THE POPULAR REVOLUTION OF TUNISIA AND THE SYSTEM OF CORPORATE GOVERNANCE IN THE COMPANIES LISTED ON THE STOCK EXCHANGE

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Abstract

This paper examines the specificities of the governance system in Tunisian companies through the remuneration policy for executives, the board and the ownership structure in the period before the revolution. The purpose of this work is to identify possible dysfunctions and subsequently propose ways of to rehabilitate governance mechanisms and optimize their effectiveness. The agency theory identifies the necessary conditions for effective controlling. Empirical validation on a panel of 30 Tunisian companies listed on the Tunis Stock Exchange and observed for two years (between 2008 and 2009), Shows firstly that the policy of executive compensation is not a mechanism for effective governance, and secondly that the impact of internal control mechanisms on performance, through its components, seems mixed.

Keywords: Compensation Policy, Board Structure, Ownership Structure, Performance, Shareholder Value Creation, Revolution

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Introduction

After the popular revolution of Tunisia, the foundations for a political and economic system that promotes the values of democracy and Equity were laid, and attention is now turned towards the market where most banks and companies were listed in the Tunisian section of a small number of investors or shareholders whose loyalties were questionable and whose equity investments and business practices do not meet, most of the time, the principle of transparency.

Companies which are subject to malpractice or whose shareholders consisted of individuals prosecuted by the authorities were put under the supervision of administrators. Furthermore a series of measures were adopted to put an end to endemic corruption which has continued to cast discredit on the business. The fate of movable and immovable assets will be decided by the courts.

Tunisian corporate governance will undoubtedly go through a new era characterized by greater transparency and greater fairness in business management as regards the awarding of contracts and business management. Everyone knows that despite the enactment of the law on security of financial¹ information in Tunisia, there is little transparency in the business world.

Tunis Stock Exchange has experienced days when negotiating sessions were suspended² and more companies have suffered extensive damage.

The business world is looking forward to resuming its activities with the return of calm in a climate characterized by trust and transparency.

In this new political, economic and financial post-revolution Tunisia, we wonder through this research about the type of change that should be introduced into the governance system of Tunisian companies traded on the particular financial incentives and internal control.

To answer this question we will first highlight limitations of the system of corporate governance of Tunisian listed companies. Then we will propose an alternative system that upholds the values based on transparency, fairness and integrity, and that is capable of adapting to new issues facing Tunisian companies after the popular revolution.

Thus, we propose to study the following points:

 $¹ Law\ 2005\text{-}96$ of 18 October 2005 on strengthening the security of financial relations

² The period from Friday 14 january to 31 january 2011

First, we will focus on the determinants of executive compensation policy of Tunisian quoted firms. Then, we will highlight the impact of internal control over the performance of these companies. Finally, we will propose a series of recommendations to make Tunisian corporate governance more efficient, to respond to the new financial climate of post-revolution Tunisia.

Before examining the specifics of the governance system of Tunisian companies and proposing corrective measures, let us call to mind the theoretical foundation underlying our research.

1. The Literature Review

1.1. The Concept of Governance

The concept of corporate governance has been for more than a decade the subject of much of the research conducted in management science. This concept has also attracted academics, and many practitioners in the field of business.

Therefore, several definitions³ have been proposed by order of interest and depending on the nature of the issues faced.

The concept of governance has been linked to several aspects of business and related to various theories. There is first of all the macroeconomic aspect which involves, according to Charreaux 2004, two theories, one based on the appropriation of the rent (law and finance; approach,La Porta et al 1998), political-financial approach (La Porta, Lopez-desilvaves, Sheifer and Vishny, one 2003, Coffee 2001, Licht 2001) and socio-cultural approach (La Porta et al 1997, Stulz and Williams) and that is based on production (varieties of capitalism theory, regulation theory; Boyer and Saillard 2002).

The second aspect is microeconomic. At the microeconomic level, the concept of governance focuses on the relationship between managers and resource holders. Three main approaches are concerned, namely the shareholder or financial approach (initiated by Bearles and Means 1932, Jensen and Meckling 1976, Fama 1980), the partnership approach (Charreaux Debrerees and 1998, Zingales 1998) and the cognitive approach that gives central importance to the ability of firms to innovate and their skills to create investment opportunities and to adapt to environment (Prahalad 1994, Lazonick and O'ssullvian 1998).

The theoretical foundations of governance revolve around the agency theory (Jensen and Meckling (1976)); the theory of rooting (Macck.A, and Vishny Shleifer.A. R.W1989, Paquerot 1997, Piget 1998, Maati 1999, Gharbi.H 2002); and the stakeholder theory (Freeman, RE 1984, Mitchell R, Agle B and DWOD 1997).

