



Corporate Governance and the Level of Financial Disclosure by Tunisian Firm

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Abstract

This study examines the relationship between the level of disclosure and its determinants, more specifically those relating to corporate governance mechanisms. The theoretical framework of the relationship between governance and the level of disclosure is proposed by the agency theory. For a sample of non-financial listed Tunisian companies for a period of 2004-2009. We built an index to approximate the extent of disclosure. We also used an unweighted and weighted index based on the views of financial information users (banker, Analyst, Financial Market Board, shareholders). The results show that the level of disclosure is explained by the size, leverage, profitability, duality, concentration of ownership and control quality as measured by the number of auditors and the presence of Big 4.

Key words: *Weighted disclosure index, corporate governance, board of directors, ownership structure.*

JEL Classification: *G32, G34*

Introduction

The propagation of crises and scandals in recent years has demonstrated the failure of the governance system. These crises have prompted regulators to provide financial security laws and codes of conduct. These laws give enough importance to the concept of voluntary disclosure of financial information. Indeed, with globalization the role of voluntary disclosure is increasingly debated in an international context (van der Laan Smith, and Tondkar Adhikari, 2005). The disclosure is a theoretical concept that is difficult to measure directly (Marston and Shrivess, 1991). Several methods have been proposed for this purpose among which we can cite the disclosure index. Disclosure is considered a good way to communicate with stakeholders on the progress of a company because it provides evidence on the nature of management and provides an idea of the strengths of the company.

The existing literature mainly on developed countries has found that voluntary disclosure of financial information is associated with certain firm characteristics. This study focuses on the detection of variables that may influence financial communications for developing countries such as Tunisia. The Tunisian stock market is a thin market composed of 57 listed companies among which there are 25 financial institutions. Disclosure financial information by these

companies often focused on regulated and mandatory information. To attract investors to participate in financial markets and to follow codes of good governance, financial authorities request and encourage companies to disclose voluntary information. Among regulations : the law n ° 2005-96 of 18 October 2005 on strengthening the security of financial relationship, and the financial market council Press February 8, 2010 (specifically Article 44) on the information disclosed at the report. It is useful in this case to measure the financial information disclosure level by Tunisian companies and seek the determinants of such level.

The rest of the paper is organized as follows: firstly we discuss the literature on the determinants of financial disclosure. Secondly we present the sample, variables and model. Finally we present the results and interpretations.

1. Literature Review

The literature on financial disclosure cited several factors that explain this practice. These factors are specific to the company, on its structure or performance and corporate governance... Our study focuses interest on certain governance mechanisms and their effect on disclosure policy by listed and non-financial companies. The agency theory provides a series of mechanisms to reduce conflicts of interest, discipline managers and motivate them to achieve the objectives of the shareholders. All of these mechanisms are available to shareholders to monitor managerial opportunism (Denis and McConnell, 2003). External mechanisms include the disciplinary role of markets (labor market, market of goods and services, market for corporate control) and the regulatory and external audit.

Internal mechanisms from the company are based primarily on the role of the board of directors, ownership structure and the debt policy. In what follows we will focus on some mechanisms and their relationship to practice disclosure of financial information.

1.1.The quality audit

Although it is entirely the responsibility of the directors to prepare financial statements, undertake external audit can significantly influence the amount of information disclosed. Audit function has a key role in the control of the management of companies where the owners do not ensure stewardship. This relationship is consistent with agency theory. Large audit firms have a strong incentive to maintain their independence and to impose more stringent disclosure standards because they have more to lose from deterioration of their reputation. The audit quality depends on two variables, the competence of the auditor and its independence. The agency theory suggests that external audit plays a role in mitigating the conflict of interest between management and investors (Xiao et al 2004, Jensen and Meckling1976). This suggests that firms with high agency costs will be examined to obtain high audit quality by contacting large audit firms.

