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# Corporate Board Characteristics and the Informativeness of Accounting Earnings: Evidence from Tunisia

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**Abstract**

In this paper, we examine the relationship between the board characteristics and the informativeness of accounting earnings for a sample of Tunisian firms. Using panel data methodology, we provide evidence that board composition affects the information content of accounting incomes in Tunisian context. Particularly, board independence and identity of directors enhance the earnings quality. However, the non duality CEO/chairman is negatively related to the informativeness of accounting incomes. Our findings confirm that the board of directors is an appropriate governance mechanism in monitoring managers and improving corporate transparency in Tunisian firms.

**Keywords:** Corporate governance, board of directors, identity of directors, informativeness of accounting earnings, emerging market, Tunisian firms.

## 1. Introduction

The financial information is an important variable that helps investors to identify promising investment opportunities and evaluate firm performance. The financial statements are essential for investors to identify good companies in which they will allocate their funds (Bushman and Smith, 2003). However, the wave of accounting scandals in several financial markets has raised questions about the accounting quality. A number of leader companies, which were involved in accounting fraud (Adelphia, Enron, Parmalat, etc), were obliged to restructure their financial statements (Agrawal and Chadha, 2005). Thus, the investors' confidence on management team has been lost which explains the considerable decrease in stock prices of firms subject to accounting scandals (Brown and Caylor, 2006).

According to previous studies, the financial reporting quality is affected by several factors such as firm size, growth opportunities, management incentive plans (Noe, 1999; Miller and Piotroski, 2000), agency costs (Skinner, 1994, 1997) and corporate governance (Beekes et *al.*, 2004; Karamaou and Vafeas, 2005; Beekes and Brown, 2006; Bradbury et *al.*, 2006; Firth et *al.*, 2007; Pergola et *al.*, 2009; Dimitropoulos and Asteriou, 2010; etc).

The governance structures aim to constrain the opportunistic behavior of managers, protect the shareholders' interests and disclose relevant and credible information to investors (Bradbury et *al.*, 2006; Han, 2005; Beekes and Brown, 2006; Ahmed et *al.*, 2006). Prior research confirmed the link between the corporate governance and the reporting quality, especially, in developed countries (Vafeas, 2000; Beekes et *al.*, 2004; Petra, 2007, etc). These have sophisticated financial markets with large number of investors and stock transactions, several codes of corporate governance and robust legal environment that protects the shareholders' rights. For example, Bradbury et *al.* (2006) revealed that the effectiveness of the board of directors and the audit committee improve the financial information quality by decreasing the earnings manipulation. Ahmed et *al.* (2006) found that the small size of the board is associated with high information content of earnings. Han (2005) indicated that the ownership concentration enhances the accounting quality.

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Similarly, Beekes and Brown (2006) reported that good governance structures lead to disclosure relevant and reliable information to investors.

Recently, much attention has gone to the subject of corporate governance and financial reporting quality in emerging markets. This question is very pertinent to examine because the financial markets in these countries are not enough sophisticated. The regulatory environment does not provide robust protection for minority shareholders, the corporate governance is still at an embryonic stage and the ownership concentration is very high. Consequently, the agency conflicts are likely to be high in developing economies (Jensen and Meckling, 1976; Firth et *al*., 2007).

In this paper, we examine the relationship between corporate governance and financial information quality in the Tunisian context. This country has undertaken several reform programs in order to promote foreign investment, trade and privatization of the public firms. Corporate governance is a new concept that needs great concern. Tunisian Firms have distinctive features, such as the existence of relational networks (cross-shareholdings between banks and companies), concentrated ownership and considerable presence of the State, families and financial institutions. Consequently, the conflicts of interest should be intensified in Tunisian firms given the presence of blockholders. They can take advantage of company resources and expropriate private benefits at the expense of other shareholders.

Our purpose is to investigate the effect of board characteristics on the earnings informativeness for a sample of 22 non financial firms during the period 1997-2007. Using panel data methodology, we find that the board composition and the CEO duality improve the earnings quality of Tunisian firms.

This study makes several contributions to the extant literature. First, we provide evidence on the role of the board of directors, as an effective governance mechanism, in an emerging market which is the Tunisian context. Then, we highlight the composition of the board and, especially, the identity of directors, which reveals the specificity of Tunisian context. We provide evidence that Tunisian companies can enhance their transparency by strengthening the control exercised by different directors. Finally, our findings have important implications for policymakers seeking to improve the financial reporting quality of the Tunisian firms.

