TONE DISCLOSURE AND DEBT FINANCING: EMPIRICAL STUDY FROM THE BANKING SECTOR GOVERNANCE

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Abstract

This research examines the relationship between tone disclosure (TD) and debt financing (DF) in the Jordanian banking sector between 2010 and 2019. This research uses the agency theory since it explains TD behavior to reduce information asymmetry and conflict of interest. Based on this theory, the first hypothesis suggests a positive association between TD and DF. Furthermore, the second hypothesis suggests a bidirectional relationship between TD and DF. The sample consists of 15 banks in the Jordanian banking sector. This research calculates TD by dividing the number of positive words by the total number of words. Results show a positive relationship between TD and DF, and the relationship is bidirectional (Hui et al., 2024; Zhu et al., 2023), which proves our two hypotheses. The study results help external financial statement users, mainly financers, understand the use of TD in the annual report in Jordan, one of the emerging countries. Also, the results recommend using TD in a bank's annual report to attract more debt financers.

Keywords: Tone Disclosure, Debt Financing, Jordanian Banking Sector, Agency Theory

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1. INTRODUCTION

The relationship between tone disclosure (TD) and debt financing (DF) has always been a critical area of investigation in the financial sector, particularly within emerging markets (Chadha & Singhania, 2024). This paper will attempt to find out this relationship in the context of the Jordan banking sector over the period 2010–2019. This study contributes to the wide literature on financial communication and its influence on financial stability and investor behavior by deciphering how the tone of narrative disclosures in annual reports influences and is influenced by DF.

The TD is part of narrative disclosure and uses optimistic or pessimistic language towards the financial statements. It is a qualitative tool that narrows down communication gaps between management in a company's internal environment and stakeholders such as investors or financers in the external environment. Past empirical evidence underlines TD as lessening information asymmetry and lowering conflicts of interest, hence being congruent with the principles of agency theory. Such a theory indicates that with enhanced transparency and communication, there will be improved stakeholder trust, consequently leading to better financing conditions (Reid et al., 2024).

In this regard, the banking sector within Jordan stands as a good case scenario for this research work since it contributes immensely to the national economy and particularly relies on both traditional and modern borrowing methods (Khanfar & Almasri, 2023). This makes the response of the sector to global financial crises and recovery in the wake of a valuable context for examining the dynamics between TD and DF (Naeem et al., 2024).

The research was thus pegged to two major objectives, which included finding out the positive relationship between TD and DF in the Jordanian banking sector and investigating whether such a relationship is bidirectional.

The research methodology adopted for the study is quantitative in nature. Secondary data were taken from the annual reports of 15 banks in the Jordanian banking sector for the period of a decade. While the TD was measured by the number of positive words in the reports divided by the total number of words, DF was measured as total debt divided by total assets. The research applies regression analysis to test the hypotheses and uses a control for bank size, age, return on assets (ROA), loss, and revenue growth.

This research has multiple implications for the field of financial management and disclosure practices. First, it provides empirical evidence of the role of tone in enhancing the condition of DF with disclosure in an emerging market context.

The paper therefore highlights the relevance of more qualitative financial communication that serves to reduce information asymmetries and align stakeholder interests. Finally, the results allow deriving practical implications for banks and for policymakers when there is interest in attracting and sustaining external financing: the strategic use of tone in annual reports.

The paper investigates how the interaction between disclosure TD and DF shapes financial communication strategies, and hence possibly impacts financial stability in the banking sector.

The paper is organized as follows. Section 2 elaborates on what narrative disclosure is and several studies undertaken with respect to DF. Section 3 delves into data collection and analytic techniques. The subsequent sections, Section 4 and Section 5, present the empirical results and discuss their implications. Finally, Section 6 concludes the paper with a summary of findings, limitations, and suggestions for future research.