A number of previous studies have found a relationship between the firm audit size and the extent of corporate disclosure. Singhvi and Desai, (1971); DeAngelo, (1981); Craswell and Taylor, (1992); Ahmed and Nicholls, (1994), and. and Inchausti (1997) Xiao Yang and Chow (2004) Fan and Wong (2005) Leung et al. (2005) found a significant positive relationship between the type of audit firm and disclosure practices.

In our study we found that few of Tunisian companies have an auditor to the big 4, it is for this reason that we have suggested to use the variable number of auditors as a determinant of audit quality. Since two audit reports can be complementary and also demonstrates the

effectiveness of the control system. Based on theoretical arguments and empirical studies we have the following hypothesis:

H₁: there is a positive relationship between audit firm size and corporate disclosure

1.2. The Leverage

Companies with higher leverage have higher monitoring costs. Control costs are borne by the company to resolve or reduce conflicts of interest between managers and creditors (Jensen and Meckling, 1976). Similarly, disclosure reduces agency costs and facilitates the risk assessment by creditors of the company (Botosan, 1997; Botosan and Plumlee, 2002). Creditors probably ask more information to ensure their funds. The decrease in the cost of debt is by the voluntary disclosure which facilitates control by creditors (Christiaens, 1991). Management should disclose more frequently and thoroughly for the purpose of monitoring to ensure debt holders of the ability of the company to pay its engagement. When the leverage increases the potential wealth transfers from debt holders to shareholders also increases (Myers, 1977). Indeed, agency conflicts are exacerbated by the presence of bondholders in the capital structure of a company.

A positive relationship between the debt ratio and levels of disclosure (mandatory and voluntary) has been found in studies concerning developing countries (Bradbury, 1992; Hossain et al, 1995; Morris et al, 2004). However, other studies have rejected this relationship (McKinnon and Dalimunthe 1993; Pham et al, 2003) or accepted a negative association (Eng and Mak, 2003). These differences in findings may be caused by differences in measurement of disclosure or for specific characteristics of countries. Companies that have a higher debt ratio should have higher degrees of transparency because creditors demand more information about them to guarantee their funds (Khanna, Palepu and Srinivasan, 2004). Thus, this discussion suggests the following hypothesis

H₂: The leverage has a positive impact on voluntary disclosure of financial information.

1.3. Board of Directors size

Board effectiveness decreases when the size of board exceeds a certain level (Jensen, 1993), when the number is very large directors can be manipulated by managers and this can lead to management entrenchment (Pichard-Stamford, 1998). There is a threshold where the addition of a new director will have negative effects. The large number of directors causes a problem of communication between members. The effectiveness of the control task is positively related to the level of information disclosed. In this case, shareholders can take as a source of information the report of the Board of Directors. Through these arguments, we can formulate our hypothesis as follows:

H₃: The size of the board negatively affects the extent of voluntary disclosure of financial information.

1.4. The proportion of independent directors

Board composition refers to the number of independent directors and the total number of directors. Independent directors contribute to improving the quality of the audit process, by requiring a more detailed audit because it is their responsibilities to exercise control. They considered as mechanism for resolving conflicts between shareholders and managers (Fama and

Jensen, 1983), they can contribute to improving the effectiveness of the board (Franks et al., 2001). Chen and Jaggi (2000), Haniffa and Cooke (2002) demonstrate the existence of positive association between corporate disclosure level and the proportion of independent directors on the board. The empirical studies verify the relevance of outside directors as a governance mechanism that strengthens the board's ability to reduce agency conflicts between shareholders and managers who encourage companies to voluntarily disclose information in annual reports. From these explanations previously cited, we propose the following hypothesis:

H₄: The presence of independent directors has a positive impact on the extent of voluntary disclosure of financial information.

1.5. The combination of functions between the Chairman and Chief Executive Officer (CEO)

According to the agency theory the combination of functions may negatively affect the effectiveness of the Board in terms of control. The duality of function can lead to management entrenchment. Quality of control and the disclosure of information increase in the presence of separation between the chief executive officer and the chairman (Forket, 1992). The voluntary disclosure may be a solution to eliminate or reduce the negative effects of combination of function (Fama and Jensen, 1983). Based on these arguments we can build the following hypothesis:

H₅: The combination of function of CEO and chairman of the board has a negative impact on the extent of voluntary disclosure of financial information.

