



THE DETERMINANTS OF PROFIT FORECAST BY TUNISIAN COMPANIES

Myriam Boudiche

*Department of Finance, Faculty of Economic Sciences and Management of Tunis, El Manar University,
Tunisia*

ABSTRACT

This paper aims to examine the impact of the determinants of profit forecast by companies on the level of detail of information published by the leaders. It analyzes the contribution of publications to reduce information asymmetry between managers and investors. From a sample of 50 companies listed in the stock exchange of Tunis in 2010, our results show that the most successful companies are able to provide detailed and reliable profit forecasts better than others ones in order to maximize their financial value. They also show that companies belonging to high-tech sectors provide more detailed and credible than others. These results suggest that the publication of reliable information is an important determinant of investor behavior.

Keywords: Users of forecast information, Reliability of information, Publication, Stock exchange, Managers.

JEL codes: G17, G30.

INTRODUCTION

When investors want to participate in the capital of a publicly traded company, the leaders put at their disposal a set of information to reduce the uncertainty surrounding the transaction. [Lev \(1992\)](#) finds that investors can make an opinion on the value of the company and appreciate the price of the shares offered during the operation, if asymmetric information and uncertainty are not reduced; investors are unlikely to participate in it.

[Baik and Jiang \(2006\)](#) found that by disclosing information on earnings forecasts and recommendations for buying and selling securities, financial analysts are putting pressure on the leaders of publicly traded companies. This appears to be beneficial for shareholders; however, many adverse effects appear. The excessive optimism of analysts led leaders to manipulate accounting information and to act against the interests of shareholders. The existence of this optimistic hide-lighted in numerous studies around the world confirms the idea of discipline management ineffective.

During the last decade, conflicts of interest seem to exist between investors and analysts because the latter are frequently used by banks in business relationship with the companies followed. The disciplinary role of analysts has been argued by [Dubois and Dumontier \(2007\)](#). Despite this, it seems that their announcing forecasts or recommendations impact the behavior of investors, judged in some cases, by the financial market. In this context, the objective of this research is to analyze the level of detail of the publication of forecast information published in the annual reports of companies. Thus, the question is to know whether the information on the profit forecasts available to companies predict satisfactorily the evolution of stock prices and hence cause a reduction in information asymmetry between managers and shareholders.

The main challenge to the evaluation of publicly traded companies concerns the advertisements made by financial analysts, the company and its prospects. Thus, the quality of forecast information is of considerable practical and theoretical importance. It allows the achievement of corporate financial goals and helps provide a good and confident image needed by the various financial actors. [Bughin et al. \(2007\)](#) note that the use of this information has an important effect on the value of the company, the interpretation of its financial statements by investors and the decision to buy, sell or hold securities of the company.

Indeed, companies must face this need for information from the majority of stakeholders in the financial market especially investors in order to make the best decisions as for economic growth and are grant more confidence to the security. In addition, the forecast information should reduce the information asymmetry between the managers of the company and investors. It is therefore important to know the determinants of the level of detail of the forecast information. To our knowledge, this work is the first to examine the relationship between the level of forecast information and the reliability of profit forecasts.

After a brief presentation of the different actors in the financial market interested in the information on the profit forecast and the various tools at their disposal, this will allow it to make a respective publication of information. The first part continues with a review of literature on the impact of the publication of information about managers by exposing the methodology used as well as the empirical results obtained and presented in the second part of this article.

USERS OF THE INFORMATION IN THE PROFIT FORECAST

The need of stakeholders in the financial market for financial quantitative information kept on growing and diversifying as this information help them assess their heritage and decide to buy, sell or hold securities of the company. Studies of [Barako et al. \(2006\)](#) show that knowledge of the choice of the company's disclosure of financial and accounting information influences the appreciation of its value by the most of stakeholders.

The Leaders of Publicly Traded Companies

Leaders spread the forecast information they hold to make investors understand it more easily, to reduce the risk of non-clarity and inaccuracy of this information and to understand the variations in stock prices. Leaders convey private information on profit forecasts to inform investors about the ability to generate profits, due to developing of new projects funded by capital.