2. LITERATURE REVIEW AND HYPOTHESES DESIGN

2.1. Narrative disclosure

The annual report presents financial data to investors and data analysts who influence investment decisions (Allee & Deangelis, 2015). Likewise, disclosure is expressed through organized financial reports that contain management discussions, financial statements, and notes and is considered essential for the effective functioning of the capital market. One of the things that contribute to improving communication between the internal and external parties of the company is the narrative disclosures; they are considered non-financial disclosures (Elsayed & Elshandidy, 2020). In recent years, researchers have increased interest in researching how to analyze textual annual reports. Recent research aims to increase the effectiveness of communication tools between managers and external parties to determine the impact on the external user and how to organize information delivery through annual reports (Blankespoor, 2018).

Furthermore, narrative disclosure is a way for managers to convey information about the company to shareholders and outside parties. However, narrative disclosure addresses the inconsistency of financial information and the company's primary business. Managers develop appropriate disclosure of the change in financial performance and investors' needs for information (Chen & Xie, 2022). Previous studies also argued that the narrative disclosure could be expressed as a message that is prepared by the encoder (the preparer of financial reports) to deliver it to the user of the financial reports (decoder), who receives it and analyzes it to find out about certain decisions (Bonsall & Miller, 2017). Moreover, others added that linguistic styles are characteristic of narrative disclosures that vary and fluctuate in proportion to the difference in the company's annual report and financers' minds. Besides that, narrative disclosures provide data and information related to the company's future and current annual reports (Bonsón et al., 2021).

Correspondingly, the previous research shows that narrative disclosures are divided into two patterns: the first type is descriptive narrations, and the other is narrative narrations. The descriptive narrative expresses specific data such as notes explaining financial statements, corporate governance, corporate social responsibility (CSR), and reports on benefits paid to board members. Recent studies shed light on storytelling as a discussion and analysis of the company's annual report and financial position (El-Haj et al., 2020).

Finally, TD is one of the types of narrative disclosures, and based on the previous studies, everything mentioned leads to investigating the interaction between managers and external users through TD.

2.2. Tone disclosure

Tone disclosure indicates the use of either an optimistic or pessimistic tone while disclosing financial statements. It is also perceived to be one of the characteristics of narrative disclosures. In other terms, it is described as one of the means of narration within an annual report, as it operates towards building a tool that connects internal parties of the company to external parties such as financiers (Evans et al., 2022). Additionally, TD found that it is a tool through which financial information is arranged in the annual report and is considered to have a narrative and qualitative nature of quantitative facts (Evans et al., 2022). Furthermore, TD is related to the negative and positive words by which the company describes its interaction in the market, how its performance development is measured, and the economic factors that influence it (Zhou et al., 2022).

Prior research defines TD as a problem solver, which is the need for more financial education for some external users.

In recent years, the importance of textual analysis of accounting data and its financial reports has increased in accounting literature. The qualitative information presented in the annual reports is considered reliable information that comes along with the financial statements to confirm its validity (Morshed, 2024).

The United Kingdom (UK) emphasizes the importance of TD because external parties need to understand the company's position in the financial market by introducing the information and the words used in the annual report. Merging the TD with the financial statements increases the value of these data and is presented and interpreted more straightforwardly and uncomplicatedly (Henry et al., 2023). The TD has become nearly 70% of the annual financial reports, which means that researchers have begun to focus on textual disclosures more than examining the financial statements. The importance of TD lies in facilitating an understanding of quantitative information and clarifying the company's future vision and the risks and benefits that reflect the firm's quantitative information (Du & Kuo, 2023).

Quantitative information does not give a comprehensive view of decision-making concerning financing, hence the role and importance of the TD they came. Moreover, the focus on TD in Europe is increasing. The TD is associated with psychology studies through how information is presented to users and the extent to which they are affected by the TD in the annual report (Hamza et al., 2023). The importance of TD lies in the extent to which qualitative information is related to the quantity that helps attract external financing by influencing external users from the qualitative information disclosed. As a result, the focus on TD has become an important matter to be investigated by researchers as it is not essential to know what the information is but how to present it to external users (Elliott et al., 2024).