1.6. The ownership structure

This study examines two aspects of ownership structure, i.e., the percentage held by major shareholders and the presence of institutional shareholders.

1.6.1. The percentage held by major shareholders

According to the agency theory the separation between ownership and control, can lead to possibility of conflict of agency (Jensen and Meckling, 1976). The conflict decreases with share detained by officers. By disclosure managers show to the shareholders that they act in their interest. Another point of view shows that companies with concentrated ownership do not disclose enough information. In these companies most time shareholders are also members of directors, they access to all the information available in the company. Otherwise they disclose only limited information. The empirical results of the relationship between ownership concentration and corporate disclosure are mixed. Hossain et al. (1994) found a negative relationship, while Haniffa and Cooke (2002) noted a positive relationship. Craswell and Taylor (1992) not found a relationship between ownership structure and voluntary disclosure companies. Based on the suggestions of the agency theory supported by the previous results, we can propose the following hypothesis:

H₆: The relationship between the percentage held by major shareholders and the extent of voluntary disclosure is negative.

1.6.2. The percentage of shares held by institutional shareholders

When participation in capital by institutional investors is important, they can influence manager to improve the quality of information disclosed. The institutional investors can access easily to information and they have very high skills to properly treat it. They also have the

resources to monitor manager with less expensive. With these qualities institutional shareholders may have more effective control on the production of financial information (Ben Ayed-Koubaa, 2010). According to the agency theory, institutional ownership can be used as an element of effective control of the firm. In fact, institutional investors are exacting in terms of regular financial information and timeliness (Healy et al. 1999). Bushee and Noe (2000) Healy et al., (1999) found a positive relationship between the ownership of institutional investors and the quality of voluntary disclosure. Based on theoretical arguments and empirical studies we have the following hypothesis:

H₇: The relationship between the percentage held by institutional shareholders and the extent of voluntary disclosure is positive.

2. Presentation sample, variables and model

2.1. The presentation of the sample

Our sample consists of non-financial listed companies in Tunisia. More precisely, we consulted the annual reports of these companies either published on their websites or that of Tustex (the first specialized Internet media in the disclosure of stock market information in Tunisia), available from financial intermediaries or in the Financial Market Board (CMF: Conseil du Marché Financier) and for a period ranging from 2004 to 2009 order to construct an index of disclosure for each year. At the end of 2009 the number of listed companies is 52 companies of which 29 are non-financial. For this study, 22 companies are taken as they are rated for the entire study period. The procedure in this study is to construct a weighted index based on stakeholder views on the stock market and an unweighted index. Then we will try to explain this level of disclosure by firm-specific variables and variables on the governance mechanisms.

2.2. Construction of disclosure index

For the construction of indices disclosure, we conducted a literature review of evidence established by the researchers as Cooke (1989), Botoson (1997), Naser and Nuseibeh (2003), Leventis and Weetman (2004) and Hassan, Romilly, Giorgioni and Power (2009). These indices include items on the general information in those financial statements, information related to the financial structure and to the financial market, forecasting and social information.

For our index, we conducted a detailed review of the academic literature on information published in the activity reports of listed companies. We also consulted the following Tunisian laws;

- The Accounting Act No: 96-112 of 31/12/1996 relating to the accounting system of enterprises, the general standard,
- Law n°94-117 of 14/11/1994 relating to the restructuring of the financial market,
- Law n ° 2005-96 of 18 October 2005 on strengthening the security of financial relations,
- The regulation of CMF (Article 44) and the CMF Press February 8, 2010 on the information to be disclosed at the report.

In total, a complete list of 71 items was collected and, for convenience, they have been grouped into seven categories. Table 1 lists the main categories and the number of items per category. Since the information provided by the companies have aims to inform users, it is useful to know their opinions on the assessment items introduced. This is why we opted for a weighted and unweighted, based on the study of Naser and Nuseibeh (2003).