This paper proceeds as follows. In section 2, we review studies about the link between the board characteristics and the earnings informativeness and we develop our hypotheses. In section 3, we define the sample, the variable measures and the econometric model. In section 4, we summarize the empirical findings and, in section 5, we present the concluding comments.

## 2. Board of directors and informativeness of earnings: Research hypotheses

The board of directors is considered as the main decision making process and control system in the firm (Fama and Jensen, 1983). The effectiveness of the board depends on its characteristics. The directors are required to monitor and evaluate the activities of the management team (Beekes et *al*., 2004). The task of control should be attributed to outside directors as inside directors can be closely related to the manager. The large size of the board may be associated with coordination difficulties which reduces the board effectiveness (Jensen, 1993). CEO duality can lead to the entrenchment of the manager who can pursuit personal strategies (Fama and Jensen, 1983). Thus, the board characteristics, such as composition, size and structure, are key variables to ensure effective control in the firm, solve the agency problems between partners (Fama, 1980; Fama and Jensen, 1983) and improve the financial reporting quality (Bushman et *al*., 2004; Bradbury et *al*., 2006; Beekes and Brown, 2006; Petra, 2007; etc).

### Board composition and informativeness of earnings

According to the governance literature, the board composition has an important role in disciplining the managers and protecting the shareholder interests (Weisbach, 1988; Rosenstein and Wyatt, 1990; Byrd and Hickman, 1992; Brickley et *al*., 1994). Despite the fact that inside directors have extensive knowledge of the firm's business and its operational decisions, the outside directors contribute more to the effectiveness of the board because of their expertise and objectivity to evaluate the firm performance (Byrd and Hickman, 1992; Booth and Deli, 1996; Hossain et *al*., 2000).

Research on the effects of board independence on the financial information quality presents mixed results. According to Beasley (1996), the likelihood of fraud in financial statements is reduced when the percentage of outside directors is high in American firms. In the same context, Klein (2002) confirmed that the board composition minimizes the earnings management. Specifically, she found a negative relationship between board independence and discretionary accruals. Bushman et *al*. (2004) underlined that the percentage of outside directors is positively related to the earnings quality of American companies. These findings were also confirmed for British firms. Peasnell et *al*. (2000) documented that earnings management is mitigated when the board of directors is more independent.

Beekes et *al*. (2004) reported that managers integrate, in a timely way, the bad news in accounting incomes, when there is more outside directors. In the Chinese context, Firth et *al*. (2007) showed that the earnings quality is positively associated with the percentage of independent directors. Hence, these findings indicate that accounting incomes are more informative in firms with high board independence. This means that outside directors are more effective in monitoring and disciplining the managers than inside directors.

However, other studies have not confirmed the role of independent directors in improving the financial disclosure quality. For example, Vafeas (2000) reported that there is no significant link between board composition and earnings informativeness of American firms. Similarly, Ahmed et *al*. (2006) did not validate this relationship for New Zealand firms. Based on these empirical findings, we posit the following hypothesis:

***$H_1$: The percentage of outside directors is related to the informativeness of earnings.***

The debate on the board composition focuses, in particular, on the percentage of independent directors. Nevertheless, the boards in emerging markets are characterized by the presence of other directors such as foreign investors, financial and state institutions and families. These directors may have essential role in monitoring the management team (Klai and Omri, 2011 a, b). The link between the identity of directors and the informativeness of earnings has not been widely explored in emerging markets. We believe that it is an important issue that should be examined in order to improve the board effectiveness and consequently the firm transparency. Therefore, we posit the following hypothesis:

***$H_2$: The percentage of directors who represent foreign investors, families, financial institutions and State is related to the informativeness of earnings.***

**Board size and informativeness of earnings**

The literature on corporate governance recommends that the board with reduced number of directors is more effective in monitoring and disciplining the managers (Jensen, 1993). A large board may limit the coordination among members and intensify the difficulties of communication (Lin et *al*., 2003). Indeed, Lipton and Lorsch (1992) and Jensen (1993) advocated that the independent directors may be disturbed in fulfilling their functions when the board contains a considerable number of members. They may be constrained to communicate their opinions and improve the process of decision-making and control within the firm.