Correlation between TD and the companies' plans to generate cash from outside financiers Furthermore, TD shares valuable information and weaknesses in internal controls and adds it to earnings announcements and quantitative information. Thus, focus on the potential economic consequences of using a TD and indicate that this tone is essential in providing additional and quantitative information. The TD is divided into optimistic and pessimistic, as reflected in the annual report (Gounopoulos & Zhang, 2024). The optimistic tone improves the company's public image and increases capital. Either the pessimistic tone is used to avoid certain obligations over time. Companies reflect their enhancement of the annual report by focusing on optimistic news and disclosing more good news than bad. In addition to the above, it showed that a positive tone impacts conveying the company's good annual report to interested external parties. Technological events and developments that keep pace with accounting standards and reporting practices have taken a great deal of space to develop the TD (Beretta et al., 2019).

Initially, the form of disclosure was traditional financial statements showing the company's financial position, as the annual reports lacked direct disclosure, such as the narration style in the reports. The development reached the inclusion of a section in the financial reports called management discussion and analysis (MD&A) that contributes to adding content that helps in understanding the content of the financial reports (Fisher et al., 2020).

In conclusion, the development of the TD led to the transition from the study of financial information to a holistic approach that takes into account the views of management and non-financial performance through the introduction of MD&A, then narrative reports, conversational reports, advanced data analysis, and finally standardization efforts, as this would enhance transparency in the TD and raise the effectiveness of disclosures in affecting the future performance of the company, attracting investment, sustaining organizations, and providing practical assistance in evaluating financial health. Therefore, the first hypothesis is:

H1: A positive relationship exists between tone disclosure and debt financing in the Jordanian banking sector.

2.3. Debt financing

Debt financing is one of the financing methods that companies adopt to provide financial liquidity to ensure the continuity of their business, and it is in the form of bonds and deposit certificates (Shiyyab & Morshed, 2024). DF covers the lack of insufficient liquidity that supports the company's main activity, so the importance of this method lies because it is considered less expensive than other financing methods, such as issuing shares. Moreover, DF is one of the methods companies use to raise working capital or cover capital expenditures by selling debt instruments such as certificates of deposit in banks.

Capital enhancement is considered one of the pillars for the continuity of companies. This means that DF is an essential source of capital increase. DF reduces agency costs that appear because of the difference of interests between the principal and the agent through the commitment of both parties to raise the performance efficiency of the company to fulfill liabilities payments (Ramadan & Morshed, 2024). One of the things that prove the importance of debt is that companies direct excess or free cash flow to fulfill DF. In this matter, the company avoids serving personal interests (Morshed et al., 2024).

The importance of DF since it is one of the elements of the capital structure required to support the fixed assets of companies and their operational capital. Based on the above, DF is an essential tool for pressure management to improve the quality of financial information provided in the annual report. This means that interest obligations put management under pressure to improve performance to pay obligations and avoid bankruptcy (Gennaro, 2021).

Furthermore, DF is a primary source that completes the capital structure format. Additionally, DF has some advantages, such as no change in ownership structure and a reduction of the agency problem (Orichom & Omeke, 2021).

DF contributes to maintaining the company's continuity through integrated administrative work to maximize the company's profits. An effort is made to pay off obligations and reach financial stability. The DF method reduces costs by obtaining the advantage of tax exemption on the interest paid (Vanichchinchai, 2023). The discovery of DF dates back to the Middle Ages when money lending services were launched and made available to merchants in Venice, Italy. Then, in the eighteenth century, international banking services emerged under the leadership of the Rothschild family (de Matteis et al., 2023). DF is one of the causes of agency costs, which arise through the relationship between shareholders, managers, debt holders, and shareholders. Debt reduces agency costs and maintains that through an administrative commitment to maintaining performance balance (Galariotis et al., 2023). In addition to the above, research confirms that debts are more prominent than stocks because of the ability to control management through the consistency of information provided to shareholders. DF is considered one of the sources of capital formation for any startup company because retained profits are not available or are considered insufficient. Finally, DF is one of the sources companies rely on to finance themselves; it is the second form of capital structure and an essential element in corporate financing (Savio et al., 2024). The company finances its operations and assets by issuing financial instruments such as short-term debts, long-term debts, loans payable, notes payable, and bonds.