Table 1: The categories of information published

Categories	Numbers of items
General and Strategic Information	13
Information on the financial statements	14
Social Data	4
Corporate Governance data	8
Financial and market information	20
Forward-looking information	4
Other information	7
Total	71

The questionnaire asked respondents to indicate their opinion about the usefulness and relevance of information items specific in making investment decisions. Once the final list of information items has been determined, the next step is to assign a score to each item on the list. Each point was weighted equally giving the item a value of one if disclosed, and the value of zero in the absence of disclosure. The total extent of disclosure index is measured as the sum of points assigned to a particular company in a given year divided by the maximum number of applicable item. The choice of this methodology avoids penalizing firms which does not disclose some item specific to other activity. We kept the items whose disclosure percentage is greater than 10%. For our study, the results of the questionnaire show that the item is published by at least 15% of the companies in our sample. To test the reliability and adequacy of the disclosure index we used Cronbach's alpha, this coefficient is always greater than 0.7, which confirms the robustness and reliability of the index.

2-3 The Weighting Index

The questionnaire was designed to gather the opinions of users on the relative importance of disclosure in annual reports. The questionnaire described the objectives of the research, explained the method of assessing the importance of items and includes a categorized list of items in the disclosure index. It is recognized that conflicting aims between stakeholders in the preferences of different items. However, as the focus of research is on the activity reports that recognize multiple users (Cooper and Sherer, 1984) the views of a broad group of stakeholders were considered appropriate. Reviews were quantified using a five-point scale. Each member of the group was invited to consider the proposed items and indicate the degree of importance. The scale was based on the level of importance they attach to items disclosed. Similar scales have been used by Naser and Nuseibeh (2003). A Likert scale was used with a rating of 5 indicating very important, 4 important, 3 moderately important, 2 slightly important and 1 unimportant. Users and the number of respondents are presented in table below:

Table 2: The distribution of respondents

Users	Number of respondents
Bankers	40
Analysts and CMF directors	20
Auditors	40
Potential shareholders (Academic)	100
Total	200

The level of publication for each items component disclosure index for the entire period is available at Appendix. From these publications level, we note that the information frequently disclosed by the Tunisian companies is general information. Only for information about “the organizational structure” the disclosure level is low, it passe from 36.4% in 2004 to 68.18 in 2009. Same level is for the item concerning “the overview of main subsidiary” where the maximum level of communication reaches 27.27%. Some information relating to the financial statements have a higher level, by example, the accounting policies, the comparative financial statements, information on income.

Table 3 : Descriptive statistics of diffusion indices

Index	Minimum	Maximum	Mean	Standard deviation
WI04	0,61	0,89	0,7393	0,09462
UI04	0,60	0,90	0,7326	0,09835
WI05	0,62	0,93	0,7605	0,09797
UI05	0,62	0,93	0,7540	0,10140
WI06	0,62	0,94	0,7749	0,09847
UI06	0,62	0,94	0,7687	0,10190
WI07	0,67	0,96	0,8115	0,08431
UI07	0,66	0,96	0,8055	0,08799
WI08	0,69	0,97	0,8250	0,08252
UI08	0,68	0,97	0,8189	0,08711
WI09	0,72	0,97	0,8386	0,07251
UI09	0,72	0,97	0,8336	0,07599

WI: weighted index, UI : unweighted index

For items on corporate governance, we have important publications level but only for information about position or function exercised by directors where the level is low, it varies from 35% to 50%. The same level is for the item concerning the rules governing the appointment and replacement of members where we found publication level that varies from 40% to 72.72% from 2004 to 2009. For information on the financial market, the level of publication is important only for item concerning the evolution of the capital structure where we found a level of disclosure 36%. We can say that information frequently disclosed is mandatory. It was also noticed that the Tunisian firms disclose less information about social data, forward-looking data, information concerning activities in research and development and those relating to the policy of risk management. From the table 3, we can see that the level of disclosure to non-financial companies in Tunisia has increased through the years following the publication requirements requested by the Financial Market Board through the law of financial security.

