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# Quality of financial reports: Evidence from the Tunisian firms

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This paper studies the effect of the quality of annual reports on investor's decisions in the Tunisian financial market. We measure the qualities of content and form of financial reports and their effects on investors' decisions, particularly on stock prices. We used a sample of 175 publications between 2006 and 2010. Our results provide strong evidence that the content's effect is higher than the form's effect in making decisions.

**Keywords:** quality report, market reaction, asymmetric information, stock price.

JEL classification: D82, G11, G12.

## INTRODUCTION

The financial literature on information asymmetry has grown dramatically over the last decades. In fact, well informed investors may hide information if they can take some advantages whether they are private or not. The less informed investors have access only to publicly disclosed information because they face an adverse selection problem (Chang et al., 2008; Tetlock, 2011).

Information asymmetry may be due to moral hazard problem when, only well informed investors, have an opportunistic behavior and can earn private and non transferable profits. Disclosure of information is a way to mitigate asymmetric information. It has an effect on the trading behavior of uninformed investors such as the choice of projects they are investing in and the funds they are issuing. Investors always prefer firms publishing newsletters and disclosing frequently, financial information and track records. Under asymmetric information, good firms send a costly signal which cannot be imitated by bad firms.

Brown et al. (2007) argue that disclosure increases the trading of uninformed investors and decreases the trading of the informed ones since it diminishes asymmetric information. They find a strong positive correlation between the quality of financial reporting and market reaction.

Tunisian legislation, through several of it's texts (The code of Commercial Companies and the corporate accounting system), established some qualitative characteristics of useful accounting information so that this information is produced and published by companies, and is necessary to take the financial and economic decisions.

Fundamental qualitative characteristics of accounting information according to the Tunisian legislature are summarized mainly in relevance and reliability. Relevance may result in terms of predictive, retrospective and timeliness of information disclosed capacity. As for reliability, it takes the form of neutrality, accuracy and verifiability of information.

The current paper is related to the literature on the form and the content of annual financial reports and their effect on stock price. We analyze the effects of both form and content of financial reports on their quality and try to provide appropriate measures of them. This study

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analyzes also the quality effect of annual reports on investors' reaction in the Tunisian financial market.

First, we provide a clear distinction between the two effects of form and those of content of annual financial reports. This is a way to assess the quality effect of disclosure and its subsequent implication on market reaction. Second, this paper discusses measures of reports' quality. We provide new measures of the quality such as observable proxies of content and form. Some discussed measures are yet used differently in previous studies.

To our knowledge, there are no academic papers which separately analyzed the qualities of content and form and their effect on market reaction.

First, Healy et al., (2001) highlighted the limits of subjective ratings (We do not consider subjective ratings since there are no public available ratings in the sample we consider) addressed by these rankings (They address many critics: the lack of clarity as to whether the analysts on the panels take the ratings seriously, the unclear basis on which firms are selected for inclusion, and the potential biases that analysts bring to the ratings). Second, disclosure index, as in Eng et al., (2003), does not consider the disclosure content. It depends on the presence or the absence of some items and does not make a clear distinction between quality and quantity of disclosed information (Marston et al., 1991). Third, it seems that reports' length is not an appropriate criterion of readability (Bloomfield, 2008). Some reports could be short and clear; others could be too long and don't provide useful information.

Moreover, the readability scores have the following problems: (1) it is argued that these measures should be addressed for children and not for adults, (2) readability scores focus on words and sentence-level features but ignore aspects of the text as a whole and (3) they take no account of the interests and motivations of the reader (Beattie et al., 2004; Hirshleifet et al., 2011).

In contrast with previous studies, quality of financial reports is given by the quality of reports' content and the quality of reports' form. Our analysis yields three-key findings of financial reporting form and five-key findings of financial reporting content. On one hand, studying the form of financial reporting is useful when investors must take decisions. This will be proxy through three measures. First, we join Dinh (2000) and Li (2008) and show that investors looking for information related to future firm profitability and earning persistence will be interested in good news succession measure. This is because some investors are interested in firms disclosing consecutive good news without any lecture of financial reports. Second, we find that the analyst's forecast error is a useful information for investors, (Beyer, 2008; Li, 2008). Finally, the timing of disclosure is crucial for investors' decisions making. This measure is not contained in financial reports. It captures the effect of timing disclosure, (Beyer, 2008).