Besides, several papers indicated that the board size can be associated with good quality information (Bushman et *al*., 2004; Bradbury et *al*., 2006). The directors in a small board should be more aware of their responsibility to control the managers and ensure the reliability of financial statements. Vafeas (2000) and Ahmed et *al*. (2006) reported that the board size reduces the informativeness of earnings of New Zealand and American firms. Firth et *al*. (2007) noticed that the information content of accounting incomes is negatively related to the board size of Chinese companies. Thus, we state the following hypothesis:

***$H_3$: The size of the board of directors is related to the informativeness of earnings.***

### CEO duality and informativeness of earnings

Separating the positions of CEO and board chairman is another attribute of the board effectiveness and independence. Combining these two positions can lead to excessive power of the CEO and motivate his opportunistic behavior. This is reflected in the choice of strategies that maximize his personal interests at the expense of shareholders (Jensen, 1993). Consequently, the duality CEO-chairman decreases the board independence and affects the firm transparency and the financial reporting quality (Fama and Jensen, 1983; Jensen, 1993). Indeed, Dechow et *al*. (1996) found a positive relationship between CEO duality and the probability of violation of accounting principles in American firms. In addition, Firth et *al*. (2007) revealed that the earnings quality of Chinese firms is positively associated with the separation of the positions of CEO and board chairman.

However, other studies suggested that duality avoids the dilution of power and potential rivalry between the CEO and the board chairman (Bradbury et *al*., 2006). This allows the manager to better understand the business environment of the firm and to be more involved. Therefore, the corporate performance and the quality of financial reporting are high when the CEO is also the chairman of the board (Cannella and Lubtakin, 1993; Sridharan and Marsinko, 1997). Thus, we test the following hypothesis:

***$H_4$*: *The separation between the positions of CEO and board chairman is related to the informativeness of earnings.***

## 3. Research design

### Sample study

In order to examine the effects of board characteristics on the earnings informativeness, we use a sample of 22 non-financial firms listed on the Tunis Stock Exchange, during the period 1997-2007. We exclude financial companies, such as banks, because they have specific corporate governance and accounting systems. The data on financial and governance variables has been collected from the annual reports of the firms[1].

### Earnings quality

In this paper, the informativeness of earnings is measured by the relation returns/earnings. It explains the market response to the disclosed earnings or the earnings explanatory power for returns (Warfield et *al*. 1995; Vafeas, 2000; Ahmed et *al*., 2006; Ashbaugh et *al*., 2006; Firth et *al*., 2007). The model equation is as follows:

$$RETN_{it} = \alpha_0 + \alpha_1 EPS_{it} + \alpha_2 \Delta EPS_{it} + \alpha_3 LOSS_{it} + \alpha_4 LOSS_{it} * EPS_{it} + \varepsilon_{it}$$

Where $RETN_{it}$ is the 12-month stock returns of the firm 'i' in year t, $EPS_{it}$ is the earning per share deflated by the beginning stock price, $\Delta EPS_{it}$ is the change in earning per share, $LOSS_{it}$ is a dummy variable that equals to 1 if the earnings are negative at year 't' and 0 if not and $EPS_{it}*LOSS_{it}$ is an interaction term between earning per share and its sign.

The informativeness of earnings which is called 'EARQTY' is measured by the residuals from this model. According to Gu (2007), the residuals measure the amount of returns which is not explained by contemporaneous accounting incomes. Consequently, higher residuals imply less information content of accounting incomes and less firm transparency.

### Board Characteristics

In this study, we focus on the governance variables that are specific to the Tunisian context and are related to the size, structure and composition of the board of directors.

First, we define the board size "BDSIZE" as the natural logarithm of the total number of directors (Vafeas, 2000; Ahmed et *al*., 2006). Second, the non duality CEO/board chairman "NODUAL" is a binary variable that equals to 1 if there is a separation of the two positions and 0 otherwise (Fama and Jensen, 1983;

Jensen, 1993; Dechow et *al*., 1996; Firth et *al*., 2007). Third, we define the percentage of outside directors "OUTSDIR" as the fraction of independent members, who have no relationship with the company, to the board size (Fama and Jensen, 1983; Jensen, 1993; Beekes et *al*., 2004; Bradbury et *al*., 2006; Firth et *al*., 2007).