Based on the agency theory, company owners do not prefer to resort to DF because they are keen not to affect the company's value by imposing more obligations on it (Pandey & Sahu, 2019). On the other hand, the agent tends to serve their interests away from the company's interests, which affects the TD due to inconsistent performance and conflicts of interest. DF enhances disclosure practices by complying with reporting requirements, and thus, this compliance introduces credibility and transparency of TD in the annual reports (Feng & Wu, 2023).

The presence of one goal for the investor and the lender, which is to avoid bankruptcy, improves TD. Also, DF raises the susceptibility of the administrative commitment to improve the financial performance to pay obligations. DF leads to a higher degree of risk through its impact on the return expected by the company's owners. Therefore, it is possible to reach a less optimistic TD (Guo et al., 2024). Moreover, debt may lead to financial hardship or bankruptcy, but at the same time, it increases the commitments that enhance the performance improvement reflected in the TD in the reports (Du et al., 2022). In the context of the above and concerning the first hypothesis, this study assumes a bidirectional relationship between DF and TD. Therefore, the second hypothesis is:

H2: The relationship between tone disclosure and debt financing is bidirectional in the Jordanian banking sector.

3. RESEARCH METHODOLOGY

3.1. Study sample

The study sample consists of all banks in the Jordanian banking sector during the period 2010–2019, which follows the effects of financial crises. Furthermore, the Jordanian banking sector was selected because it is one of the most critical sectors in Jordan. It hugely affects the Jordanian economy, where most investors and financiers rely on the banking sector (Al-Abedallat, 2017). It is considered one of the best sectors for financing and investment.

The number of banks in the selected sample from Jordan is 23, except for eight banks due to the lack of written reports, often presented as pictures or scans. Finally, the total number of observations in this sample is 145. In contrast, there are five observations not available.

3.2. Dependent variable: *Debt financing*

Debt financing is the company's ability to fulfill its obligations, and its measurement is the total debt divided by the total assets. The ratio of total debt over total assets is used for measuring DF. Total debt over total assets and long-term debt to total assets are used to test the relationship between CSR disclosure and DF (Neves et al., 2023).

3.3. Independent variable: *Tone disclosure*

Previous research has found that in the past decade, interest has been focused on measuring TD using computer linguistics tools such as Corporate Financial Information Environment (CFIE) software and NVivo software. One of the tools used is a bag-of-words approach used in studies of textual analysis in general and narrative in particular This approach aims to measure the frequency of words present in a document through a word list to be studied in a particular phenomenon divided by the total number of words. The TD is measured in many previous studies based on the number of positive or negative words, where positive words indicate optimism, while negative words indicate pessimism (Bassyouny, 2020).

The tone is qualitative information. However, it transferred from qualitative to quantitative information to be able to examine the impact of the statistical results on DF using the following steps:

1. The annual reports of the banks classified in the Jordanian banking sector were collected.
2. A list of positive words was processed on NVivo and uploaded; each annual report was uploaded on NVivo software.
3. NVivo provided the number of positive words and the total number of English words in each annual report.
4. Finally, the tone is measured quantically by using the following equation:

$$TD = \frac{Number\ of\ positive\ words}{Number\ of\ total\ words\ in\ the\ annual\ report} \tag{1}$$

3.4. Control variables

To better isolate the effect of TD on DF, a set of firm-specific characteristics was included based on previous studies including the bank size (*Size*), the bank age (*Age*), *profitability* (i.e., *ROA* and *Loss* dummies), and revenue growth (*Rev_Growth*) (Doshi et al., 2023).

3.5. Data collection method

The following secondary data was collected to support this research:

1) Financial data needed for this study was gathered from annual reports published on the bank's website.

2) Other data about TD and DF was obtained from books, journals, theses, and the Internet, which support the mechanism of measurement and historical data.

3) The word list used to measure the TD was gathered.

The study variables were examined using statistical software (i.e., Stata). This study was conducted using descriptive statistics, correlation, multi-collinearity test, and regression analysis to achieve the primary purposes of the study.