Cheng and Firth (2000) found that some leaders decide to publish forecast information, others do not publish any, indeed, the U.S. leaders do not publish certain coded forecasts in order to protect the company's risk from prosecution and heavy penalties if it fails to meet its commitments as they pledge their reputation. This publication is compulsory in Malaysia Jelic *et al.* (1998), it is authorized in Hong Kong in the study by Cheng and Firth (2000), and Australia in the study by Brown *et al.* (2000).

Financial analysts are putting pressure on business managers and constitute a real discipline mechanism because most of these managers disclose earnings forecast different from these produced by analysts. The active behavior of the leaders has resulted in various works, Tan *et al.* (2002) and Libby *et al.* (2006) who studied the consequences of this behavior on the judgment of investors, on the perception of financial analysts and financial market reaction, during their experiment, they find that the disclosure has no real effect on analysts' earnings forecasts at the announcement of earnings.

The Financial Analysts

The financial analyst gathers and processes financial and non-financial information and participates in several economic functions to facilitate the decision-making of person interested in information about profit forecasts. The study by Leone and Wu (2002) shows that the analyst has a high capacity of profit forecast when his forecasting is more accurate than the others, the competence of the Financial Analyst is appreciated, and thus considered as a good analyst. Clarkea *et al.* (2007) found a positive impact between the reputation analysts and the compliance of their predictions that act positively on the broadcasts of shares and the market share of brokers.

Financial analysts assess a relevant share of quoted companies, when they consider that these shares are undervalued, and they recommend their purchase and when they detect overvalued companies, they recommend their sale. Hence, comes the usefulness of financial analysts in their roles which are totally beneficial to the smooth functioning of the economy. Dubois and Dumontier (2007) find that financial analysts are able to find out the errors of the shares of a company by controlling the parameters to estimate the methods of evaluation.

The Investors

Investors may have an idea of the value of the company and appreciate the share price when leaders put at their disposal a set of forecast information that reduces the uncertainty surrounding the transaction. If this uncertainty is not reduced, investors will employ financial analysts or at a change of risk. Based on the results of [Beaver \(1968\)](#) the forecast information published has an impact on investors' behavior. This information leads to a change in investors' expectations presented by a readjustment of their portfolios. In their sample, they explain that the accuracy and intelligibility of information held by each investor is responsible for the difference of revisions expectations from one investor to another. Based on this reasoning, the less informed investors will modify their expectations, while the more informed will do so but moderately.

LITERATURE REVIEW AND HYPOTHESES

This study helps to understand the determinants of the level of detail in forecast information. This understanding is important since detailed forecast information is likely to reduce information asymmetry between managers and investors.

The Information Required as Part of the Profit Forecast

To ensure quality and data matching, accounting law sets the amount of accounting and financial information to disclose by financial analysts and companies. The set of publication requirements, which companies must comply is grouped under the term "financial reporting". It is up to quoted companies to file annual accounts and management report to the court, and to publish the quarterly turnover achieved. The financial analyst completes the role of companies by providing additional reliable and forward looking statements. This part aims to identify tools for classifying information and more specifically to test their direct or indirect impact on the forecast information. To the extent that these factors help explain the behavior of leaders in the dissemination of forecast information both financial and non-financial studied by [Cheng and Courtenay \(2006\)](#) and [Cormier et al. \(2006\)](#), they propose that these factors thus determined, enable in the same way to influence the control practices of forecasting information.

This work is in a slightly different prospect as it examines the level of detail in the forecast information published. The hypotheses tested in this study of the determinants of the level of detail of information publication (Score 1) are the following:

Ho1: The level of detail in forecast information should grow with the firm age (age) quoted.

[Clarkson et al. \(1992\)](#) were based on the signal theory to explain the profit forecast. The older companies are encouraged to provide more detailed forecasts to distinguish themselves from other ones.

Debreceeny and Rahman (2005) note the oldest firms with better control over their market, are able by themselves and without resorting to stock brokers, to collect detailed and reliable forecast information to construct an identical image which is specific to them.

Ho2: The detail of the information should be positively associated with membership of the company to an audit agency of good quality (Audit).