Moreover, the board of directors in Tunisian firms is composed by other directors representing the families, financial companies, foreign investors and the State (Klai and Omri, 2011 a, b). Hence, we include, in our study, the identity of other directors. We define the percentage of directors who represent the families "FAMDIR", the financial institutions "FINDIR", the State "STATDIR" and the foreigners "FOREDIR".

**Regression model**

To investigate the impact of the board characteristics on the information content of earnings, we use the following model:

$$EARQTY_{it} = \alpha_0 + \alpha_1\ BDSIZE_{it} + \alpha_2\ NODUAL_{it} + \alpha_3\ OUTSDIR_{it} + \alpha_4\ FAMDIR_{it}$$
$$+ \alpha_5\ FINDIR_{it} + \alpha_6\ STATDIR_{it} + \alpha_7\ FOREDIR_{it} + \alpha_8\ DEBT_{it} + \alpha_9\ SIZE_{it} + \alpha_{10}\ GROW_{it} + \varepsilon_{it}$$

Where 'EARQTY' is the informativeness of earnings; 'BDSIZE' is the natural logarithm of the total number of directors; 'NODUAL' is a dummy variable which equals to 1 if the CEO is not the board chairman and 0 otherwise, 'OUTSDIR' is the percentage of outside directors; 'FAMDIR' is the percentage of directors who represent the families; 'FINDIR' is the percentage of directors who represent the financial institutions; 'STATDIR' is the percentage of directors who represent the State; 'FOREDIR' is the percentage of directors who represent the foreigners; 'DEBT' is the debt ratio; 'SIZE' is the firm size and 'GROW' is the Market-to-Book ratio which measures the growth opportunities.

According to prior studies, the informativeness of earnings can be influenced by other variables such as debt ratio, firm size and growth opportunities (Beekes et *al*., 2004; Bushman et *al*., 2004; Han, 2005; Ahmed et *al*., 2006; Firth et *al*., 2007). In our paper, the firm leverage "DEBT" is defined as the fraction of debts to total assets. The firm size "SIZE" is measured by the natural logarithm of total sales. The growth opportunities "GROW" are measured by the Market-to-Book ratio.

## 4. Study results

**Descriptive statistics**

The descriptive statistics of the variables are provided in Table 1.

**Table 1: Descriptive statistics**

| *Variable* | *Mean* | *SD* | *Min* | *Max* |
|---|---|---|---|---|
| RETN | 0.067 | 0.499 | -0.924 | 1.806 |
| EPS | 1.693 | 3.360 | -9.739 | 11.836 |
| BDSIZE | 9.156 | 1,871 | 5 | 12 |
| NODUAL | 0.240 | - | 0 | 1 |
| OUTSDIR | 0.081 | 0,129 | 0 | 0.625 |
| FAMDIR | 0,338 | 0,339 | 0 | 1 |
| FINDIR | 0,252 | 0,181 | 0 | 0,714 |
| STATDIR | 0,366 | 0,336 | 0 | 0,917 |
| FOREDIR | 0,106 | 0,149 | 0 | 0,5 |
| DEBT | 0.477 | 0.216 | 0.043 | 1.356 |
| SIZE | 17,752 | 0,926 | 16,148 | 21,112 |
| GROW | 1,932 | 1.810 | 0,212 | 12.583 |

We find that the average share return in our sample is about 6.7% and the earnings per share are about 1.7 TND, with a maximum value of 11.84 TND. The average debt ratio is 47.7% and the Market-to-Book ratio is about 1.93 indicating that the Tunisian firms have considerable potential growth and are well appreciated by investors. Besides, we discern that the Tunisian listed firms are characterized by a large board of directors. In our sample, the average size of the board is about 9 directors. The duality CEO/board chairman is very frequent in the Tunisian context. Only 24% of firms separate the positions of CEO and board chairman.

Furthermore, we notice a low percentage of outside directors which is about 8% on average. This indicates that the boards of Tunisian firms are dominated by inside members who represent principally state institutions, families, financial companies and foreign investors. Their presence is on average equal to 36.6%, 33.8%, 25.2% and 10.6% respectively. Therefore, these findings raise the need to verify the effectiveness of the board of directors and its effect on the earnings informativeness of Tunisian firms.