On the other hand, studying financial reporting content needs a deep lecture of these reports. Investors focus on the most important information to make decision, such us seasoned equity offering, debt, firm performance, positive versus negative result, etc. A deep lecture may help them to detect more information and consequently make decisions which improve the transactions on the market. This effect will be proxy through five measures. First, in order to capture more aspects of financial reporting quality, we use the measure of readability of financial statements proposed by Eng et al., (2003). Second, seasoned equity offering, as in Welker (1995), depends on the expected cash-flows which depend on future firm's projects. Third, we adopt debt as a risk's measure, (Ahmed et al., 2003) because investment in firms with high level of debt is considered risky by investors. Fourth, we join Bloomfield (2008) and consider financial profitability to estimate the current firm performance. Finally positive versus negative result is the simplest indicator of short term firm profitability (Beyer, 2008; Chen, 2011).

The paper is structured in the following way: Section 2 reviews the financial literature on the quality of reports. Variables and measures are discussed in Section 3. The results are analyzed in Section 4. Section 5 summarizes and concludes.

## LITERATURE AND HYPOTHESES

In order to mitigate asymmetric information, regulators fix new rules and approve more laws about disclosing financial information. Financial reports must provide investors more accurate and reliable information. In that sense, they must be easy to read and without "puzzling" information. The aim is protecting minority and uninformed investors and to preserve their interests.

Many papers focused on the quality of annual reports and try to define determinants of quality. For instance, Smith et al., (1971) study the readability of the financial statements reports of 50 wealthy companies and conclude that the readability level of these reports is low. Healy (1977) analyzes the reading ease of the footnotes within the financial statements of 50 New Zealand firms and shows that they were not easy to read.

Lebar (1982) focuses on the forms of annual reports and press releases of NYSE firms in 1978 and compares the differences in topics and information. Their results show that corporate annual reports are not easy to read and to understand. Accordingly, corporate annual reports are quite difficult to read and may be regarded as technical reports rather than financial ones. In fact, they are produced to meet specific needs of some particular professional investors. Consequently, they are not understood by a wide range of investors. Biddle et al., (2009) argue that the quality of financial reporting is measured by the level of accuracy of the information

about expected cash-flows they are providing to uninformed investors.

This definition is consistent with the Financial Accounting Standards Board Statement of Financial Accounting Concepts No1 (1978), which states that financial reporting are made to inform current and potential investors and to help them making decisions. Diamond et al., (1991) consider that the disclosure's quality depends on Bayesian investor's beliefs about security value after receiving the disclosure. Other studies define disclosure quality as the degree of self-interested bias in the disclosure (King, 1996; Chaplinsky et al., 2010). However, Hopkins (1996) argues that the reports' quality is given by the transparency of information provided in these reports.

Accordingly, we conclude that the reports quality is a problematic concept since it is a qualitative issue and differs significantly from one firm to another. So, it seems that quality is a main key in many fields of research. However, it is difficult to assess this quality concept. Analyzing quality reports is too complex and subjective. That's why, the aim of the current paper is to provide new measures of the quality of financial reports and our empirical validation is the first one done on the Tunisian context. In fact, the previous measures have two main limits. First, they cannot focus on more than one concept of disclosure quality and just capture the presence or absence of some specific information. For instance, little consideration is given to the type of disclosure. Second, they do not consider the whole report but only few sections and consequently may ignore important information in other sections. Our measures complete those provided by subjective ratings' measuring disclosure quality (Lang et al., 1993). They also complete those in disclosure index studies in which disclosure quality is measured through the amount of details on particular topics. We also distinguish two dimensions of quality: the content quality and the form quality.

Our measures are also related to those in thematic content analysis, which divides reports in sections according to the level of difficulty (Rutherford, 2002)<sup>ii</sup>. They also complete measures provided in readability studies designed to quantify the difficulty of text<sup>iii</sup>. We complete measures in linguistic analysis based on an index to capture a larger set of text characteristic (Li, 2008) <sup>iv</sup>.