(Depoers, 2000) finds companies that call to several agencies should disclose more exhaustive information and with a good quality to maintain their reputation and credibility. According to Clarkson *et al.* (2003) and Chalmers and Godfrey (2004), the audit quality provided by auditors of large firms leads to an increase in the accuracy of financial information.

Ho3: The level of detail of information should be higher in large firms (size).

However, in some studies, the association between firm size and level of detail of information is not significant. Ferguson *et al.* (2002) and Prencipe (2004) show that large companies already have a better understanding of their market. Other results Depoers (2000), Eng and Mak (2003) and Cormier *et al.* (2005) show up the weakness of this hypothesis and explain that the demand for pertinent forecast information should to grow with large companies rather than with the small ones.

Ho4: The level of debt (Indebt) should be positively associated with the level of detail of information.

As the agency costs between shareholders and managers increase with the proportion of the company debt, Bujaki and McConomy (2002) and Ferguson *et al.* (2002) show that highly indebted firms may have difficulty to raise new financing. These investigations show a negative association of debt on the level of detail of information published. However Eng and Mak (2003) found a positive association between the level of debt and the level of detail of the information published in Singapore.

Ho5: The higher the activity sector (Sect) is sensitive to economic fluctuations, the detailed information is more important. The forecasts are difficult to establish when it comes to high-growing sector. Indeed, Entwistle (1999) and Stolowy and Ding (2003) found that innovative firms are more likely to achieve higher results than firms operating in traditional sectors and should therefore publish more reliable information, hence a positive influence of detail information in relation to the belonging of the company to an innovative industry.

Ho6: The level of detail of information should be positively correlated with levels of profitability (ROE). The result of Garcia (2002) performed on a sample of Spanish companies shows a positive

influence of the firm profitability on the level of information. This argument implies the importance of communication when the financial result of the company is high. The relationship between disclosure and the level of profitability has been studied unsuccessfully on a sample of UK companies by [Percy \(2000\)](#) and [Williams \(2001\)](#).

Ho7: The level of detail of information should decrease with the share of insiders in the company (Share Ins). [Haw et al. \(2004\)](#) argue that firms with high share of insiders are more politically visible and use the information for strategic purposes to make transfers of wealth in favor of governments. [Shen and Chih \(2005\)](#) note that the leader is willing to adapt his financial reporting. Consequently, insiders cannot judge the action of the manager against them and will consequently call financial intermediaries to judge this situation.

Empirical Results

The approach made before the analysis of empirical results obtained.

Sample and Methodology

After a presentation of the sample, the methodology used is described.

Sample

Our sample is limited to 50 companies quoted on the Tunisian stock exchange. We have included all companies quoted on the stock market in 2010. Our questionnaire to companies listed on the stock market aims to calculate the score they give to forecast information published in annual reports. However, the variable to be explained is based on research data emerging from the questionnaires led to financiers who work in these companies. We have circulated 50 questionnaires directly to companies in March and April 2012. We have prepared a response rate of 100%. We mention that 40 questionnaires were completed in our presence in an interview with the financial manager. For the others, who have requested to complete the questionnaire alone, because of their unavailability, we examined whether the respondent has filled all the boxes or has met some difficulties of understanding.

Calculation of Information Publication Overall Score

The variable of the study to explain corresponds to a score that measures the level of detail of the information published by companies in the sample. We study companies which can choose whether to publish information held by the leaders or not. For each company a score was calculated from a list of 49 items that companies are likely to spread. The approach is dichotomous: If adopted a list of information takes the value 1, otherwise it is set to 0.

For each of the 50 companies in the sample observed, a score of publication is calculated. This score is the sum of points obtained from the survey conducted among the quoted companies and after reading the annual report hence:

$$ST_i = \sum_{j=1}^n S_j$$

With:

- ST_i : Total score of firm i
- n : number of items in the index
- S_j : Score of item $j = 1$, if the item is published and 0 otherwise.

The Explanatory Variables

We classify the explanatory variables (or independent variables) into two categories: direct variables that reflect the assumptions that lie at the core of our empirical device and indirect additional variables meant to improve the model specification but not central to our demonstration.