**Regressions Results**

The results of panel data regression[2] of earnings quality on board characteristics are presented in Table 2.

**Table 2: Regression results**

| *Independent Variables* | *Coefficient* | *t-statistic* | *p-value* |
|---|---|---|---|
| BDSIZE | -0.080 | -0.89 | 0.372 |
| NODUAL | 0.178 | 3.52 | 0.000 |
| OUTSDIR | -0.652 | -3.29 | 0.001 |
| FAMDIR | -1.538 | -6.30 | 0.000 |
| FINDIR | -0.291 | -1.82 | 0.068 |
| STATDIR | -1.527 | -6.03 | 0.000 |
| FOREDIR | -1.010 | -2.93 | 0.003 |
| DEBT | -0.062 | -0.42 | 0.678 |
| SIZE | 0.044 | 1.24 | 0.214 |
| GROW | 0.048 | 3.90 | 0.000 |

First, we find that the board size is not statistically significant and is not correlated with the informativeness of earnings. This may be due to the large size of the board of all Tunisian firms.

Second, we perceive that the separation of the CEO and board chairman positions is negatively related to the earnings quality. This indicates that firms which do not combine the two positions of CEO and chairman have low information content of earnings. This result implicitly emphasizes that the separation of these positions may lead to confusion of authority within the firm. Thus, the non duality CEO-chairman reduces the informativeness of accounting incomes of Tunisian companies.

Third, we notice that the board composition significantly affects the earnings quality of firms. The percentage of outside directors is positively related to the informativeness of earnings. This suggests that investors appreciate the presence of independent directors who are able to monitor the managers and ensure the relevance of financial information. The board independence is therefore associated with more transparency of Tunisian firms. This result is consistent with the study of Firth et *al*. (2007) in the Chinese context.

In addition, we discern that the presence of other directors is positively related to the information content of the earnings. The State, the families, the financial institutions and the foreigners are well represented in the boards of Tunisian firms. These directors have incentives to monitor managers and ensure the reliability of financial statements. Thus, the identity of directors is an important factor to improve the earnings informativeness of Tunisian firms.

Furthermore, we detect that the debt ratio and the firm size are not associated with the information content of earnings. The growth opportunities are negatively related to the earnings quality of Tunisian companies. This suggests that high growth firms have potential investment projects, which incites the managers to manipulate the earnings in order to get financing (Ballesta and Meca, 2007). Thus, the increased growth opportunities are not well perceived by the market, which reduces the information content of annual incomes.

In sum, we provide evidence that the board composition improves the earnings informativeness of Tunisian firms. Indeed, we show that the identity of directors can be an effective governance mechanism to enhance the financial reporting quality in emerging market such Tunisia.

## 5. Conclusion

In this paper, we examine the relationship between the board characteristics and the informativeness of earnings for a sample of non financial Tunisian firms during the period 1997-2007. Using the panel data methodology, we find that the board size is not related to earnings quality, while the separation of CEO and board chairman reduces the information content of accounting incomes.

The important finding of our study is that the board composition, in particular the identity of directors, affects the earnings informativeness of Tunisian firms. The presence of outside directors and other members representing the State, families, financial and foreign investors is an effective governance mechanism that enhances earnings quality and corporate transparency. Therefore, we confirm the role of the board of directors in improving the financial reporting quality in the Tunisian market.

Our study contributes to the debate on the link between corporate governance and financial disclosure in emerging markets. We reveal that in the Tunisian context, which is characterized by the ownership concentration and non robust protection of investors by regulators, the board of directors is considered as adequate governance mechanism to monitor managers and improve the financial reporting quality. The board effectiveness depends, essentially, on its composition and, more specifically, on the identity of directors. Hence, our findings could incite policymakers to strengthen the role of board by increasing its independence and encourages further research to investigate the link between the identity of directors and the financial reporting quality in emerging countries.

Finally, we note that our study can be improved by introducing other variables that affect the earnings quality, such as the ownership structure and the quality of external audit. It will also be relevant to examine this issue in the financial sector and other emerging markets.

## References

Agrawal, A. and Chadha, S. (2005), "Corporate Governance and Accounting Scandals", *Journal of Law and Economics*, Vol. 48, pp. 371-406.