Financial reports are done to reduce information asymmetry in the financial market. The first lecture provides some details about the project's quality to uninformed investors. Some investors become informed and satisfied to initiate transactions in the capital market. Some others do not have trust in financial report. They care about all the details presented in the financial reports. On the contrary, many others prefer making a deep/careful lecture before making decision. In fact, detailed reports "careful" reading helps investors to get more details about potential projects. These details offer

investors other ideas about financial reporting quality more than those got from the disclosure form. This is why, we think that investors rely more on the content of reports than their form to evaluate the projects quality. Thus, they make the appropriate decisions. So we consider the following hypothesis:

Hypothesis: The financial reporting content has more dominant effect on investors' reaction than the financial reporting form.

Our results show that both the form and the content of financial reports have a positive effect on investors' decisions. Besides, there is a dominant effect of the content quality on the form aspect. We think that these results are strongly related to the Tunisian context for two main reasons. First, laws on disclosure quality are strongly based on the form of financial reports without giving any importance to the content. Second, actors on the Tunisian financial market are not very professional to be satisfied by the form of announcement. They need a deep lecture of reports and someone else to help to take financial decisions.

#### **METHODOLOGY**

To study the effect of financial reporting quality on market reaction, we consider endogenous and exogenous variables as follow:

## **Endogenous variable**

Our endogenous variable is the abnormal returns as follow:

$$AR_{i,t} = R_{i,t} - \frac{1}{N} * \sum_{i=1}^{N} R_{i,t}$$

Where  $AR_{i,\ t}$  measures abnormal evolution of the returns, (Brown et al., 2001; Bajo, 2006).

R it is the return of the title i at the date t

N is the number of observations.

Abnormal returns is a measure that reflects investors' reactions. Any increase (decrease) of this measure shows that investors will (won't) appreciate the report's quality, and so they will (won't) invest in selling or buying stocks.

## **Exogenous variables**

The definition of the variables, as well as the specification of the current model, will be presented by taking into account factors which are likely to influence the behavior of the investors following the publication of financial annual reports.

We have two sets of variables: (1) variables to measure the effect of the report's form on quality, (SUCSS  $_{i,\ t}$ , SURPR  $_{i,\ t}$ , TIME  $_{i,\ t}$ ) and (2) those related to the report's content, (SCORE  $_{i,t}$ , EQOFR  $_{i,\ t}$ , DEBT  $_{i,\ t}$ , PRFM  $_{i,\ t}$ , RSLT  $_{i,\ t}$ ).

#### Measures of the form

Good news succession (SUCSS  $_{i,\ t}$ ): it measures the effect of consecutive good news after disclosing annual report on market reaction.

$$SUCSS_{i,t} = \begin{cases} 1 & \text{if the firm show 3 consecutifs positifs results} \\ 0 & \text{if not} \end{cases}$$

As in Dinh (2000), we consider two extreme portfolios: (1) the "portfolio of good news" containing the firms' stocks showing three consecutive positive results. It shows successful/positive results three years before the disclosure of the report. (2) The "portfolio of bad news" contains stocks of firms showing three consecutive bad results. It shows negative news three years before the disclosure such us failure, recession, dismissal. Accordingly, we suggest that consecutive good news decreases abnormal returns.

Surprise effect (SURPR i, t) measures the forecast's error.

$$SURPR_{i,t} = \frac{estimeted\ result - realized\ result}{realized\ result}$$

The realized result measure is collected from the financial statements. As in Dinh (2000), the estimated result is collected from the revealed estimated financial statements the previous year. The largest is the difference between realized and estimated result, the biggest will be the fall of the returns of the titles.

Timing of announcement (TIME  $_{i,\ t}$ ) is the period of time between the disclosure's date and the closing's date of the countable exercise on December 31 of each year. This variable usually takes a positive value because the disclosure is made after the end of year. A late disclosure of financial reports decreases stock.

## Measures of financial reporting content

Disclosure score (SCORE  $_{i,\ t}$ ): According to the scale of Eng et al.  $(2003)^v$ , we assign a score to financial report. Eng et al. (2003) scale assigns points to each paragraph in the report according to the type of disclosed information (strategic, financial, etc). It is used to measure the accuracy of both qualitative and quantitative information. We divide the total points of each report by the total number of points of the entire sample. This score helps to appreciate the detail's level of the

announcement and to verify some specific information. The increase of quality's score increases abnormal.

