thereby allowing for an objective and measurable description of the observable content. Using annual reports and related data from the sampled firms, the average disclosure rates of hard and soft information were determined. Table 2 presents the descriptive statistics of both the principal variables and the control variables applied in the empirical investigation. With respect to the dependent variable, users of financial reports, the findings reveal that the average return on assets amounted to 2.03 per cent, while the mean return on shares reached 8.74 per cent. For soft information disclosure indicators, the results show that the average proportion of sentences containing at least one term reflecting uncertainty was 17.65 per cent, with a standard deviation of 6.76 per cent. Furthermore, the mean proportion of sentences identified as either positive or negative equalled 24.62 per cent, with a standard deviation of 6.10 per cent. The average firm value was 10.38, whereas employee growth reached 31.47 per cent.

Table 2: Descriptive Statistics of Main Variables.

	Obs	Means	Std.Dev	Min	Max
Financial Statement Users					
Return on Share	160	0.0874	0.0011	0.0063	1.2307
Return on Assets	160	0.0203	0.1784	0.0018	0.0789
Disclosure of Soft Information					
Vagueness	160	0.1765	0.0676	0.0000	0.6549
Tonal Content	160	0.2462	0.0610	0.000	0.5466
Firm Value	160	0.1038	0.0934	0.9367	0.1152
Growth in Employees	160	0.3147	0.2905	- 0.0814	0.5469
Disclosure of Hard Information					
Numerical Intensity	160	0.4257	0.2406	0.0354	0.6891
Objectivity	160	0.6384	0.3478	0.1212	0.9941
Firm Age	160	24.50	17.39	45.00	13.00
Industry	160	0.5000	0.1010	1.0000	0.0000
Control Variables					
Firm Size	160	0.1123	0.0897	0.1037	0.1265
Financial Leverage	160	0.7908	0.3041	0.9236	0.5019
Market to Book	160	2.4865	0.0932	0.8738	4.0927
Source: Prepared by the researcher.					

In terms of hard information disclosure, Table 2 indicates that the average ratio of numerical expressions to the total number of sentences was 42.57 per cent, with a standard deviation of 24.06 per cent. The mean proportion of information expressed as factual, or based on interpretations subject to judgment, was 63.84 per cent, with a standard deviation of 34.78 per cent. The descriptive statistics also reveal that the average firm age was 24.50 years, while the industry value averaged 0.50. Overall, the descriptive evidence suggests that firms disclose a greater volume of hard information compared with soft information, since managers tend to prioritise factual disclosures that mitigate risks, although these do not necessarily guarantee enhanced economic outcomes.

4.2. Pearson Correlations

The researcher employed Pearson's correlation matrix to examine the significance of the associations between the study variables. To determine the relationship between indicators of hard information disclosure and those of soft information disclosure, Pearson's correlation results are presented in Table 3. Moreover, Table 3 illustrates that the components of soft information disclosure are positively correlated with one another but negatively correlated with the measures of hard information disclosure. Conversely, the elements of hard information disclosure exhibit positive correlations among themselves and negative associations with soft information indicators. The findings further suggest that the informational environment becomes more ambiguous when firms predominantly rely on soft disclosures, whereas greater reliance on hard disclosures reduces such ambiguity. Consequently, the nature of the information environment plays a central role in shaping the extent to which disclosures are characterised as hard or soft, thereby influencing the accessibility and clarity of information available to users of financial reports.

Table 3: Pearson Correlations Between Soft and Hard Information Disclosure.

	1	2	3	4	5	6	7	8
Vagueness	1.000							
Tonal Content	0.374**	1.000						
Firm Value	0.260**	0.189**	1.000					
Growth in Employees	0.118*	0.172**	0.204**	1.000				
Numerical Intensity	-0.113*	-0.126*	-0.279**	-0.187**	1.000			
Objectivity	-0.292**	-0.429**	-0.119*	-0.114*	0.381**	1.000		
Firm Age	-0.259**	-0.340**	-136*	-0.408**	0.477**	0.126*	1.000	
Industry	-0.191**	-0.241**	-0.121*	-0.227**	0.343**	0.198**	0.119*	1.000
Source: Prepared by the researcher.								