Ahmed, K., Hossain, M. and Adams, M. (2006), "The Effects of Board Composition and Board Size on the Informativeness of Annual Accounting Earnings", *Corporate Governance: An International Review,* Vol.14, No 5, pp. 418-431.

Ashbaugh, H., Collins, D. and LaFond, R. (2006), "The Effects of Corporate Governance on Firms' Credit Ratings", *Journal of Accounting and Economics*, Vol. 42, No.1-2, pp. 203-243.

Ballesta, P. and Meca, E. (2007), "Ownership Structure, Discretionary Accruals and the Informativeness of Earnings", *Corporate Governance: An International Review*, Vol. 15, No. 4, pp. 677-691.

Beasley, M. (1996), "An empirical analysis of the relation between the board of director composition and financial statement fraud", *The Accounting Review*, Vol. 71, pp. 443-465.

Beekes, W. and Brown, P. (2006), "Do better governed Australian firms make more informative disclosures?", *Journal of Business Finance & Accounting*, Vol. 33, No 3, pp. 422-450.

Beekes, W., Pope, P. and Young, S. (2004), "The link between earnings timeliness, earnings conservatism and board composition: Evidence from the UK", *Corporate Governance: An International Review*, Vol. 12, No 1, pp. 47-59.

Booth, R. and Deli, N. (1996) "Factors Affecting the Number of Outside Directorships Held by CEOs", *Journal of Financial Economics*, Vol. 40, pp. 81–104.

Bradbury, M., Mak, Y. and Tan, S. (2006), "Board characteristics, audit committee characteristics and abnormal accruals", *Pacific Accounting Review*, Vol. 18, pp. 47-68.

Brickley, J., Coles, J. and Terry, R. (1994), "Outside directors and the adoption of poison pills", *Journal of Financial Economics*, Vol. 35, pp. 371-390.

Brown, L. and Caylor, M. (2006), "Corporate Governance and Firm Valuation", *Journal of Accounting and Public Policy*, Vol. 25, No 4, pp. 409-434.

Bushman, R. and Smith, A. (2003), "Transparency, financial accounting information, and corporate governance", *Economic Policy Review*, Vol. 9, No 1, pp. 65-87.

Bushman, R., Chen, Q., Engel, E. and Smith, A. (2004), "Financial accounting information, organizational complexity and corporate governance systems," *Journal of Accounting and Economics*, Vol. 37, No 2, pp. 167-201.

Byrd, J. and Hickman, K. (1992), "Do outside directors monitor managers? Evidence from tender offer bids", *Journal of Financial Economics*, Vol. 32, pp. 195-207.

Cannella, A. and Lubtakin, M. (1993), "Succession as a sociopolitical process: Internal impediments to outsider succession", *Academy of Management Journal*, Vol. 36, pp 763-793.

Dechow, P., Sloan, R. and Sweeney, A. (1996), "Causes and Consequences of Earnings Manipulation: An Analysis of Firms Subject to Enforcement Actions by the SEC," *Contemporary Accounting Research*, Vol. 13, No 1, pp. 1-36.

Dimitropoulos, P. and Asteriou, D. (2010), "The Effect of Board Composition on the Informativeness and Quality of Annual Earnings: Empirical Evidence from Greece", *Research in International Business and Finance*, Vol. 24, pp. 190-205.

Fama, E. (1980), "Agency Problems and the Theory of the Firm", *Journal of Political Economy*, Vol. 88, pp. 280-307.

Fama, E. and Jensen, M. (1983), "Separation of Ownership and Control," *Journal of Law and Economics*, Vol. 26, pp. 301-325.

Firth, M., Fung, P. and Rui, O. (2007), "Ownership, two-tier board structure, and the informativeness of earnings: Evidence from China, "*Journal of Accounting and Public Policy*, Vol. 26, No 4, pp. 463-496.

Gu, Z. (2007), "Across-Sample Incomparability of R2s and Additional Evidence on Value Relevance Changes Over Time", *Journal of Business Finance & Accounting*, Vol. 34, No.7-8, pp. 1073-1098.

Han, S. (2005), "Ownership Structure and Quality of Financial Reporting", Working Paper of University of Illinois, February 2005.