The literature on governance focuses essentially on the organization and the distribution of power within companies. In this regard, we must distinguish two levels: the organizational and the institutional levels (Rubinstein 2002, Plihon Ponsard Zarlowski 2001). However, this concept is also linked to several aspects of business such as value creation or performance⁴ or results management accounting.

Furthermore, the notion of governance is hampered by the diversity of actors (managers, employees, banks, suppliers, customers and public authorities), the multiplicity of themes covered (political executive compensation, ownership ...) and scope of relevant disciplines (law, finance, accounting, human resources, accounting, sociology ...).

1. 2. Governance Mechanisms

To align the interests of the manager and the shareholders or the various stakeholders to reduce the discretion of these, corporate governance has control mechanisms such as financial incentives in two forms of remuneration and removal, internal and external, to mitigate moral hazard and adverse selection and reduce drift potential leaders.

1.2.1. Financial Incentives

According to Hirigoyen and Caby (2005, p 66) «The incentives are intended to solve the agency problem by linking executive compensation (rewards) to the performance of the company (increasing shareholder wealth ».

In this regard, the compensation awarded to executives is an ultimate way to meet these various requirements, thereby aligning the interests of executives with those of shareholders (Jensen and Mecking, 1976), and reducing agency conflicts and their detrimental effect on the performance of companies.

Research focuses now on the role of governance mechanisms in executive compensation (Barkema and Gomez-Mejia 1998)⁵. Thus, the disciplinary mechanisms should be able to exert a moderating effect on the remuneration policy for executives.

Financial incentives take two forms: positive (the remuneration policy) and negative (removal). Indeed, there are various criteria that influence compensation policy:

³ The main authors who have defined governance: charreaux, Pesqueux, Pigé, Pastré, Charltey, Plihon, Rubinstein, Richard et Miellet

⁴ Jérôme Caby , Gérard Hirigoyen, création de valeur et Gouvernance de l'entreprise, Economica, 2005

⁵ Barkema H.G. et Gomez-Mejia L.R. (1998), « Managerial Compensation and Firm Performance: A General Research Framework », Academy of Management Journal, vol. 41, n° 2, p.135-145.

1.2.1.1 Performance Business

The influence of pay on performance and vice versa is complex because the connection between these two variables is mixed and sometimes the link is missing.

The correlation between these two variables has recently called special attention, mainly since the failure of large firms and the financial crisis. The question is to know if the existence of financial incentives necessarily leads to a performance of the firm managed

(Bonazza 2008)⁶. The organizational aspect, especially, is apprehended because of the link between executive compensation, the creation of shareholder value, financial performance or growth opportunities. Causality is difficult to demonstrate given the multiplicity of variables that determine both the remuneration policy as growth (Zimmerman 1985).

1.2.1.2 Age Leader

The influence of seniority on the link between pay and performance is negative due to the tendency of leaders to replicate their previous decisions and to align with a given industry standard. Young officers will collect the fruit of their long-term decisions, while older officers receive only one of its short-term decisions. This hypothesis is confirmed by Bardero RJ (1990).

Nevertheless, Moore RL (1994) found a positive influence not only on seniority, but also on the proximity of the exit age. In other words, the board would increase its vigilance when the executive retires and the threat of revocation loses interest.

1.2.1.3 Size firm

Indexation of compensation on the size of the company was originally proposed by WJ Baumol (1959). This argument assumes that with the increased size and thus the complexity of management, company management requires greater skills. Accordingly, the obligation to attract more qualified managers leads to increasing pay.

<u>1.2.2 Internal Control</u>

The internal control mechanisms are essentially the board and the ownership structure.

1.2.2.1 The Board of Directors

It is the body responsible for ensuring the interests of capital providers, Jensen (1993) defines it as: « a forum for discussion, approval and tracking exercise. For the shareholders, it is a mechanism to defend their

interest by having disciplinary authority over the leaders».

The role played by the board differs depending on the composition, size and structure of the latter. (Linck et al 2008). Each type of board represents a preferred mode of resolution (Finkelstein and Hambrick, 1989).

1.2.2.1-1 The Nature of the Directors:

According to the theory of transaction costs (Williamson, 1986), the Board of Directors is essentially the oversight board in corporate governance. It includes inside directors (performing functions within the company) and outside ones (having no function within the company) and ensures the security of transactions between the firm and various stakeholders.