Seasoned equity offering, (EQOFR  $_{i,\ t}$ ): seasoned equity offerings are function of issuance of common stocks and convertibles, capital reduction and strategic decision (acquisition, collusion, trade sale, IPO). It is us written

$$\begin{split} &EQOFR_{i,t} \\ &= \begin{cases} 1 & \textit{if there is seasoned equity offering operation} \\ 0 & \textit{if not} \end{cases} \end{split}$$

Any additional financial information about capital structure may improve the market conditions and change the investors' decisions (Welker, 1995). We expect a positive effect of seasoned equity offering on measurements of the market reaction.

Debt,  $(DEBT_{i,t})$  is the ratio of debt and total assets in the company i at date t. It is written:

$$DEBT_{i,t} = \frac{Debt}{total \ assets}$$

According to Ahmed et al. (2003), the level of debt helps investors to get more information about liquidity risk. A high endowment firm level has many effects on investors' reactions. A high level of debt decreases stocks returns.

Performance (PRFM  $_{i,}$  t) is the ratio of financial profitability and is written:

$$PRFM_{i,t} = \frac{Net \ value \ of \ income}{Total \ stockholders' equity}$$

Li (2008) argues that information about performance has an effect on the involvement of the investors in the firm, particularly on the stock returns. In fact, a well performing company gives guarantees to investors to boost their incentives to finance its projects. Bloomfield (2008) points out a positive relationship between good company performance and stock returns. The increase of the firm's performance improves stock returns in the market.

Result sign (RSLT i, t) estimates the exercise's restant of the firm i at date t. It is given by:

$$RSLT_{i,t} = \begin{cases} 1 & \text{if the firm's result is positive} \\ 0 & \text{if not} \end{cases}$$

Many papers (Beyer, 2008) consider that the announcement of a positive result has a good reputation effect, in the sense it attracts investments. For instance, it improves firm's returns. Notice that the announcement of losses has lower impact than gains.

Accordingly, we state that the relationship between profit's disclosure and market reaction is expected to be positive.

Variables	Mean	STD	Min	Max	
AR i, t	6.18	8.78	0.53	46.27	
TIME i, t	112.94	35.85	15	176	
SUCSS i, t	0.94	0.1719	0.2	1	
SURPR i, t	0.0011	0.00669	0	0.039	
SCORE i, t	0.5715	0.245	0.1547	1.614	
EQOFR i, t	0.1714	0.2177	0	0.8	
DEBT i, t	0.6918	0.4987	0.0057	2.9284	
PRFM i, t	0.1171	0.1195	-0.3967	0.3828	
RSLT <sub>i. t</sub>	0.9485	0.2133	0	1	

Table 1. Descriptive statistics

#### **Control variables**

We join Chang et al. (2008) and consider some variables that may affect the disclosure's policy. Market to book, (MRBK i, t) is given by:

$$MRBK_{i,t} = \frac{Market \ value \ of \ the \ assets}{Book \ value \ of \ the \ assets}$$

Biddle et al. (2009) find evidence that large firms usually have higher sales than small ones. Accordingly, the levels of equity and debt are higher in large firms. Such levels provide strong evidence that financial reports are more transparent and have stronger effect in these firms. This leads us to predict a positive relationship between the market to book and the market reaction.

Growth of the company, (GRWTH i, t) measures sales' variation rate between two consecutive years.

$$GRWT \quad i, t = \frac{Sales\ year\ t\ -\ sales\ year\ t\ -\ 1}{sales\ year\ t\ -\ 1}$$

According to Beyer (2008), it is useful in growing firms with growing turnovers. Then we can state that disclosure in growing firms have a higher impact on the market than mature firms.

Activity sector risk, (RSKST i, t) measures the sector's risk.

$$\textit{RSKST}_{i,t} = \begin{cases} 1 & \textit{if the firm's sector is risky} \\ 0 & \textit{if not} \end{cases}$$

Angelatos et al., (2004) pinpoint that hi-tech industry are very risky. Accordingly, we expect that the increase of risk increase market reaction after each financial reporting disclosure.

#### **ANALYSIS AND DISCUSSION**

## **Descriptive data**

Our sample is given by 175 mandatory financial reports of Tunisian listed firms between 2006 and 2010. They are collected from (1) the Tunisian financial market TFM and (2) the Control Council of the Financial Market CCFM. Firms operating in the banking and the insurance sectors are excluded from our sample. These sectors have particular accounting rules about the content and the form of their disclosure Firms with the rest of our sample. Table 1 presents descriptive statistics. The mean abnormal return across all firm-years is equal to 6.18.