4.3. Statistical Hypothesis Tests

This part of the study examines the effect of hard and soft information disclosure on enhancing the decision-making of financial report users in Iraqi companies. For this purpose, four statistical hypotheses were formulated, each of which is tested separately in the following subsections.

4.3.1. First Hypothesis Test

This hypothesis examines soft information disclosure's effect on users' decisions contained in financial reports on a measure of the rate of return on share. Table 4 reports the findings on the multiple regression analysis used to investigate this relationship. Soft information disclosure was found to affect return on share significantly such that a relationship measure (R) equaling 0.532 was recorded at a level of significance of 1%. A coefficient of determination (R^2) value of 0.283 was realized, indicating a rather strong relationship between soft information disclosure and return on share. Validation of these findings was done using a highly significant F-statistic value of 17.014 corresponding to a level of significance of 0.000 (less than 5%). It further transpires that soft information disclosure possesses a positive regression constant. It thus has a significant positive effect on return on share. Based on these results, we accept the first hypothesis of this research.

The results also highlight a negative and significant effect of financial report ambiguity, measured by the absolute percentage of vagueness, on the return on shares of Iraqi companies. This implies that a higher proportion of sentences containing uncertainty terms reduces the return on shares. Conversely, the informational content of financial reports, reflected

in the absolute percentage of tonal content (whether positive or negative), shows a significant positive impact on return on shares. This finding underscores the importance of financial disclosures in shaping investors' decisions, as financial reports remain a critical source of information for stakeholders engaged in securities investment. In addition, the results emphasise the role of market value in influencing stock prices. Larger firms generally enjoy higher stock prices due to established performance records, stronger profitability, and greater investor confidence. Such firms are perceived as more stable and less risky, which increases demand for their shares and subsequently raises prices. However, the regression analysis reveals that the growth rate in employee numbers has no significant effect on the return on shares of Iraqi companies. Interestingly, the negative relationship suggests that large-scale employee layoffs may signal potential financial difficulties, thereby undermining investor confidence and adversely affecting share value.

Table 4: Effect of Soft Information Disclosure on Return on Share.

Variables	Coefficients B	Std. Error	T	Sig
Constant	0.752	0.445	1.627	0.106
Vagueness	-0.052	0.010	-5.045	0.000
Tonal Content	0.491	0.159	3.093	0.002
Firm Value	1.220	0.319	3.821	0.000
Growth in Employees	-0.095	0.069	-1.374	0.171
Firm Size	0.318	0.095	3.359	0.001
Financial Leverage	1.428	0.142	1.007	0.315
Market to Book	0.474	0.072	6.603	0.000
R	0.532	R^2		0.283
Adjusted R^2	0.277	Durbin- Watson		1.783
F	13.014	Sig		0.000
Source: Prepared by the researcher.				

4.3.2. Second Hypothesis Test

This hypothesis examines the effect of soft information disclosure on users of financial reports in relation to the return on assets. The hypothesis was tested through multiple regression analysis, and the results are presented in Table 5. The findings reveal that the disclosure of soft information has a significant influence on the return on assets, with the correlation coefficient (R) reported at 0.468 at a 1% level of significance. The coefficient of determination (R^2) was 0.219, indicating that soft information explains approximately 21.9% of the variance in return on assets, which reflects a relatively strong relationship between the two variables. Moreover, the F-value of the test reached 11.907, representing a substantially high value, while the significance level stood at 0.000, which is below the 5% threshold. These outcomes confirm that soft information disclosure exerts a positive and statistically significant effect on return on assets, attributable to the positive value of the regression constant. Therefore, based on the results of the analysis, the second hypothesis of the study is accepted.

Table 5: Effect of Soft Information Disclosure on Return on Assets.

