The Inclusion of Forecasts in the Narrative Sections of Annual Reports and Their Association with Firm Characteristics: The Case of Jordan

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Abstract

This study investigates the disclosure practices toward disclosing forecast information in the narrative sections of the annual reports for industrial and service companies for the year 2007. Additionally, this study examines the determinants of disclosing forecast information for the companies listed on the Amman Stock Exchange (ASE) by encompassing information asymmetry, proprietary cost and corporate governance characteristics. The results document that forecast disclosures are positively related to growth opportunities, role duality, and company size, but it is negatively related to competition rate and performance.

Keywords: Forecast Disclosure, Forward-looking Information, Corporate Governance, Firm Characteristics

1. Introduction

Corporate disclosure practices are one of the main themes in financial accounting research. Recently, demand for disclosure of listed companies has increased and bankruptcies of large companies place extra pressure on companies for increasing their reporting quality (Beretta and Bozzolan, 2008). Companies disclose information in alternative Media such as annual reports, interim reports, press releases, conference calls and direct communication with analysts. The focus of this study is on annual reports due to many reasons (Aljifri and Hussainey, 2007). First, annual report is mandatory document which is required to be produced on annual basis. Second, annual report is the predominant source of voluntary disclosure to stakeholders (Neu et al., 1998). Third, previous studies documented that annual report's disclosure is positively correlated with other financial media (Lang and Lundholm, 1993; Botosan, 1997). Despite of these, annual report suffers from timeliness, but most of the companies release their annual reports within four months after the financial year end.(Note 1). The focus of this study is on the disclosure of forecasts information, due to the value relevant of this information compared to other types of information.

Previous studies of voluntary disclosure of earnings forecasts have concentrated on developed countries (e.g., Clarkson et al., 1994; Clarkson et al., 1999; Johnson et al., 2001; Robb et al., 2001; Kent and Ung, 2003; Vanstraelen et al., 2003; Lim et al., 2007; Bozzolan and Mazzola, 2007). The developed countries generally have a more regulated environment than developing countries, since disclosure of forward-looking information is governed by Management Discussion and Analysis Section (MD&A) or Operating and Financial Review Section (OFR). In March, 2004, the Jordan Securities Commission asked listed companies to provide their annual reports within three months from the end of the company's fiscal year, and the annual report shall include information related to the important prospective developments including any new expansions and projects; the Company's proposed plan for at least one upcoming year; and the Board of Directors' forecasts for the outcomes of the Company activities (JSC, Instructions of Issuing Companies Disclosure, Accounting and Auditing Standards, 2004, Article 4).

In developing countries, Cahan and Hossain (1996), Celik et al. (2006) and Aljifri and Hussainey (2007) examined the determinants of forward-looking information. The primary theoretical foundation of these studies was the notion of information asymmetry theories. Recently, explanatory studies witnessed the inclusion of new explanatory variables reflecting corporate governance mechanisms. Again, the influence of the agency theory is clear in these studies. Stemming from an information asymmetry notion, adopting strong corporate governance mechanisms could promote high financial reporting quality. The disclosure of financial report containing forward-looking information is more likely to be perceived as being of higher quality (Clarkson et al., 1994; Ajinkya et al., 2005; Karamanou and Vafeas, 2005). Nevertheless, proprietary cost theory hypotheses that companies are reluctant to provide information when the threat of competitors exists.

This study aims to increase our understanding of disclosure practices and to identify potential new determinants of forecasts information by encompassing corporate governance variables, information asymmetry variables and proprietary cost factors for the companies listed on the ASE

The remainder of this study is set out as follows: section 2 reviews previous studies and develops hypotheses based on exciting theories. Section 3 presents the research design and describes the data. Section 4, discusses the results. Section 5 provides a summary to the research findings in relation to theories of disclosure and presents the main conclusions of the study. Moreover, contributions to the literature, limitations, and suggestions for future researches are also presented here.