2-4 The control variables

- Size : The size of the company is regarded as an important determinant of levels of disclosure (Chow and Wong-Boren, 1987; Lang and Lundholm, 1993; Singhvi and Desai, 1971; Cooke, 1989; Owusu-Ansah, 1998; Watson , Shrikes, and Marston, 2002) (Agca and Önder, 2007). Ho and Taylor, 2007) We expect that a relationship between the size of the company and disclosure

financial information will be positive as provided by agency theory. Large corporations voluntarily disclose more information in their annual reports to mitigate agency conflicts.

- Profitability: It is generally argued that the managers of the most profitable companies disclose financial information due to signaling and / or incentives for adverse selection). Several studies suggest that firms, when the outcome is favorable, tend to communicate information more frequently. (Verrecchia, 1983; Dye 1985; Lang and Lundholm, 1993; Inchausti, 1997).

2-5 The model

In this study, the method used is panel data because we have data for 22 companies six years, which gives us 132 observations. Since we have two dependent variables, weighted and unweighted index, we get the following two equations:

Equation 1 :

$$INP_{i,t} = \beta_0 + \beta_1 TA_{i,t} + \beta_2 LEV_{i,t} + \beta_3 ROA_{i,t} + \beta_4 DUA_{i,t} + \beta_5 BS_{i,t} + \beta_6 IND_{i,t} + \beta_7 CC_{i,t} + \beta_8 INST_{i,t} + \beta_9 NAUD_{i,t} + \beta_{10} BIG4_{i,t} + \varepsilon_{i,t} \quad (1)$$

Equation 2 :

$$IP_{i,t} = \beta_0 + \beta_1 TA_{i,t} + \beta_2 LEV_{i,t} + \beta_3 ROA_{i,t} + \beta_4 DUA_{i,t} + \beta_5 BS_{i,t} + \beta_6 IND_{i,t} + \beta_7 CC_{i,t} + \beta_8 INST_{i,t} + \beta_9 NAUD_{i,t} + \beta_{10} BIG4_{i,t} + \varepsilon_{i,t} \quad (2)$$

Table 4: Presentation of variables

Variables		Measures
Size	TA	the logarithm of Total assets
Leverage	LEV	The ratio Total liabilities / total assets
profitability	ROA	The ratio Net income / total assets
Audit Quality	NAUD	Auditors number
	Big4	Approximated by a binary variable equal to 1 if the firm belongs to the big 4 auditors 0 if not.
Ownership Structure	CC	Percentage held by the major shareholder
	INST	Percentage held by institutional investors
Board of directors characteristics	DUAL	Equal to 1 in the presence of the combined functions of CEO and Chairman of the Board and 0 if not
	BS	Board size: number of board members
	IND	Percentage of independent directors on the board : number of external members / total number of board members

3 - Presentation and interpretation of results

The application of multiple regression models requires the absence of multicollinearity between the independent variables / exogenous. This problem leads to poor estimates of the coefficients α_i . A bivariate multicollinearity problem arises when two independent variables are highly correlated. Table 5 presents the Pearson correlation coefficients of exogenous variables included in our model.

Table 5 : Pearson correlation coefficient

	TA	LEV	ROA	DUA	BS	IND	CC	INST	NAUD	BIG4
TA	1.0000									
LEV	0.4183	1.0000								
ROA	-0.084	-0.623	1.0000							
DUA	0.2292	0.0555	0.0247	1.0000						
BS	0.2632	-0.030	0.1232	-0.361	1.0000					
IND	0.1772	0.1585	-0.214	0.1396	0.0915	1.0000				
CC	0.2078	0.2948	-0.357	-0.043	0.0068	-0.035	1.0000			
INST	0.4686	0.2460	-0.228	0.2340	-0.002	0.1518	-0.0933	1.0000		
NAUD	0.4928	0.3560	-0.037	0.2265	-0.021	-0.009	0.2373	0.1795	1.0000	
BIG4	0.2987	0.2098	0.0392	0.2066	-0.067	0.1333	0.3520	-0.096	0.4222	1.0000

The results of the tests show the absence of a multivariate multicollinearity problem. The Hausman test results indicate that the random effect is preferred to the fixed effect that either Equation 1 or Equation 2. We used random effects.