Variables	Coefficients B	Std. Error	T	Sig
Constant	0.259	0.813	2.319	0.046
Vagueness	-0.363	0.069	-5.269	0.000
Tonal Content	-0.652	0.386	-1.705	0.093
Firm Value	0.419	0.112	3.730	0.000
Growth in Employees	0.052	0.041	1.270	0.206
Firm Size	3.137	0.994	6.094	0.000
Financial Leverage	0.294	0.238	1.235	0.218
Market to Book	1.227	0.123	2.845	0.031
R	0.468	R^2		0.219
Adjusted R^2	0.210	Durbin- Watson		1.664
F	11.907	Sig		0.000
Source: Prepared by the researcher.				

4.3.3. Third Hypothesis Test

This hypothesis investigates the effect of hard information disclosure on financial report users in relation to the return on share. The hypothesis was examined using multiple regression analysis, and the outcomes are presented in Table 6. The results indicate that hard information disclosure significantly influences the return on share, with the correlation coefficient (R) recorded at 0.476 at the 1% significance level. The coefficient of determination (R^2) was 0.227, suggesting that hard information accounts for approximately 22.7% of the variance in return on share, reflecting a strong relationship between the two variables. Furthermore, the F-value reached 21.765, representing a considerably high value, while the significance level was 0.000, which is lower than the 5% threshold. These findings confirm that hard information disclosure exerts a positive and statistically significant effect on the return on share, supported by the positive value of the regression constant. Consequently, based on the analysis, the third hypothesis of the study is accepted.

Table 6: Effect of Hard Information Disclosure on Return on Share.

Variables	Coefficients B	Std. Error	T	Sig
Constant	1.239	0.539	2.299	0.022
Numerical Intensity	0.136	0.051	2.649	0.001
Objectivity	0.797	0.374	2.133	0.034
Firm Age	0.403	0.118	0.818	0.148
Industry	-0.215	0.098	2.197	0.029
Firm Size	0.507	0.103	4.926	0.000
Financial Leverage	1.013	0.439	1.269	0.136
Market to Book	2.403	0.118	3.148	0.000
R	0.476	R^2		0.227
Adjusted R^2	0.219	Durbin- Watson		2.178
F	21.765	Sig		0.000
Source: Prepared by the researcher.				

4.3.4. Fourth Hypothesis Test

This hypothesis investigates whether hard information disclosure has any impact on financial report users through return on assets. Multiple regression was employed and reported in a summative format in Table 7. It can be observed from regression analysis that hard information disclosure is having a statistically significant influence on return on assets since the correlation coefficient (R) was 0.618 at a significance level of 1%. It was observed that the coefficient of determination (R^2) was 0.382 and exhibits that hard information disclosure explains approximately 38.2% variance in return on assets and thus shows a strong connection between both these aspects. It was also observed that the F-statistic was 24.178 and a level of significance was 0.000 that is significantly less than the threshold level of 5%, reinforcing strength in evidence. It is further supported by positive regression constant that exhibits that hard information has a positive and statistically significant influence on return on assets. Thus, this research's fourth hypothesis is accepted.

Table 7: Effect of Hard Information Disclosure on Return on Assets.

Variables	Coefficients B	Std. Error	T	Sig
Constant	1.899	0.390	4.872	0.000
Numerical Intensity	0.184	0.044	3.786	0.001
Objectivity	-0.358	0.346	-1.324	0.127
Firm Age	2.512	1.433	3.164	0.002
Industry	-0.019	0.014	-1.342	0.180
Firm Size	0.451	0.203	4.132	0.000
Financial Leverage	-0.215	0.098	0.926	0.238
Market to Book	0.397	0.070	1.066	0.211
R	0.618	R^2		0.382
Adjusted R^2	0.377	Durbin- Watson		1.994
F	24.178	Sig		0.000
Source: Prepared by the researcher.				