The mean of consecutive good news is too close to 1 which implies that Tunisian firms are more sensitive when there are good news portfolios. In contrast, the surprise/unexpected effect seems low (the mean error between estimated return and realized one is 0.0011 near than zero).

The mean value of the score is 0.57 and is assigned a low volatility of 0.245 point, which implies that disclosure quality has a positive effect. However, the average of the time of financial reporting disclosure is 113 days with 36 days as a high volatility. This implies that disclosures in our sample are made too late.

In addition, financial reporting content proxy seems to be an appropriate measure of the content quality (Table 1). First, we notice a bad content of financial reports. In fact, the variation in equity offering is too small: the average value 0.1741 is very close to the minimal value and the maximum value does not reach 0.8.

The firm's debt proxy is considerably high, the mean is equal to 0.69 and standard deviation is 0.49. In addition,

Variables	expected signs	Coefficients	STD	Z	P > Z
TIME i, t	(-)	-0.0056	0.0108	-0.52	0.602
SUCSS i, t	(-)	-0.39	0.9914	-0.39	0.693
SURPR i, t	(-)	-31.31	26.94	-1.16	0.245
SCORE i, t	(+)	-0.37	0.6399	-0.59	0.556
EQOFR i, t	(+)	2.04	2.10	0.97	0.332
DEBT i, t	(-)	0.27	0.4010	0.70	0.486
PRFM i. t	(+)	4.50	4.71	0.96	0.339

-5.17

0.47

3.30

0.43(+)

Table 2. Relation between financial reporting quality and abnormal returns with errors' correction

(+)

(+)

(+)

(+)

a very low mean of performance measure with a low standard deviation implies that firms have very bad performance. However, the result's proxy shows a positive effect of the content in financial reporting.

RSLT<sub>i.t</sub>

MRBK i. t

GRWTH i. t

RSKST i, t

We conclude that the form of financial reports is considered a first signal for the quality of financial disclosure but a detailed lecture is necessary to evaluate the quality of financial reports.

## Abnormal returns and financial reporting quality

To study the effect of financial reporting quality on the market reaction, we consider a simple regression model. Equation (1) analyzes the effect of the financial reporting form and content on the abnormal return, as follow:

$$AR_{i,t} = f(SUCSS_{i,t}, SURPR_{i,t}, SCORE_{i,t}, TIME_{i,t}) + f(EQOFR_{i,t}, DEBT_{i,t}, PRFM_{i,t}, RSLT_{i,t})$$
 (1)

The estimation of the equation (1) shows insignificant R<sup>2</sup> (inferior to 0.0796 with probability 0.9727). One explanation is fixed effect between variables. In fact, the

explanation is fixed effect between variables. In fact, the signs of the estimated variables are not consistent with our expectations in contrast with SUCSS, RSLT, GRWTH and MRBK. Under fixed effect, the total significance of the variables is weak.

The overall significance of the variables according to the fixed effect is small, which encourages us to take the study of random effects. This passage allows us to observe an improvement of the overall significance of the model through an R2 equal to (0.4994) and a probability of about (0.0000). Most of the variables have a sign as expected but still negligible significance except for the variable (TIME).

0.049

0.000\*\*\*

0.000\*\*\*

0.798

-1.97

5.35

0.26

2.62

0.1144

0.6173

1.68

However, and to decide between the fixed effect and random effect, we opt for the application of the test (Hausman 1978). The probability of two chi2 is (0.8337), which implies the rejection of the null hypothesis testing and uptake of the random effect. But in order to achieve best results, we can at least set a statistical perspective is that corrections of errors with signs predict.

The Hausman test rejects the model with fixed effects (the probability of the chi2 is 0.8337). Consequently, we consider random effects. This improves the quality of our

results (R<sup>2</sup>=0.4994 with probability 0,000). Table 2 summarizes the results of the estimated model when there is an errors' correction.