3.6. Study models

The dependent variable is debt financing (*DF*), and the first model includes an independent variable — tone disclosure (*TD*). The Model 1 was used to test *H1*. In addition, control variables are *Size*, *Age*, *ROA*, *Loss*, *Rev_Growth*, and year dummy (*Year*).

Based on prior related studies, the model below was used to test the relationship between *TD* and *DF*:

Model 1 (H1)

$$DF_{it} = \alpha + \beta_1(TD_{it}) + \beta_2(Size_{it}) + \beta_3(Age_{it}) + \beta_4(ROA_{it}) + \beta_5(Loss_{it}) + \beta_6(Rev\_Growth_{it}) + \beta_7(Year_{it}) + \varepsilon \tag{2}$$

Model 2 (H2)

$$TD_{it} = \alpha + \beta_1(DF_{it}) + \beta_2(Size_{it}) + \beta_3(Age_{it}) + \beta_4(ROA_{it}) + \beta_5(Loss_{it}) + \beta_6(Rev\_Growth_{it}) + \beta_7(Year_{it}) + \varepsilon \tag{3}$$

Model 2 tests the *H2* where the dependent variable is *TD*, and the model contains an independent variable — *DF*.

This study uses a quantitative approach with descriptive statistics and regression analysis to examine the relationship between *TD* and *DF* in Jordanian banks. Other possible alternative methodologies include a qualitative approach with interviews and content analysis to establish deeper insights into the context, a mixed method design using the quantitative data coupled with surveys of financial managers for a better representative view, and a longitudinal design to capture the changes over time and thus offer a dynamic perspective on the TD-DF relationship. These alternatives may enrich the understanding of data and provide different interpretations of it.

4. RESEARCH RESULTS

The study examines the interaction between *TD* and *DF* in Jordanian banks, reporting a bidirectional relationship. Descriptive statistics describe a low mean for *TD* (0.004) and a higher mean for *DF* (0.122), while control variables followed the same pattern as previous studies (see Table 1). Results from the regression also confirmed that *TD* positively significantly enhances *DF*, which agrees with the agency theory, and *DF* positively influences *TD*, showing another way of increasing the credibility of annual reports. The interplay between both means better TD could attract more DF for banks.

4.1. Descriptive statistics

Table 1 shows the descriptive statistics for all variables in the study. This descriptive statistic includes the primary variables (*TD* and *DF*) and the control variables (*Size*, *Age*, *ROA*, *Loss*, and *growth*). Descriptive statistics show that the mean of *TD* is 0.004 positively with a minimum of 0.001 and a maximum of 0.010. This means that the ratio of positive words in the annual report is relatively small. This could be because the study sample is small since it is limited to banks. On the other hand, *DF* has a positive mean of 0.122 with a minimum of 0.001 and a maximum of 0.324. Banks rely on debt to finance their assets at a lower rate than equity. The descriptive statistics of the control variables are similar to those in previous studies.

Table 1. Descriptive statistics

Variable	*Observations*	*Mean*	*Std. dev.*	*Min*	*Max*
DF	145	0.122	0.085	0.001	0.324
TD	145	0.004	0.002	0.001	0.010
Size	145	15.876	2.325	12.765	21.027
Age	145	3.926	0.542	2.773	5.328
ROA	145	0.017	0.009	-0.002	0.038
Loss	145	0.034	0.183	0.000	1.000
Rev_Growth	145	0.064	0.132	-0.188	0.813

4.2. Correlation analysis

Table 2 shows the correlation analysis for the study variables. It shows that *DF* positively correlates with *TD* by (37.32%). Table 2 indicates that the highest correlation of 0.8273 was found between *Size* and *Age*.