5. Conclusion

To conclude, the study demonstrates that mandatory disclosure of hard information often reduces the scope for soft information, and when both types are provided simultaneously, they are generally interpreted predominantly as soft. The findings also reveal that managers with dishonest intentions are more inclined to rely on objective disclosures, whereas managers who are trustworthy and possess valuable subjective insights tend to reinforce them with validation. Since information underpins financial transactions and markets, taking both quantitative and qualitative forms, this research distinguishes between hard and soft information and emphasises the comparative benefits of each. The study further explains that hard information is quantifiable, easily stored, and impersonally communicated, with its reliability unaffected by the collection process. In contrast, advances in technology have transformed the way soft information is gathered, analysed, and transmitted, reshaping financial markets, intermediaries, and incentives for either proper or improper data use. Given the inherent uncertainty of future outcomes, soft information emerges as a key contributor to information asymmetry, limiting entrepreneurs' capacity to attract investment. The evidence suggests that while soft information plays an essential role in financing entrepreneurial ventures, it entails higher acquisition costs for investors compared with hard information. This makes it more difficult to utilise despite its significance. Moreover, the results confirm that compulsory disclosure of hard information diminishes the level of soft disclosure, and when disclosed together, the information is largely perceived as soft. The study therefore concludes that although soft information is indispensable for supporting entrepreneurial activities, its costliness and complexity pose challenges to investors, in contrast to the relative accessibility and objectivity of hard information.

5.1. Implications

Several recommendations may be drawn for practitioners and regulators from the findings of this study. First, policymakers are encouraged to adopt innovative approaches in structuring and designing disclosure systems, ensuring a balance between mandatory hard information and the flexible presentation of soft disclosures. A regulatory framework that places stronger reliance on hard data is essential to minimise the excessive weight given to qualitative commentary, which often reduces comparability and limits the potential for independent assurance. Regulators, including standard setters and exchange authorities, could therefore benefit from designing a structured and systematic disclosure process that integrates both hard and soft information, either within a single consolidated report or through a sequential format. Such an approach would enhance transparency and strengthen assurance.

Second, significant investment is required in technological tools and digital reporting capabilities within financial sector organisations to strengthen the credibility of soft disclosures and improve their accessibility. Advanced technologies such as natural language processing, blockchain, and artificial intelligence-based assurance mechanisms hold strong potential for reducing bias, inaccuracies, and manipulation in narrative disclosures. Nevertheless, these technologies should be integrated appropriately to provide reasonable assurance and enhance the reliability of information sharing. Once organisations establish and embed such credibility in their disclosure practices, soft disclosures can become not only informative but also trustworthy, thereby enhancing investor confidence and contributing to greater market efficiency.

Third, executives and boards must recognise that information asymmetry is often at its peak in contexts of uncertainty, such as entrepreneurial and innovation-driven activities. In these cases, disclosures should combine quantitative financial metrics with qualitative, narrative, and forward-looking insights, delivered in a neutral and objective manner. By integrating both evidentiary elements and subjective perspectives, firms provide investors with more balanced insights into intangible or uncertain investment indicators, facilitating more informed evaluation of potential risks and opportunities. Finally, investors and analysts are advised to refine and adapt their decision-making models by systematically incorporating both hard and soft information. Hard information offers reliable and formal foundations for decision-making, while soft information conveys strategic signals of future risks and opportunities, even if it is less straightforward to evaluate with equal confidence. The application of advanced text analytics and sentiment analysis can further support analysts in forming a more holistic and timely understanding of a firm's disclosures. This enables a more accurate assessment of risk and investment potential within the broader market context.

5.2. Future Directions

This hypothesis examines soft information disclosure effects on users' decision-making in financial reports, specifically shares' rate of return. Table 4 presents findings on multiple regression analysis to validate this relationship. The research results indicate that soft information disclosure is significant at a level of significance of 1%, since the correlation coefficient (R) is equal to 0.532. It further shows a relationship between soft information disclosure and returns on share of moderate strength since the coefficient of determination (R^2) is equal to 0.283. These results are further corroborated with an F-statistic equalling 17.014 and level of significance equalling 0.000 below the threshold required (5%). Further, a positive regression constant corroborates that soft information disclosure has a significant positive relationship on return on share. Thus, this research's first hypothesis is accepted.

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