Under random effects, and after errors' correction, the model (1) shows significant results (Wald Chi2 = 1226.09, and probability = 0.0000). First, the announcement time variable increases when the level of abnormal stock returns decreases. In consistence with our expectations, this result implies that the earliest is the announcement date. The most relevant are the financial reports and their disclosure enhances the market reactions. Investors are attracted to the first firms that publish their financial reports. They consider that these firms respect disclosure rules and timing. This shows that they are good quality firms and they won't have any bad news later. This result is consistent with Beyer (2008) who considered that reducing announcement time can be a managerial

<sup>\*, \*\*, \*\*\*</sup> significant at level 10%, 5%, 1%.

strategy to attract investors' attention to firms that are the first to disclose their reports.

Moreover, consecutive good news succession, which expresses firm earning persistence, increases when the level of abnormal stock returns decreases. As expected, the results of the regression show a negative relationship between the abnormal returns and good news succession. Firms which belong to the set of "good news portfolios", as defined by Dinh (2000), pay more attention to the form of their financial reports. In fact, disclosing information increases investors' confidence in the project's quality. Consequently, investors don't sell their stocks and also don't decreases stock returns.

The surprise effect shows, as expected, negative relation between errors forecast and stocks returns. We recall that the surprise variable captures the errors of investors' predictions. Consequently, the errors' forecast is diminished which meets with the objective of the investors because their result's estimation seems to be near to the realized one. Each time the difference between previous and realized benefits decrease, stock returns vary with the rise of the investors good appreciation. Beyer (2008) argues that when there is positive unexpected news, firms are down short term performing because the previous result is higher than the current one.

The interpretation of the regressions of the form disclosure variables are of great contribution. The empirical results show that our hypotheses are validated for all the three variables: TIME, SUCSS and SURPR. These results enable us to understand the positive effect of the disclosure quality form. But, the quality effect due to the reports' form is not enough to make a general opinion on financial reporting. We need to conduct a second investigation about the content quality effect's of mandatory financial disclosure.

The study of the content quality shows that investors focus on a specific kind of information, such as bid ask spread, debt, performance and the result sign (Welker, 1995; Ahmed et al., 2003; Li, 2008; Bloomfield, 2008; Beyer, 2008). In fact, and with regard to the announcement details, particularly in financial mandatory reports, the variable score decreases with stock returns. This means that even if the quality of financial mandatory reports increases, stock returns continue to decrease. This is not consistent with our expectation. But according to Eng et al. (2003), investors do not care about detailed announcements covering a wide range of information. They are not looking for announcement's standardization, but seek to find some other details helping them in their decisions making. In fact, investors are looking for specific information in reports.

The empirical results show that our hypotheses are validated for the two following variables: seasoned equity offering and performance. Further information about financial capital structure may have a positive effect on the market

conditions and consequently on the investors' decisions (Welker, 1995). Our expectations also suppose that information about performance has an effect in the involvement of the investors in the firm's market, particularly in terms of volume and number of transactions (Li, 2008). The increase of these two variables increases the abnormal returns. This proves that these specific informations are of great utility for investors and other capital market participants.

The increase of the number of seasoned equity offering increases stocks returns (Welker, 1995). One explanation is that investors are attracted to firms issuing seasoned equity because they expect them to operate well which, in return, boosts the market reaction. There is a similar effect of performance disclosed indicator, which is also very well appreciated by market participants.

Moreover, our results cannot validate the negative relationship between debt variables and stock returns, neither the positive relationship between result sign and stock returns. In fact, we expected a negative relationship between debt indicator and market reaction but empirical results show a positive relationship. This means that investors do not consider high levered firms as risky firms. Debt is regarded as a financing source rather that a signal of bad management quality. In contrast, a positive results' announcement decreases stocks returns. This result is very strong and it refutes our expectations. This implies that the realization of a profit is not very important for the investors' decision making. Accordingly, investors appreciate a negative result as a short term difficulty and not as a bad indicator of future firm prosperity.

The negative relationship between financial reporting form and stock returns, and the positive relationship between financial reporting content and stock returns, show that both of them contribute significantly to enhance the investors' decisions. Our results show that financial reporting form quality is of great utility for investors. It gives them a general appreciation of the quality of the disclosed report. This helps them to make decisions and so they formulate their opinion about their investment. In addition, these results show that the reporting content is also important for investors' decision making. Financial reporting content gives them more details about firms' performance, future projects and financial resources. This gives investors more confidence in their wealth investment in such firms.