According to the report Viénot (1995):) « Outside directors are not shareholders or former officials in the company or significant suppliers or customers, and more generally they have no significant contractual relationship with the company ».

The agency relationship suggests that outside directors who are more competent and independent, are overseeing the management and performance guarantee to protect the interests of shareholders and thus make it possible to have more objective and optimal decisions. Outside directors are believed to play a larger role than inside directors in controlling leaders.

1.2.2.1-2 The Board Size

A crucial aspect of the organization's board is the choice of an optimum number of directors. Jensen (1993) and Lipton and Lorsch (1992) found that companies with a large size board of directors are less efficient than others; this is the difficulty of solving agency problems.

These authors conclude that companies with a small size board of directors are more efficient and produce more value. Similarly, Business Round table (2002) concludes that « smaller boards are often more cohesive and they work more effectively than large boards ».

1.2.2.1-3 Accumulated Functions

The dual structure of supervisory board and managing directors emphasizes a distinction of powers between the Executive Board, consisting of inside directors in charge of defending the interests of shareholders and the supervisory board representing the outside directors responsible for ensuring the interests of all stakeholders.



⁶ Bonazza P. (2008), Les patrons sont-ils trop payés ?, Larousse, coll. A vrai dire

The unitary⁷ structure of CA is challenged since it allows the Council to exercise fully its role in the management and discipline of officers.

1.2.2.2- The Ownership Structure

It depends on the nature of ownership, executive shareholder or institutional shareholders.

1.2.2.2-1 The Role of the Executive Shareholder

Referring to the agency theory, some studies have found that the percentage of shares held by the CEO affect the strength of the relationship between executive pay and company performance (Gomez -Mejia et al . 1987; Deckop, 1988, Finkelstein and Hambrick, 1989).

Cheng and Firth (2005) examined the compensation of senior executives in Hong Kong in order to investigate how it is affected by the performance of the company and the characteristics of governance. They find that managerial ownership moderate his compensation, but there is little evidence that it encourages the components of pay based on performance.

1.2.2.2-2: The Role of Institutional Investors

The agency theory assumes that financial investors have privileged access to information and therefore exert more effective control on the management of the firm.

They have a privileged position allowing them to access information about the company, its competitors and its industry.

Therefore, they can better assess the performance of leaders, comparing the other companies which they have information.

These agents also have processing capacity of treatment of financial and economic information more important. So the shareholders can contribute to improve performance. In addition, the presence of institutional investors and the proportion held in the capital may have an impact on executive compensation (Hartzell and Starks 2003), (Gallgher, Suith and Swan 2005).

1.2.3 External Control

Beyond the internal control mechanisms, the discipline of leadership is provided by the market through four devices namely, the market for goods and services, labor market leaders, takeovers and the financial market.

According to Fama Dermisetz 1980 and 1983 the market for goods and services can be a means of

controlling the executive through the competitive constraint urging managers to meet this requirement.

Moreover, competition also affects the labor market either within the company through the skills that evolve within it or the recruitment of new managers that may succeed them especially in times of company poor performance (Faith Tollison 1984).

Outside the company, the market exerts a strong pressure and assigns a value to officers requiring them to align the interests of shareholders and avoid opportunistic behaviour.

The fear that control of the business and the management team get transferred from one society to another, following poor results or because of the decline in market value, would encourage leaders to best serve the interest of shareholders (Fama, Jensen MC 1983). These same shareholders, if dissatisfied, may lose interest in their shares and sell them thus inducing a fall in prices.

Finally, it is worth noting that there is no consensus on all these internal and external controls and their overall impact on the management of conflicting relationships between managers and shareholders or their impact on creating value....

Parrat 1999⁸ says that the role of financial markets remains mixed, since in some situations, the prospect of a change of leader can be seen as a good signal for the market resulting in higher prices.

Finally, note that the interdependence of mechanisms and the complexity of relationships explain on the one hand the lack of consensus on their effectiveness and on the other, the confused results about the meaning of causality and its impact on the firm.

2. Empirical Evidence: The Impact of Governance Mechanisms on the Performance of Tunisian Firms

To understand the impact of executive compensation policy on Tunisian companies as well and internal mechanisms as well as the board of directors, the ownership structure on performance, we will adopt the following methodology:

Using a simultaneous equations model, we will first identify, in a first estimate, the factors that explain the executive compensation of Tunisian companies. Then, the variable remuneration will be introduced in addition to other control variables such as internal characteristics of board and ownership structure as an explanatory variable in a second estimate to capture their impact on company performance.