Table-1. Definition of the explanatory variables

Hypotheses tested	operational definition	operational name	Sign	Data source
Age	Ln(Age)	Age	+	Annual Report
The quality of the audit agency	0: bad practice 1: good practice (binary variable)	Audit	+	Annual Report
Size	Ln (total assets)	Size	+	Annual Report
Indebtedness	Book value of debt	Indebt	+	Annual Report
Sector of activity	dichotomous variable High technology: 1 Other: 0	Sect	+	Annual Report
Level of profitability of the company	$\frac{\text{Net income}}{\text{Equity}}$	ROE	+	Annual Report
Visibility of insiders	Proportion of insiders	Insider	-	Annual Report

EMPIRICAL RESULTS

Methodology

The determinants of publication of financial documents and their justification are studied. The variable to explain (score 1) is binary, we use a logit regression.

To assess the determinants of forecast information, we use the following model:

$$\text{Score } 1 = \alpha_0 + \alpha_1 (\text{Age}) + \alpha_2 (\text{Audit}) + \alpha_3 (\text{Size}) + \alpha_4 (\text{Indebt}) + \alpha_5 (\text{Sect}) + \alpha_6 (\text{ROE}) + \alpha_7 (\text{Insider}) + \varepsilon_{ij} \quad (1)$$

Correlation Matrix

It is appropriate to examine the correlations of the explanatory variables which may bias the conclusions of this analysis, in order to detect the collinearity between them.

Variables	Age	Audit	Insider	ROE	Sect	Size	Indebt
Age	1						
Audit	0,053	1					
Insider	0,239	0,014	1				
ROE	0,123	0,065	0,076	1			
Sect	0,260	0,033	0,106	0,019	1		
Size	0,147	0,260	0,204	0,023	0,201	1	
Indebt	0,003	0,198	0,133	0,002	0,245	0,515	1

The examination of the correlation matrix shows that there is no problem of collinearity between the explanatory variables because they have low correlation; therefore, we are not obliged to take corrective action.

Correlation coefficients range from a minimum equal to 0.003 to a maximum equal to 0.260, except for the relationship between the size and the debt whose correlation coefficient is 0.515 respectively. This value does not reveal the presence of a serious collinearity problem, since it confirms that this problem exists when the correlation coefficient exceeds the threshold of 0.8. So we are going to use all the variables of our model.

Furthermore, the proposed model is explained 74.10% of the Durbin-Watson statistics are almost equal to 2, hence no problem of autocorrelation.

Estimation of Model

Variables	Coefficient	Prob.
C	10.91384	0.4604
AGE	-0.048968	0.3993
AUDITEUR	-0.720105	0.8674
INSIDER	* -28.73049	0.0021
ROE	** 0.042528	0.0289
SECT	** -14.52086	0.0491
SIZE	0.386810	0.6006
INDEBT	-0.073763	0.9106
R-squared	0.740802	Mean dependent var 26.20930
Adjusted R-squared	0.637122	S.D. dependent var 14.67677
S.E. of regression	8.841188	Akaike info criterion 7.441368
Sum squared resid	2344.998	Schwarz criterion 7.973824
Log likelihood	-146.9894	Hannan-Quinn criter.

F-statistic	7.145120	Durbin-Watson stat	1.671281
Prob(F-statistic)	0.000006		

Interpretation of the Signs of the Estimated Coefficients

The positive sign of the estimated coefficients associated with variables ROE and size, correspond to the model assumptions. While the negative sign of coefficients associated with age, Auditor, Share Insider, Sect and Indebt, contradict them.

Interpretation of the Significance of the Signs of the Estimated Coefficients

- **Age.** The estimation results show that the coefficient associated to this variable ($\alpha = -0.048$) is negative, implying that the age of the society negatively affects the level of detail in forecast information. However, this coefficient is not significant, therefore, the age of the company is not an explaining factor the level of detail of information. This conclusion enables us to reject the second hypothesis (H_1) stating that corporations are encouraged to provide more detailed information on profit forecasts.

We believe that the youngest companies do not master well the market, and should provide more detailed information on the profit forecast to attract most investors and to be distinct and occupy a place in this market with hard competition.