Table 6: Hausman test and homogeneity

Equation	Homogeneity		Hausman test		Methods
	Fisher	Prob > F	chi2	Prob>chi2	
<i>Equation 1</i>	32.51	0.0000	9.08	0.5245	Random
<i>Equation 2</i>	30.93	0.0000	11.34	0.3316	Random

The estimate of the regression gives the results presented in Table 7. Using either weighted or unweighted index to measure the level of disclosure of financial information, we found the same results concerning the significance of the variables. The level of disclosure is explained by the size, leverage, profitability, duality, concentration of ownership and quality control as measured by the number of auditors and the presence of Big 4. We did not find significant results for the other variables related to corporate governance such as board size, the presence of institutional investors and the presence of independent directors.

Variable size affects positively the level of disclosure. This relationship is significant at the 1% level. In fact, a large company discloses more information. Production and disclosure of information are expensive and, therefore, the large companies have greater financial resources and expertise to produce full financial statements and detailed (Chow and Wong-Boren, 1987). This positive relationship is confirmed by most empirical internationally studies. This result is similar to Bradbury (1992), Hossain et al (1995) and Agca Onder, (2007), Hossain (2008). The relationship between debt and the level of disclosure is also positive, is significant at the 1% level. Companies with higher leverage have higher monitoring costs. Control costs are borne by the company to resolve or reduce conflicts of interest between managers and creditors. Disclosure reduces agency costs and facilitates the risk assessment by creditors of the company (Botosan, 1997; Botosan and Plumlee, 2002). Similarly, the effect of profitability on the level of disclosure is positive and significant at the 10% level; profitability can be seen as a signal of good management done by managers. Several previous studies (Akhtaruddin, 2005; Ho and Taylor, 2007) suggest that firms with a favorable outcome tend to communicate information more frequently.

The presence of combined function of chief executive Officer and Chairman of the Board adversely affects the level of financial disclosure by Tunisian companies. This variable affects negatively the level of disclosure. This relationship is significant at the 5% level. This allows us to accept the hypothesis H₅. A manager who ensures the two functions of the management and control would tend to withhold unfavorable information outside. Ho and Wong (2001) found that the separation can increase the effectiveness of the Board and to improve the level of information disclosed by companies. Since in most Tunisian companies, the majority shareholder often provides or participates in the management of the company.

Table 7: The result of estimation of the determinants of financial disclosure

variable	Equation 1	t-Statistics	Equation2	t-Statistics
TA	0.0392353 ^{***}	2.41	0.0384088 ^{***}	2.40
LEV	0.0705818 ^{***}	2.46	0.0718067 ^{***}	2.53
ROA	0.136687 [*]	1.74	0.1341742 [*]	1.72
DUA	-0.0389412 ^{**}	-2.29	-0.0390383 ^{**}	-2.32
BS	0.001554	0.23	0.0022528	0.34
IND	-0.1020981	-0.74	-0.086792	-0.65
CC	-0.0168696 ^{**}	-2.39	-0.0163112 ^{**}	-2.34
INST	0.018169	0.22	0.0143713	0.18
NAUD	0.0564158 ^{***}	5.69	0.0540835 ^{***}	5.51
BIG4	0.0282225 [*]	1.69	0.0315709 [*]	1.91
Constant	0.3888522 ^{**}	2.07	0.3901354 ^{**}	2.12
R ²	0.2006		0.1972	
Wald chi2(10)	100.16 ^{***}		98.75 ^{***}	

TA: firm size; LEV: leverage; ROA: profitability; DUA duality; BS: Board of director size's; IND independence of director; CC: Percentage held by the major shareholder; INS: Percentage held by institutional investors; NAUD: Auditors numbers; BIG: big 4 auditor; Significant at a level of (***) 1% (**) 5% (*) 10%.