Table 2. Correlation analysis

Variable	*DF*	*TD*	*Size*	*Age*	*ROA*	*Loss*	*Rev_Growth*
DF	1						
TD	0.3732*	1					
Size	0.4451*	0.1575	1				
Age	0.3615*	0.0628	0.8273*	1			
ROA	-0.1744*	-0.0159	-0.1971*	-0.2418*	1		
Loss	0.1781*	-0.0157	0.2498*	0.2710*	-0.2582*	1	
Rev_Growth	-0.1126	-0.143	-0.2029*	-0.121	-0.1465	0.1863*	1

*Note: *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.*

4.3. Regression results for *H1*

Table 3 shows the impact of *TD* on *DF*, where *DF* serves as the dependent variable. The coefficient of *TD* is positively and statistically significant at a p-value of 1%. This result is similar to the study prediction in the *H1*. This means a bank's probability of disclosing a positive *TD* is positively associated with its *DF*. Thus, *H1* is accepted. Consistent with, the positive effect of *TD* on *DF* is consistent with agency theory that *TD* reduces conflict of interest and information asymmetry. Regarding the control variables, our results report that *Size* is positively significant with *DF*. We also find a negative association between *DF* and _cons.

R-squared is 31.39%. This value indicates that 31.39% of the variable in *DF* scores can be predicted from the independent variables *TD Size*, *Age*, *ROA*, *Loss*, *Rev_Growth*, and _cons. Note that this is an overall measure of the strength of association and does not reflect the extent to which any particular independent variable is associated with the dependent variable. The results in the tables confirm the study results that *TD* in Jordanian banks positively affects *DF*. This means that *TD* is used to attract more *DF*.

Table 3. Regression result *H1*

DF	*Coef.*	*Robust std. err.*	*t-value*	*p-value*
TD	15.965***	4.183	3.82	0.000
Size	0.011**	0.005	2.21	0.029
Age	0.003	0.02	0.14	0.885
ROA	-1.006	0.741	-1.36	0.177
Loss	0.042	0.032	1.33	0.187
Rev_Growth	-0.022	0.053	-0.43	0.669
_cons	-0.133**	0.055	-2.38	0.019
Year	Included			
N	145			
R-squared (%)	31.39%			
F-stat	4.97***			
Mean VIF	1.98			

*Note: VIF — variance inflation factor. *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.*

4.4. Regression results for *H2*

Table 4 shows the impact of *DF* on *TD*, where *TD* serves as the dependent variable. The coefficient of *DF* is positively and statistically significant at a p-value of 1%. This result is similar to the study prediction in the *H2*. This means that Jordanian banks' *TD* is positively and significantly associated with *DF*, indicating that the relationship between *DF* and *TD* is bidirectional. Thus, *H2* is accepted. The result aligns with previous studies in explaining *DF* which enhances the credibility and transparency of the TD in the annual reports (Uyar et al., 2024).

Therefore, according to Aksoy and Yilmaz (2023), DF increases the commitment of companies to improve the quality of financial information for the ability to pay debts, thus improving the TD in the annual reports.

R-squared is 19.96%. This value indicates that 19.96% of the variable *TD* scores can be predicted from the independent variable's *DF*, *Size*, *Age*, *ROA*, Loss, *Rev_Growth*, and _cons. Note that this is an overall measure of the strength of association and does not reflect the extent to which any particular independent variable is associated with the dependent variable. The results in the tables confirm our main result that *DF* positively affects *TD* in the Jordanian banking sector. This supports that *DF* is used for reducing agency costs. Given this result, the study motivated the companies to TD because TD helps reduce conflict of interest and information asymmetry. Furthermore, TD gives the solution for external users to make the best decision and helps them understand the information the annual report contains.