- **Audit.** The results show that the coefficient on this variable is negative ($\alpha = -0.720$), this means that belonging of the society to an agency of good quality reduces the level of detail in forecast information, which is contrary to the theory. Similarly, the results show that this coefficient is not significant. Thereby reject the fifth hypothesis (H_2) assuming that the level of detail of information is to represent a positive association with the belonging of the company to rename a firm.

We suggest that the most performing companies are able by themselves and without resorting to the best law firms to offer more exhaustive and better forecast quality information with the least expenditure.

- **Share Insider.** The results show that the coefficient on this variable is negative ($\alpha = -28.730$), this implies that the share of insiders reduces the level of detail of information. Moreover, the coefficient on this variable is statistically significant at a risk threshold of 1%. The share of insiders in society is a determining factor in the level of detail of information. These results allow accepting the tenth hypothesis (H_7) that the level of detail should decrease with the proportion of insiders.

Indeed, the leader is willing to adapt its financial reporting, conflicts of interest arise, and consequently, the insiders cannot judge the actions of rulers against them.

- **ROE.** As for the variable representing the return on equity, the results show that the coefficient ($\alpha = 0.042$) is positive, implying that the return on equity has a positive impact on the level of detail of information, especially this coefficient is significant at a threshold risk equal to 5%. This conclusion can accept the ninth hypothesis (H_6) assuming that the level of detail of information is positively correlated with the level of profitability.

Therefore, the most successful companies are those that provide more detailed forecast information to justify the long-term forecasts and to distinguish themselves from the other ones.

- **Sect.** The results show that the coefficient for this variable is negative ($\alpha = -14.520$), which implies that the belonging to a high-tech sector has a negative impact on the level of detail of information. However, this coefficient is significant at a threshold risk equal to 5%. This conclusion may accept the eighth hypothesis (H_5) which the companies that belong to a high-tech sector provide more reliable information than other ones.

We conclude that innovative and high technology companies are more likely to achieve greater results than the companies operating in traditional sectors.

- **Size.** The results show that the coefficient for this variable is positive ($\alpha = 0.386$), implying that size has a positive effect on the level of detail of information. On the contrary, this coefficient is not significant. Therefore, size is not a factor explaining the level of detail in forecast information. This conclusion may reject the sixth hypothesis (H_3) stipulating that large companies release more detailed information than others.

However, small companies without significant resources, attempt to improve confidence with other stakeholders, by providing good quality information to ensure their sustainability.

- **Indebt.** The coefficient for this variable ($\alpha = -0.073$) is negative, and this supports that debt reduces the level of disclosure, moreover, this coefficient is not significant, confirming that the debt is not a determinant of statements communication strategy. This result allows us to reject the seventh hypothesis (H_4) assuming that the most indebted companies offer more detailed information than others. We find that the most leveraged companies find it more difficult to raise new funds, and therefore, will disseminate false information about their situation

CONCLUSIONS

The study shows that the level of detail in forecast information released by companies is motivated by the argument of the financial utility. As far as we know, this work is the first studying the relationship between the level of detail of the forecast information and the reliability of earnings forecasts in the Tunisian context, characterized by a relatively large information asymmetry between various stakeholders. Indeed, our results indicate that the most successful companies are able to provide earnings forecast detailed and reliable than others in order to maximize their financial value. The study also shows that companies which involve insiders in decision making belonging to sectors of high technology provide more detailed and credible than other companies. The importance of financial forecasting, their contribution to economic growth, the inability of financial accounting to reflect the true forecast values and the emergence of the concept of social responsibility have developed among investors and other agents growing need for detailed and credible information. However, until now, there is no consensus model to impose the direction of future events evolutions steering. Hence, this work could have implications for stock market regulators since they suggest an obligation to publish very detailed forecast information that improve the efficiency of the Tunisian market.