We also found that percentage held by major shareholders has a negative impact on the extent of voluntary disclosure. This variable is significant at the 5% level. This allows us to accept our hypothesis H₆. Indeed, the majority shareholder will not be interested in the disclosure, as he has access to all the information that he need.

Finally, we accepted the hypothesis of audit quality measured by the number of auditors and the presence of Big 4 positively affects the level of disclosure of financial information by Tunisian companies. Our result is similar to that found by Craswell and Taylor, (1992); Xiao Yang and Chow, (2004); Gray and Leung, (2005). The presence of external audit can significantly influence the amount of information disclosed. Large audit firms have a strong incentive to maintain their independence and to impose more stringent disclosure standards because they have more to lose from deterioration of their reputation.

Conclusion

In this study, we measured the level of voluntary disclosure and determined its relationship with some factors that can affect it for non financial listed Tunisian companies and taking into account existing studies internationally in this field. Based on a questionnaire to stakeholders on the Tunisian stock market, we have constructed two indices weighted and unweighted. Our results show that Tunisian firms disclose more mandatory information that

voluntary information. By integrating variables related to certain governance mechanisms, the results showed that the level of disclosure for Tunisian firms is explained by the size, leverage, profitability, duality, concentration of ownership and quality control measured by the number of auditors and the presence of Big 4. This result demonstrates the importance of the impact of governance mechanisms on the level of financial information published by Tunisian companies. By publication of information, managers can mitigate agency conflicts. They can also transmit signals on the situation of the company and ensures shareholders and creditors on the status of their funds. The self-construction of the index can be considered a limitation of this study, as there are other supports of disclosure that the company can use to communicate with stakeholders such as conferences, website, quarterly report, and media. it is useful to measure the level of disclosure for different supports.

As future research we conduct a systematic analysis and the construction of a governance index. Some authors have demonstrated that systemic analysis is preferable to the analysis of fragmented governance mechanisms. It is also useful to look for the impact of the adaptation of IFRS on the level of financial disclosure or seek the consequences of such disclosure on the value of the firm or indicators such as the cost of capital or market liquidity.

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Appendix (The percentage of firms publishing by items)

A-General Information and Strategic	2004	2005	2006	2007	2008	2009
1 - Name of company	100	100	100	100	100	100
2 - Legal status of the company	100	100	100	100	100	100
3 - Purpose	100	100	100	100	100	100
4 - The activity of the companies that it controls	45,5	50	54,55	59,09	59,09	59,09
5 -The CEO letter	54,5	54,55	59,09	50	50	54,54
6 - A brief history of the company	77,3	86,36	90,91	86,36	86,36	86,36
7 - Description of business activity	100	100	100	95,45	95,45	95,45
8 - Information about the different types of products.	86,4	86,36	86,36	86,36	95,45	95,45
9 - Overview of main subsidiaries	18,2	18,18	18,18	22,73	27,27	27,27
10-Information about events affecting operations	95,5	100	100	100	100	100
11 - Information on the industry	68,2	90,91	90,91	90,91	90,91	95,45
12 - General information about the economic environment	45,5	45,45	45,45	45,45	45,45	45,45
13 - The organizational structure	36,4	36,36	36,36	50	54,54	68,18
B-Information on the financial statements						
1-The accounting policies	81,8	90,91	90,91	100	100	100
2 - The date of the financial statements and the period covered by the financial statements	100	100	100	100	100	100
3-The comparative financial statements	100	100	100	100	100	100
4-Changes in the methods of preparation and presentation of financial statements	59,1	45,45	63,64	50	54,54	54,54
5- The equity or dispositions	72,7	86,36	90,91	81,82	81,82	86,36
6-The changes in equity	100	95,45	100	100	100	100
7-Information on income (local, export)	95,5	95,45	95,45	90,91	90,91	90,91
8 - Other income	31,8	50	50	59,09	59,09	59,09
9-The gross profit / loss.	100	100	100	100	100	100
10-The operating result	100	100	100	100	100	100
11-Expenses and depreciation method	100	100	100	100	100	100
12-Investments (tangible and intangible)	59,1	72,73	100	90,91	90,91	90,91
13-The evolution of turnovers (graphics and comment)	95,5	100	100	100	100	100
14-The evolution of net income (graphics and comment)	86,4	100	100	100	100	100