Table 4. Regression result *H2*

TD	*Coef.*	*Robust std. err.*	*t-value*	*p-value*
DF	0.007***	0.002	3.92	0
Size	0	0.000	1	0.319
Age	-0.001	0.000	-1.45	0.15
ROA	-0.001	0.016	-0.04	0.966
Loss	0.000	0.001	-0.62	0.54
Rev_Growth	-0.001	0.001	-0.64	0.524
_cons	0.003***	0.001	2.79	0.006
Year	Included			
N	145			
R-squared (%)	19.96%			
F-stat	2.66***			
Mean VIF	1.99			

*Note: *, **, *** denote significance at the 10%, 5%, and 1% levels, respectively.*

5. DISCUSSION

The study confirms the hypothesized positive and bidirectional relationship between TD and DF in the Jordanian banking sector. Accordingly, the regression results show a positive influence of TD on DF, which supports the agency theory that good communication through positive TD could reduce information asymmetry and conflict of interest in order to attract more DF. This agrees with the findings of Hui et al. (2024) and Zhu et al. (2023), who also disclosed that narrative disclosures had positive relationships with financial performance. A positive effect of DF on TD was also ascertained, insinuating that banks with high debt levels will tend to use a more optimistic tone in their disclosures to raise credibility and transparency, akin to what Uyar et al. (2024) found.

Descriptively, the mean TD turned out to be relatively low. This could be due to the reduced sample size and perhaps because the same was concentrated only on banks. Mean DF was, however, higher, depicting more DF in the sector. The correlation analysis further held up the hypothesized relationships where significant positive correlations were found between TD and DF, with the highest correlation being bank size and age. The results of the study confirm both hypotheses: one positing a positive relationship between TD and DF. Put particularly, positive TD significantly enhances DF, and more debt levels lead to a more optimistic tone in annual reports. All these results are in line with the predictions of agency theory and previous empirical evidence. They underline the relevance of narrative disclosure in the context of financial communication.

The paper also brings out numerous practical implications for the banking sector and policymakers. For instance, the fact that annual reports of banks with a positive TD enhance transparency quality and, in turn, lower the level of information asymmetry, such reports can be used to solicit more DF. It means that the banks ought to invest in narrative reporting, preferably one that is clear and optimistic. The policy implication of the finding suggests a need for authorities to encourage sound disclosure practices to promote financial stability and build confidence among investors. Similarly, recognizing the bi-directional interrelationship between TD and DF, regulators could be better able to design policies encouraging better financial communication and thus more effective use of DF. If TD is effectively used, it will support banks in attaining their financial strategies better and help them establish a good rapport with the investors and financiers so that there is an assurance of a more resilient banking sector.

6. CONCLUSION

This study has empirically established the relationship between TD and DF in the Jordanian banking sector, supporting a positive and bidirectional relationship between these two variables. Supporting the hypotheses that positive TD enhances the DF instrument and that higher levels of DF are associated with a more optimistic tone in annual reports. These results are consistent with the premises of agency theory, where good narrative disclosure can lower information asymmetry and the conflict of interest to bring in more financing.

This study has a few limitations, including selecting the banking sector as our sample, the focus only on the annual reports, the study period ending in 2019, which excludes the effect of COVID-19, and finally, the proxy used to measure TD is only word list. This research used a relatively small sample of 15 banks over a period of ten years in order to be able to analyze in detail the selected banks and produce high details concerning the dynamics of TD and DF in the Jordanian banking sector. This enables a highly specialized understanding of this important sector in an emerging market to be used as a valuable case for like markets by strictly considering the Jordanian banking sector. The use of TD measurement based on the frequency of positive words clearly and quantifiably indicates that narrative disclosures provide a simple approach to analyzing the relationship between TD and DF.

In view of the benefits, banks are suggested to use positive TDs in the annual report strategically, thereby attracting higher DF. Policymakers should encourage these strong disclosure practices that can help bolster transparency and increase investor confidence. Training programs and workshops for enhancing narrative disclosure skills may be organized for bank managers and financial executives. There may be discussion at the level of regulators for standardization of TD practice so that comparative analysis across institutions can be conducted.

Future research may have much broader scopes in terms of the number of sample sizes and the integration of banks from many regions to ensure that the findings of such studies are more generalizable. Also, if the studies were longitudinal over longer periods, it would become more dynamic to study changes between TD and DF. Future studies may also expand the findings into other dimensions of narrative disclosures, for instance, the impact of negative or neutral tones on different types of financing and investor behavior. Finally, qualitative studies may further shed light on the strategic use of TD in financial reporting, for example, through interviews with financial managers.

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