2. Previous Studies and Hypotheses Development

Previous studies on voluntary disclosures have concentrated on information asymmetry theories (agency theory, signaling theory, equity need theory) in order to explain factors affects disclosures. However, in this research it is argued that forecast information depends on other factors, combining determinants of corporate governance variables and propriety cost factors. The factors proposed and tested in this study include competition rate, performance, growth opportunities audit quality, board size and role duality. In addition, size, industry and leverage are added as control variables.

2.1 Competition Rate

Healy and Palepu (2001) argued that managers' incentives to disclose additional information appear to be sensitive to the nature of competition. Also, they stated companies compete primarily on the basis of price or capacity decisions. That is, when companies are competing on capacity basis, they have incentive to provide additional information in order to increase their market share. On the other hand, when companies are competing on a price basis, they have incentives not to provide additional information that might affect their competitive position. In this manner, Prencipe (2004) argued that proprietary costs are not only the cost of preparation, dissemination, and auditing, but they are also comprised of competitive costs, which relates to the provision of useful information to competitors with a disadvantage to disclosing companies. That is, the release of good information in the market may encourage new competitors to enter the market and such action may result in reducing the market share of disclosing companies. Verrecchia (1983) argued that when proprietary cost exists, information is withheld; the market is unsure whether the company is withholding the information because it represents bad news or simply because it is not good enough to warrant incurring the proprietary cost. In the same manner, Dye (1986) highlighted that companies attempt to limit their disclosure practices when the proprietary cost appears, and they may move from full to partial disclosure when proprietary costs are high (Wagenfer, 1990).

The majority of previous studies have examined the effect of price competition and used the proportion of fixed assets as proxy for the threat of competitors' entry. Previous research forecast disclosure found negative association between forecast disclosure and threat of competitors (e.g., Clarkson et al., 1994; Hossain et al., 2005), whereas Kent and Ung (2003) found no relationship between competition rate and the disclosure of forward-looking earnings information. Thus, based on theory, it can be hypothesized that:

H1: There is a negative association between forecast information and competition rate

2.2 Performance

Based on signalling theory, companies with good news are more likely to disclose voluntary information. Verrecchia (1983) and Dye (1985) showed that managers with good news provide additional information. Conversely, Wallace and Naser (1995) argued that profitable companies may not provide additional information because their investors are extremely satisfied. Similarly, Skinner (1994) and Kaznik and Lev (1995) demonstrated that companies with bad news are more likely to provide additional information in order to enhance accountability and reduce litigation risk.

Previous literature on forecast disclosures showed positive relationship between forward-looking disclosure and performance (Cahan and Hossain, 1996; Aljifri and Hussainey, 2007). However, Walker and Tsalta (2001), Kent

and Ung (2003) and Hossain et al. (2005) found no relation between performance and the level of forward-looking information. Based on theories and previous studies it can be hypothesized that:

H2: There is a positive association between forecast information and performance

2.3 Growth Opportunities

Prencipe (2004) highlighted that competitive costs arise from disclosing additional information which tends to be high for growing companies. Healy and Palepu (2001) pointed out that firm reluctant to disclose information that will reduce their competitive position, even if this makes it costly to raise their capital. Hussainey and Walker (2009) argued that the dividend propensity and voluntary disclosure on share price anticipation of earnings are linked to the growth opportunities of the company. Cahan and Hossain (1996), Walker and Tsalta (2001), and Eng and Mak (2003) hypothesized positive relationships between growth opportunities and forecast information, but they found no evidence to support their hypothesis. This suggests the third hypothesis:

H3: There is a positive association between forecasts information and growth opportunities

2.4 Audit Quality

DeAngelo (1981) argued that large audit firms might put more pressure on management to disclose additional information. Krishnan and Schauer (2000) pointed out that creditability of financial statements is associated with the quality of its auditors, and larger audit firms are assumed to be of higher quality. Therefore, larger audit firms are more likely to associate themselves with clients who provide better disclosure practices.   O'Sullivan et al. (2008) found positive relation between audit quality and forward-looking information, whereas, Aljifri and Hussainey (2007) found insignificant relationship between forward-looking information and audit quality. Based on this, it can be hypothesized that:

H4: There is a positive association between forecasts information and audit quality

2.5 Board Size

Karamanou and Vafeas (2005) argued that firms with more effective corporate governance are tending to provide management forecast. Ajinkya et al. (2005) demonstrated a positive relationship between independence of board and the properties of management earnings forecast which is tend to be more specific, accurate and less optimistically biased. Hossain et al. (2005) showed that board anatomy is positively related to the level of voluntary disclosure. Based on this, it can therefore be hypothesized that:

H5: There is a positive association between forecasts information and board size

2.6 Role Duality

The presence of a leading personality within the ranks of management is considered as determinants of effective corporate governance.   The existence of a dominant personality is correlated with poor disclosure, because of poor monitoring and opportunistic behavior of the managers (Forker, 1992). This suggest the forth hypothesis:

H6: There is a positive association between forecasts information and role duality

2.7 Control Variables

Previous studies documented positive relation between company size and future information (e.g., Clarkson et al., 1994; Cahan and Hossain, 1996; Clarkson et al., 1999; Walker and Tsalta, 2001; Kent and Ung, 2003; Vanstraelen et al., 2003; Hossain et al., 2005; Celik et al., 2006; Lim et al., 2007). Previous studies have also used leverage as determinants of corporate disclosure studies. For example, Aljifri and Hussainey (2007), O'Sullivan et al. (2008), and Bravo et al. (2009) demonstrated a positive relationship between the leverage and future information. Conversely, Celik et al. (2006) and Aljifri and Hussainey (2007) failed to find any support for the association between leverage and future information. Moreover, prior studies found positive and significant relation between industry and forward-looking information (Celik et al., 2006).

No hypotheses were developed for control variables; this was due to the positive significant relationship between each of these variables and voluntary disclosure (Ahmed and Courtis, 1999).

3. Research Design

3.1 Sample Selection

All the industrial and service companies listed on the Amman Stock Exchange (ASE) are evaluated in order to determine the level of forecast information disclosed in the annual reports for the year 2007. The total number of companies listed on the ASE is 195.   The financial sector is excluding from the study because the companies listed in this sector is subject to different regulation bodies.   The exclusion of the financial institutions results in 132 companies. 12 of which are deleted due to unavailability of annual reports.   Thus, the final sample consists of 120 companies listed on the ASE in 2007. In order to determine the level of forecast information disclosed in the annual

reports, similar measure to Celik et al. (2006) is employed. That is, the sentences with forecast information in the narrative sections of the annual reports are counted.

3.2 Variables of the Study

This subsection presents the independent variables considered in this study. Table (1) exhibits the independent variables and their proxies employed in this research.

In order to test the study hypotheses, a cross-sectional OLS regression analysis is employed

FLSen. = $\beta 0 + \beta 1$ Comp + $\beta 2$ ROE + $\beta 3$ Growth + $\beta 4$ Big6 + $\beta 5$ Board + $\beta 6$ Role + $\beta 7$ Size + $\beta 8$ Debt + $\beta 9$ Industry + e

Where: FLSens = number of forward-looking sentences; β = the regression coefficient, i = 0, 1… 9; Comp. = competition rate; ROE = performance, Growth = growth opportunities; Big6 = audit quality; Board = Board size; Role = role duality; Size = company size; Debt = leverage; industry = industry; e = error term.

4. Results and Analysis

4.1 Descriptive Analysis

This section presents the results of descriptive analysis for the number of forecasts sentences. On average Jordanian companies provide 4.72 sentences related to future information, which indicates low level of disclosure across the companies as presented in Table (2). Furthermore, Table (2) presents the descriptive statistics regarding the firm continuous variables which are included in the model considering the effects of them on the level of forecasts information. Table (3) exhibits information on quantitative forecast for the companies listed on the ASE. The content analysis results reveal that only 12 companies across all the companies listed on the ASE provide quantitative financial information.