(continued) The percentage of firms publishing by items

C-The Social Data	2004	2005	2006	2007	2008	2009
1-The number of employees	72,7	72,73	72,73	81,82	81,82	86,36
2-Categories of employees (contract, seasonal)	45,5	45,45	45,45	77,27	77,27	86,36
3-The staff ratios	27,3	27,27	27,27	50	50	50
4-Information on the training and development resources	36,4	36,36	36,36	50	50	50
D-The Corporate Governance						
1-The list of members of the Board of Directors	100	100	100	100	100	100
2-Personal characteristics of Directors	77,3	95,45	95,45	100	100	100
3-Position or function exercised by the directors	50	50	50	36,36	36,36	36,36
4-The rules governing the appointment and replacement of members	40,9	40,91	40,91	50	63,64	72,72
5-The shareholders list	100	100	100	100	100	100
6-The composition of the shareholding.	100	100	100	100	100	100
7-The auditor (mandates)	100	100	100	100	100	100
E-market and financial information						
1-The number of shares outstanding	100	100	100	100	100	100
2 - The market value of shares	95,5	95,45	95,45	86,36	86,36	86,364
3-The market value of equity investments	90,9	90,91	90,91	86,36	86,36	86,364
4-Information on the share capital and voting rights	27,3	27,27	27,27	45,45	54,54	59,09
5-The evolution of stock prices and trading volume	95,5	100	100	95,45	95,4	95,45
6-The market capitalization at year-end, trend	100	100	100	100	100	100
7-The dividend policy of the company	22,7	22,73	22,73	40,91	40,91	40,91
8-The dividends paid for the last three years	40,9	45,45	45,45	86,36	86,36	90,91
9-TheDividends per share.	95,5	100	100	100	100	100
10- Stock market capitalization	63,6	86,36	86,36	90,91	90,91	90,91
11-Earnings per share	95,5	100	100	100	100	100
12-The evolution of capital (nature of the transaction, the outstanding capital)	100	100	100	100	100	100
13-The information on new issues	81,8	72,73	100	100	100	100
14-The evolution of the financial structure	36,4	36,36	36,36	50	50	54,54
15-The liquidity ratio	81,8	81,82	81,82	81,82	81,82	86,36
16-The debt ratio	100	100	100	100	100	100
17-The solvency ratio	81,8	81,82	86,36	86,36	86,36	86,36
18-The price / earnings ratio (PER)	95,5	100	100	100	100	100
19-profitability ratios (ROA, ROE)	100	100	100	100	100	100

(Continued) The percentage of firms publishing by items

F-The forward-looking information	2004	2005	2006	2007	2008	2009
1-Information on future	45,5	45,45	45,45	63,64	72,73	81,82
2-Discuss the main factors influencing the next fiscal year	68,2	68,18	68,18	77,27	81,82	86,36
3-The earnings estimates for 3 years	18,2	18,18	18,18	18,18	18,18	18,18
4-Projections of future cash flows for 3 years	18,2	18,18	18,18	18,18	18,18	18,18
G-Other information						
1-The report of the Board of Directors.	100	100	100	100	100	100
2-The report of the auditor	100	100	100	100	100	100
3-The resolutions dd / mm / yyyy	100	100	100	100	100	100
4-The activity indicators	100	100	100	100	100	100
5-The elements of internal control,	31,8	31,82	31,82	72,73	90,91	95,45
6-The risks faced and policy adopted risk management	22,7	27,27	27,27	54,55	68,18	81,82
7-Activities in research and development	13,6	13,64	13,64	18,18	18,18	18,18