REFERENCES

- Baik, B. and G. Jiang, 2006. The use of management forecasts to dampen analysts' expectations *Journal of Accounting and Public Policy*, 25(5): 531-553.
- Barako, D.G., P. Hancock and H.Y. Izan, 2006. Factors influencing voluntary corporate disclosure bykenyan companies. *Corporate Governance: An International Review*, 14(2): 107-125.
- Beaver, W.H., 1968. The information content of annual earnings announcements *Journal of accounting research*, supplement: 67-92.
- Brown, P. Clarke, H. J.A. and K. Lim, 2000. The accuracy of management dividend forecasts in australia. *Pacific-Basin Finance Journal*, 8: 309-331.
- Bughin, C., O. Colot, M. Croquet and P. Niyuhire, 2007. The approach of the stakeholders performance study of annual reports of listed companies in belgium working paper.
- Bujaki, M. and B.J. McConomy, 2002. Corporate governance: Factors influencing voluntary disclosure by publicly traded canadian firms *Canadian Accounting Perspectives*, 1(2): 105-139.
- Chalmers, K. and J. Godfrey, 2004. Reputation costs: The impetus for voluntary derivative financial instrument reporting. *Accounting, Organizations and Society*, 29(2): 95-125.

- Cheng, E. and S. Courtenay, 2006. Board composition, regulatory regime and voluntary disclosure. *The International Journal of Accounting*, 41: 262-289.
- Cheng, T. and M. Firth, 2000. An empirical analysis of the bias and rationality of profit forecasts. *Journal of Business Finance and Accounting*, 27(3-4): 423-446.
- Clarkea, J., A. Khoranaa, A. Patelb and R. Rauc, 2007. The impact of all-star analyst job changes on their coverage choices and investment banking deal flow *Journal of Financial Economics*, 84: 713-737.
- Clarkson, P., A. Dontoh, G. Richardson and S. Sefcik, 1992. The voluntary inclusion of earnings forecast. *Contemporary Accounting Research*, 8: 601-626.
- Clarkson, P.M., C. Ferguson and J. Hall, 2003. Auditor conservatism and voluntary disclosure : Evidence from the year 2000 systems issue *Accounting and Finance*, 43: 21-40.
- Cormier, D., M. Magnan and W. Aerts, 2006. The association between governance, media, economic factors and web-based disclosure: Some canadian evidence. Working Paper, June. Université du Québec.
- Cormier, D., M. Magnan and B. Van Velthoven, 2005. Environmental disclosure quality in large german companies: Economic incentives, public pressures or institutionnal conditions? . *European Accounting Review*, 14(1): 3-39.
- Debreceeny, R. and A. Rahman, 2005. Firm-specific determinants of continuous corporate disclosures. *The International Journal of Accounting*, 40: 249– 278.
- Depoers, F., 2000. A cost benefit study of voluntary disclosure. *European Accounting Review* 245-263.
- Dubois, M. and P. Dumontier, 2007. Do conflicts of interest affect analyst's forecasts and recommandations? Working paper.
- Eng, L.L. and Y.T. Mak, 2003. Corporate governance and voluntary disclosure *Journal of Accounting and Public Policy*, 22(4): 325-345.
- Entwistle, G.M., 1999. Exploring the r&d disclosure environmen *Accounting Horizons*, 13(4): 353-385.
- Ferguson, M.J., K.C.K. Lam and G.M. Lee, 2002. Voluntary disclosure by state-owned enterprises listed on the stock exchange of hong-kong *Journal of International Financial Management and Accounting*, 13(2): 125-152.
- Garcia, M., 2002. Information disclosure indexes to quantify complex categorical variables. This work is part of a research project funded by the DGI (SEC2000-014), in collaboration with Analistas Financieros Internacionales et Morgan Stanley Dean Witter.
- Haw, I., B. Hu, L. Hwang and W. Wu, 2004. Ultimate ownership, income management, and legal and extra-legal institutions. *Journal of Accounting Research* 42(2): 423–462.