4.2 Regression Analysis

In order to test the joint effect for the variables of the study, multivariate analysis is performed using a cross sectional OLS-regression model. Tests of normality (Note 2) ,multicollinearity (Note 3), homoscedasticity, and linearity assumptions are checked to ensure that the assumptions are not violated. Table (4) presents the results of cross-sectional OLS-regression analysis.

The Regression analysis reveals that the value of adjusted R^2 is 16.3%, which means that the combination of the Independent variables explain 16 % of variation of dependent variables. Specifically, forecast information is found to be related to growth opportunities, role duality, competition rate, performance and company size.

For hypotheses testing, the results document that there is positive and significant relation between competition rate and forecast information. This result supports H1 and consistent with previous studies (Clarkson et al., 1994; Hossain et al., 2005). For Performance measure, the results show negative and significant relation which inconsistent with H2 and previous studies. However, this result implies that companies with bad news are more likely to disclose additional information in order to reduce litigation cost (Johnson et al., 2001). In terms of a proxy for growth opportunities, as predicted, Growth (t = 1.704) is positive and significant, consistently with H3 and previous studies (Cahan and Hossain, 1996; Hossain et al., 2005).

For corporate governance variables, the results show no relation between audit quality and forecast information. This result is inconsistent with H4 and O'Sullivan et al. (2008), but consistent with (Aljifri and Hussainey, 2007). In terms of a proxy for board size, the results show no relation between board size and information related to the future. This result is inconsistent with (Ajinkya et al., 2005; Hossain et al., 2005; Karamanou and Vafeas, 2005). This might be partly distributed that most of the companies on the ASE considered as family business, which may reduce the usefulness of corporate governance mechanism. In terms of a proxy for role duality, as predicted, Role (t = 2.012) is positive and significant, consistently with H6, which indicates that when there is separation between the roles of chairman and CEO, the companies are more likely to provide forecast information.

For control variables, the result shows positive and significant relation between company size and forecast information consistent with (e.g., Clarkson et al., 1994; Cahan and Hossain, 1996; Clarkson et al., 1999; Walker and Tsalta, 2001; Kent and Ung, 2003; Vanstraelen et al., 2003; Hossain et al., 2005; Celik et al., 2006; Lim et al., 2007).

Moreover, repeated regression analyses using alternative proxies for the independent variables, on balance, seem to identify almost the same variables as being significant in explaining variability in forecast information. Thus, different regression models serve to confirm the robustness of the original regression results.

5. Conclusion, Limitation and future studies

The results of the study document that most of the companies listed on the ASE disclose small number of sentences with forecasts information. Additionally, the results confirm that most of these companies are reluctant to provide

quantitative forecast information. However, most of these companies instead provide qualitative forecast information in optimistic manner.

The results find that the extent of forecast disclosures is positively and significantly related to growth opportunities, role duality, and company size, but it is negatively and significantly related to competition rate and performance. This seems to support information asymmetry theories which suggest that companies provide additional information to reduce information asymmetry and agency cost. Furthermore, the extent of forecast information is found to be significantly related to competition rate, growth opportunities and performance. This seems to support proprietary cost hypothesis. Also, role duality is found positively and significantly related to future information. A possible reason for this is because when the CEO and chairman are separated they are more likely to disclose additional information in order to protect their reputation. One additional control variable, namely company size is also found to be positively and significantly related to the forecasts information.

The first limitation of this study is the focuses of the annual reports which suffer from lack of a timelines. Therefore, future research could be conducted for other forms of communication such as—press releases, conference calls, corporate websites, or interim reports after—since many value relevant events are reflected in stock prices as soon as the information reaches the market while their influence on reported earnings often occurs with a time lag.