## Conclusion

Prior studies suggested that good quality of financial reports mitigates asymmetric information which increases stock price. In this paper, we measured the qualities of the form and the content of financial reports and we analyzed their effects on market reaction. We tested the hypothesis that financial reporting quality form and content can be associated with an investor's reaction in

capital markets. Our results are consistent with these hypotheses when tested in several ways. Our results show that the quality of the form report has an attractive effect on investors. Investors consider that firms involved in seasoned equity offering are well operating. Besides, activity expending is also a good signal of financial reporting quality on investors' reaction. We found also that investors are interested in well performing firms. Consequently, a high level of performance makes investors revise stock returns to the rise. We expected that high level of debt increases risks particularly when firms are in financial distress. But investors appreciate the debt as one source of financing rather than an indicator of bad financial standing. Finally, more detailed information about performance and transparency change investors' beliefs. The content plays major role in making decisions. We conclude that the reports' form helps investors to get a clear idea about the firm in which they would like to invest money. But they pay more attention to the content than to the form of financial reports when they have to make investment decisions. In fact, this result is strongly related to the Tunisian context for two main reasons. First, laws on disclosure quality are strongly based on the form of financial reports without giving any importance to the content. Second, actors on the Tunisian financial market are not very professional to be satisfied by the form of announcement. They need a deep lecture of reports and strong assistance from some professionals to help them make the right investment decisions.

In future researches it would be interesting to consider larger samples and to examine the issue of quality in public and voluntary disclosed information. It would be better to compare measures of the form quality and content form according to the sectors, industrial/financial, public/private financing, etc. It would be interesting also between study the relationship economic characteristics of capital market (such as the industry where investors are operating in) and investors' professional's specificities (such as institutional investors or large public ones), and investors' reaction after financial reporting disclosure. Another topic for future research is to add other dimensions of financial reporting quality (such as strategic, environmental, human resources information) or those related to capital market reaction such as liquidity and financial capital structure.

## **REFERENCES**

- Ahmed A, Schneible R, Steens D (2003). « An empirical Analysis of the effects of online trading on investor reaction to earnings announcements », Contemp. Account. Res. 20: 413-39.
- Angeletos G, Pavan A (2004). «The value of information and coordination in economies with investment complementarities », American Econ. Rev. 94.
- Bajo E (2006). « The information content of abnormal trading volume », Intl. Res. J. Financ. Econ. 4: 261-280.