- Jelic, R., B. Saadouni and R. Briston, 1998. The accuracy of earnings forecasts on the kuala lumpur stock exchange. *Accounting and Business Research*, 29(1): 57-72.
- Leone, A. and J.S. Wu, 2002. What does it take to become a superstar? Evidence from institutional investor rankings of financial analysts. Working paper, University of Rochester.
- Lev, B., 1992. Information disclosure strategy *California Management Review*, 34: 49-76.
- Libby, R., H.T. Tan and J.E. Hunton, 2006. Does the form of management's earnings guidance affect analysts' earnings forecasts? *The Accounting Review*, 8(1): 207–225.
- Percy, M., 2000. Financial reporting discretion and voluntary disclosure: Corporate research and development expenditure in australia *Asia-Pacific Journal of Accounting and Economics*, 7: 1-31.
- Prencipe, A., 2004. Proprietary costs and determinants of segment disclosure : Evidence from italian listed companies. *The European Accounting Review*, 13(2): 319-340.
- Shen, C.H. and H.L. Chih, 2005. Investor protection, prospect theory, and earnings management : An international comparison of the banking industry. *Journal of Banking and Finance*, 29(10): 2675-2697.
- Stolowy, H. and Y. Ding, 2003. Determinants of the french group strategy for communication on their research and development *Finance Control Strategy in March 2003*: 39-62.
- Tan, H.T., R. Libby and J.E. Hunton, 2002. Analysts' reactions to earnings preannouncement strategies *Journal of Accounting Research*, 40: 223–246.
- Williams, S.M., 2001. Is intellectual capital performance and disclosure practises related? *Journal of Intellectual Capital*, 2(3): 192-203.

ANNEXES

Question to Company Manager

Please indicate the degree of importance you attach to each of the following information items that may be disclosed in annual reports of companies listed on the BVMT.

1. Important, 0. Not important.

Pieces of information of the analysis grid Botosan (1997)		
1 - Information on the goals and strategies of the company		
Presentation of company goals	0	1
Presentation of the general strategy of the company	0	1
Discussion of actions taken during the year to achieve the objectives	0	1
Discussion of actions to be undertaken in future years	0	1
Presentation of a timetable for reaching the targets set	0	1
2-non-financial information		
Publication of information on the number of employees	0	1
Publication of information on the backlog	0	1
Publication of information on the percentage of orders to be delivered next year	0	1
Publication of the percentage of sales for products in the past five years	0	1
Publication of information on market share	0	1
Publication of information on the amount of new orders placed this year	0	1
Publication of information on sales growth in key regions for which no segment information is produced	0	1
3 - Forward-looking information		
Discussion of the impact of the opportunities the company on future sales or profits	0	1
Discussion of the impact of risks facing the company sales and future profits	0	1
Comparison of profit forecasts with actual earnings of the year	0	1
Comparison of sales forecasts with actual sales of the year	0	1
Presentation of cash flow forecasts	0	1
Presentation of forecast capital expenditure or R & D costs	0	1
Presentation of forecast market share	0	1
Presentation of cash flow forecasts	0	1
Presentation of forecasts of future profits	0	1
Presentation of forecasts of future sales	0	1
4-Information on analysis of management		
Change in operating profits	0	1
Change in net income	0	1
Change in capital expenditures or costs of R & D	0	1
Change in inventories	0	1
Change in sales	0	1
Change in receivables	0	1
Change in market share	0	1
Items of information added to the analysis grid Botosan (1997)		
5 - Financial Information		
Publication of information on the capital structure	0	1
Publication of information on the variation in turnover	0	1
Publication of information on the history of the stock price	0	1
Market perception about the value of the company	0	1

Publication of information and amounts on advertising expenses	0	1
Publication of information on the financial value	0	1
Publication of information on capital employed	0	1
Publication Information on the liquidity ratio	0	1
Publication of information on the PER	0	1
Publication of information on other financial ratios	0	1
6 - Information on earnings forecast		
Publication of information on the evolution of stock price	0	1
Publication of information on the profitability of the securities of shareholders	0	1
Presentation of operating income forecast future	0	1
Existence of a summary table of key figures	0	1
Explanation of variations between previous forecasts and realizations	0	1
Future cash horizon from 2 to 5 years	0	1
7 - Information published in annual reports		
Publication of annual report	0	1
Publication of Financial Statements	0	1
Publication of reports of the auditor	0	1
Presentation of EBE, VA and operating income	0	1