Another limitation of this study is the use of an equal weight for each item in the content analysis. This may not reflect the value relevance of such disclosure items over other items. For example, a quantitative forecast is more useful than any other type of information, and some disclosure topics are more important to one particular industry than they are to other industries. Future research may be conducted by giving more weight for more value relevant information. Additionally, the relationship between stock prices and disclosure of forecast information could also be a good research subject.

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Notes

Note 1. All companies listed on the ASE their financial year ends on Dec 31.

Note 2.The sample mean of sample size of at least 30 observations is nearly normal (Gujarati, 2006).

Note 3. The correlation matrix reveals that the highest correlation is between company size and audit quality, and company size and board size 36.8% and 35.2% respectively. Furthermore, as it can be seen in Table (4) the values of Variance Infliction Factor (VIF) for all independent variables are less than 2.0 which imply that no multicollinearity problems exist in the models.

Table 1. Independent Variables and their Proxies Employed in this Research

Independent Variables	Expected Prediction	Proxies	Previous Studies Employed Similar proxies
Competition rate	(-)	Proportion of fixed assets to total assets	Clarkson et al., 1994; Kent and Ung, 2003; Hossain et al., 2005; Bravo et al., 2009
Performance	(+)	Net income to total equity	Vanstraelen et al., 2003; Hossain et al. 2005; Beretta and Bozzolan, 2008; Bravo et al., 2009
Growth	(+)	Market price to equity ratio	Cahan & Hussain, 1996
Audit quality	(+)	A dichotomous variable equal to 1 if the firm i is audited by the big 6 audit companies in Jordan, and 0 otherwise.	Eng & Mak, 2003; Aljifri and Hussainey, 2007 Lim et al., 2007
Board Size	(+)	The size of board	Karamanou and Vafeas, 2005; O'Sullivan et al., 2008
Role Duality	(+)	A dichotomous variable equal to 1 if the firm i is separated between the role of CEO and Chairman, and 0 otherwise.	Forker, 1992; O'Sullivan et al., 2008
Control Variables			
Leverage		Total debt to total assets.	Aljifri and Hussainey, 2007; O'Sullivan et al., 2008; Bravo et al., 2009
Industry		A dichotomous variable equal to 1 if the firm i is listed in industrial sector, and 0 otherwise.	Celik et al., 2006
Company size		The natural logarithm of total asset	Clarkson et al., 1994; Clarkson et al., 1999; Johnson et al., 2001; Lim et al., 2007; Bravo et al., 2009

Table 2. Descriptive Analysis for Dependent and Continuous Independent Variables

Variables	Minimum	Maximum	Mean	Std. Deviation
Number of FL Sen.	.00	25.00	4.72	2.18
Comp.	.00	64.50	3.20	7.31
Company Size	5.45	8.82	7.27	.60
Growth	-623.02	295.93	14.55	91.23
ROE	-348.34	91.29	-.77	39.64
Debt Ratio	.45	513.62	37.68	49.80
Board	1.00	13.00	8.00	2.45

Table 3. information on quantitative forecast for the companies listed in ASE

Quantitative Items	Production	Revenue	Cash flows	Earnings	Cost	Capital Expenditure	Expected financial Statements
Number of companies	3	5	2	4	2	4	1

As it appears in the above table, around 90% of the companies listed on ASE are less likely to provide quantitative forecasts information.

Table 4. The Results of Cross-sectional OLS Regression Analyses of Determinants of Voluntary

Variables	Coefficients	t-statistic	VIF
Intercept	-2.173	-0.689	
Comp.	-0.050	-1.669*	1.169
Growth	0.005	1.704*	1.077
ROE	-0.020	-1.932*	1.310
Big6	-0.112	-0.664	1.169
Board	-0.137	-1.307	1.242
Role	0.905	2.012**	1.056
Size	0.433	1.622*	1.420
Debt	0.000	-1.307	1.057
Industry	0.224	0.500	1.113
Adjusted R2	0.163		
Model F Test	4.17 P-value = .003		

** Significant at the 5% level   * Significant at the 10% level