Hossain, M., Cahan, F. and Adams, B. (2000), "The Investment Opportunity Set and the Voluntary Use of Outside Directors: New Zealand Evidence", *Accounting and Business Research*, Vol. 30, pp. 263-273.

Jensen, M. (1993), "The modern industrial revolution, exit, and the failure of internal control systems", *The Journal of Finance*, Vol. 25, No 3, pp. 831-873.

Jensen, M. and Meckling, W. (1976), "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," *Journal of Financial Economics*, Vol. 3, No 4, pp. 305-360.

Karamanou, I. and Vafeas, N. (2005), "The Association between Corporate Boards, Audit Committees, and Management Earnings Forecasts: An Empirical Analysis", *Journal of Accounting Research*. Vol. 43 No. 3, pp. 453-486.

Klai, N. and Omri, A. (2011 a), "Corporate Governance and Financial Reporting Quality: The Case of Tunisian Firms", *International Business Research*, Vol. 4, No. 1, pp. 158-166.

Klai, N. and Omri, A. (2011 b), "The governance role of the financial information: Empirical evidence in the Tunisian context", *Afro Asian Journal of Finance and Accounting*, Vol. 2 No 4, pp. 283-298.

Klein, A. (2002), "Audit committee, board of director characteristics and earnings management", *Journal of Accounting and Economics*, Vol. 33, pp. 375-400.

Lin, S., Pope, P. and Young, S. (2003), "Stock Market Reaction to the Appointment of Outside Directors", *Journal of Business Finance and Accounting*, Vol. 30, pp. 351-382.

Lipton, M. and Lorsch, J. (1992), "A modest proposal for improved corporate governance", *Business Lawyer*, Vol. 59, pp. 59-77.

Miller, G. and Piotroski, J. (2000), "The role of disclosure for high book-to-market firms", Working paper, Harvard University.

Noe, C. (1999), "Voluntary disclosures and insider transactions", *Journal of Accounting and Economics*, Vol. 27, pp. 305-327.

Peasnell, K., Pope, F. and Young, S. (2000), "Accruals Management to Meet Earnings Targets: UK Evidence Pre and Post-Cadbury", *British Accounting Review*, Vol. 32, pp. 415-445.

Pergola, T., Joseph, W. and Jenzarli, A. (2009), "Effects of Corporate Governance and Board Equity Ownership on Earnings Quality", *Academy of Accounting and Financial Studies Journal*, Vol. 13, No. 4, pp. 87-114.

Petra, S. (2007), "The effects of corporate governance on the informativeness of earnings", *Economics of Governance*, Vol. 8, pp. 129-152.

Rosenstein, S. and Wyatt, G. (1990), "Outside Directors, Board Independence and Stockholder Wealth", *Journal of Financial Economics*, Vol. 26, pp. 175-191.

Skinner, D. (1994), "Why Firms Voluntarily Disclose Bad News", *Journal of Accounting Research*, Vol. 32, pp. 38-60.

Skinner, D. (1997), "Earnings disclosures and stockholder lawsuits", *Journal of Accounting and Economics*, Vol. 23, pp. 249-282.

Sridharan, U. and Marsinko, A. (1997), "CEO duality in the paper and forest products industry", *Journal of Financial and Strategic Decisions*, Vol. 10, No 1, pp. 59-65.

Vafeas, N. (2000), "Board Structure and the Informativeness of Earnings", *Journal of Accounting and Public Policy*, Vol. 19, pp. 139-160.

Warfield, T., Wild, J. and Wild, K. (1995), "Managerial ownership, accounting choices, and informativeness of earnings", *Journal of Accounting and Economics*, Vol. 20, pp. 55-100.

Weisbach, M. (1988), "Outside Directors and CEO Turnover", *Journal of Financial Economics*, Vol. 20, pp. 431-460.

**Notes**

**1.** The sample period begins in 1997 which is the year of adoption of the new Tunisian accounting system.

**2.** The F-test is significant at the 1% significance level which confirms the existence of individual effects (the p-value of the test is 0.000).

The Hausman specification test is significant at the 1% significance level, which proves the existence of fixed effects for the model (the p-value of the test is 0.0024).

The Wald test is significant at the 1% significance level which confirms the heteroscedasticity in the data (the p-value of the test is 0.000). Thus, we estimate the model using the method of generalized least squares to correct this problem.