- Beattie V, McInnes B, Fearnley S (2004). «A methodology for analyzing and evaluating narratives in annual reports: a comprehensive descriptive profile and metrics for disclosure quality attributes», Account. Forum. 28: 205-236.
- Beyer A (2008). «Financial analysts' forecast revisions and managers' Reporting behavior», J. Account. Econ. 46: 334-348.
- Biddle C, Hilary G, Rodrigo S, Verdi C (2009). «How does financial reporting quality relate to Investment efficiency? », J. Account. Econ. 48: 112-131
- Bloomfield RJ (2008). «Discussion of annual report readability, current earnings, and earnings persistence», J. Account. Econ. 45: 248-252.
- Brown LD, Higgins HN (2001). « Managing earnings surprises in the US versus 12 other countries », J. Account. Public. Policy. 20: 373-398.
- Brown S, Helligeist S (2007). «How does disclosure quality affect the level of information asymmetry», Rev. Account. Studies. 12: 443-477.
- Chang M, Gino A, Watson I, Wee M (2008). «Does Disclosure Quality via Investor relations affect information asymmetry? », Australian J. Manage. 33.
- Chaplinsky S, Haushalter D (2010). «Financing under Extreme Risk: Contract Terms and Returns to Private Investments in Public Equity », Rev. Financial Studies, 23: 2789-2820.
- Chen SS (2011). « An Examination of the Free Cash Flow and Information/Signaling Hypotheses Using Unexpected Dividend Changes Inferred from Option and Stock Prices: The Case of Regular Dividend Increases », Rev. Pacific Basin Financial Markets and Policies, 14: 563-600.
- Diamond DW, Verrecchia RE (1991), «Disclosure, liquidity, and the cost of capital», J. Financ. 66: 1325-1355.
- Dinh TH (2000). « Performance boursière à court et à long terme suite à l'annonce des résultats annuels: une approche comportementale », Working Paper.
- Eng LL, Mak YT (2003). «Corporate governance and voluntary disclosure», J. Account. Public Policy, 22: 325-345.
- Healy PM, Palepu KG (2001). «Information asymmetry, corporate disclosure, and the capital markets: a review of the empirical disclosure literature», J. Account. Econ. 31: 405-440.
- Hirshleifer D, Lim SS, Teoh HS (2011). «Limited Investor Attention and Stock Market Misreactions to Accounting Information », Rev. Asset Pricing Studies, 1: 35-73.
- King R (1996). «Reputation formation for reliable reporting: An experimental investigation», The Account. Rev. 71(3): 375-396.
- Lang M, Lundholm R (1993). «Cross-sectional determinants of analyst ratings of corporate disclosures», J. Account. Res. 31(2): 246-271.
- Lebar MA (1982). «A general semantics analysis of selected sections of the 10-k the annual report to shareholders, and the financial press release», The Account. Rev. 57: 176-189.
- Li F (2008). «Annual report readability, current earnings, and earnings persistence», J. Account. Econ. 45: 221-247.
- Marston CL, Shrives PJ (1991). «The use of disclosure indices in accounting research: A review article», British Account. Rev. 3: 195-210.
- Rutherford BA (2002). «Half the story: Progress and prospects for the operating and financial review», ACCA research report no: 80, London: Certified Accountants Educational Trust.
- Smith JE, Smith NP (1971). «Readability: a measure of the performance of the communication function of financial reporting», The Account. Rev. 46:552-561.
- Tetlock PC (2011). « All the News That's Fit to Reprint: Do Investors React to Stale Information? », Rev. Financial Studies. 24: 1481-1512. Welker M (1995). «Disclosure policy, information asymmetry and liquidity in equity markets», Contemp. Account. Res. 11: 801-827.

### **Endnotes**

- In the US, many studies make use of analyst scores of disclosure quality provided by The Association of Investment Management and Research.
- II. Each paragraph may be shorter than two sentences to be easy to understand and useful, FASB (2001b)
- III. These studies generally use a readability formula based on a combination of sentence length and word syllable count.
- IV. Assuming that the text is well formed and logical, this proxy captures text complexity as a function of syllables per word and words per sentence. The index indicates the number of years of formal education a reader of average intelligence would need to read the text once and understand that piece of writing with its word-sentence workload.
- V. They give points to each report: they depend on the nature of information (strategic, financial or not, qualitative, quantitative...). Then, they are divided by the total number of points in the sample
  VI. The control council of the financial market is the institution
- VI. The control council of the financial market is the institution who reorganizes mandatory disclosure of financial reports. This institution considers that such reports must be frequently disclosed. Information communicated to investors and market participants' help them making well informed investment decision according to the rule n°94-117 of 14-11-1994 reorganizing the financial market.
- VII. According to the rule n°94-117 of 14-11-1994 reorganizing the Tunisian financial market.

VIII.

<sup>&</sup>lt;sup>1</sup> In the US, many studies make use of analyst scores of disclosure quality provided by The Association of Investment Management and Research.

ii Each paragraph may be shorter than two sentences to be easy to understand and useful, FASB (2001b)

iii These studies generally use a readability formula based on a combination of sentence length and word syllable count.

<sup>&</sup>lt;sup>iv</sup> Assuming that the text is well formed and logical, this proxy captures text complexity as a function of syllables per word and words per sentence. The index indicates the number of years of formal education a reader of average intelligence would need to read the text once and understand that piece of writing with its word-sentence workload.

<sup>&</sup>lt;sup>v</sup> They give points to each report: they depend on the nature of information (strategic, financial or not, qualitative, quantitative...). Then, they are divided by the total number of points in the sample

<sup>&</sup>lt;sup>vi</sup> The control council of the financial market is the institution who reorganizes mandatory disclosure of financial reports. This institution considers that such reports must be frequently disclosed. Information communicated to investors and market participants' help them making well informed investment decision according to the rule n°94-117 of 14-11-1994 reorganizing the financial market.

<sup>&</sup>lt;sup>vii</sup> According to the rule n°94-117 of 14-11-1994 reorganizing the Tunisian financial market.