Furthermore, we chose to measure the performance of the company according to its different dimensions:

- Stock exchange measured by **Qtobin**

 $^{^7\,}$ Meeting within the same organ Chairman of the Board and CEO

⁸ Parrat F 1999 : « Quand l'actionnaire pèse trop lourd », L'expansion Management Review N° 93, Juin

- Accounting measured by **ROE**
- Hybrid measured by the creation of shareholder value (SVA).

2.1. Empirical Methodology

2.1.1. Sample Description

Our sample consists of 30 companies listed on the Stock Exchanges of Tunis BVMT from various sectors.

Our study spans a period of 2 years between 2008 and 2009. Data were collected annually from:

- The history of the annual salary of the CEOs on the basis of data provided by the National Fund of Social Security (CNSS)
- Leaflets of listed companies that are available in the Financial Market Council CMF.
- Financial statements published on the website of the Stock Exchange Tunis⁹.
- The archive CMF (documents relating to the IPO, the initial public offering, the increase in capital)
- Annual reports available to the CMF
- Stock guide from computerized databases of BHST

2.1.2. Variable Description

VIRTUS 495

⁹ WWW.BVMT.COM.TN

Variables	Signification	Measure
Endogenous Variable		
Qtobin	Indicator of market performance	(Market value of company + total assets - Book value of equity) / Total Assets)
ROE	Performance indicator accounting	Net income / Equity (Maury (2006)).
SVA(Share value added)	Performance Indicator Hybrid: Creating shareholder value: Share Value Added	(Return on shareholder-WACC) * market value of equity: Pablo Fernandez and Alvaro Villanueva (2004)
LW	Executive Compensation	Ln compensation
Exogenous variables		
DIROWN	Percentage of capital held by DG	Number of shares held by DG / Total shares (Anderson and Reeb (2003) and Villalonga and Amit (2006)).
INOWN	Percentage of capital from institutional investors	Number of shares held by institutional investors / total number of shares
BOUT	Percentage of directors external	Number of outside directors / Total Administrators
LBSIZE	Size of the Board of Directors	Ln (Total number of directors) (Anderson and Reeb, 2003; De Andres et al., 200; Jackling & Johl, 2009)
Age	Age of manager	Ln (CEO age) (Lippert and Moore (1994) Barro and Barro (1990))
DUALITE	Chairmanship of duality - Branch	Binary variable equal to 1 if duality exists and 0 otherwise
ROA	Performance indicator accounting	NR / TOTAL ASSETS (Anderson and Reeb (2004) and Villalonga and Amit (2006))
SIZE	Company Size	Natural logarithm of book value of assets to total company (Anderson and Reeb, 2003, Carter et al. 2003; and Barontini Caprio, 2006; Wang, 2006; Santalo 'and Diestre, 2006).

2.1.3. Model Overview:

To measure the impact of governance mechanisms on performance, we test the following general model¹⁰:

 $\begin{array}{l} \textbf{Corporate Performance}_{it} = \alpha_0 + \alpha_1 \, \textbf{LW}_{it} + \alpha_2 \\ \textbf{BSIZE}_{it} + \alpha_3 \, \textbf{DUALITE}_{it} + & \alpha_4 \textbf{BOUT}_{it} + \alpha_5 \\ \textbf{INOWN}_{it} + \alpha_6 \, \textbf{DIROWN}_{it} + \alpha_7 \, \textbf{SIZE}_{it} + \epsilon_{it} \end{array}$

 $\mathbf{LW} = \beta_0 + \beta_1 \mathbf{DIROWN} + \beta_2 \mathbf{age} + \beta_3 \mathbf{ROA}$

By applying the software Stata10.00, we opted for the technique of triple OLS we deem most appropriate to provide consistent and unbiased estimates of our model.

2.2. Results and Interpretations of the *Estimates:*

Before interpreting the results of our estimates, we shall focus on the descriptive statistics of our variables.



¹⁰ We are inspired in the specification of our model to the research of Ivan E. Brick ; N.K. Chidambaran (2010)

2.2.1. Descriptive Statistics

We see, through the table 1 of the descriptive statistics, that the compensation is characterized by a large disparity in the salaries of Tunisian leaders ranging from 3000 per month ... 62000MD. When reading the salary scale patterns of banks and corporations, we find that wages can reach over 200 times the minimum wage. In other words, a CEO of a company can earn in a month what a CEO of another company can win in one year; and this without taking into accounts the benefits in kind. Thus, it is not the best who are best rewarded. In addition, managers take advantage of their positions that they can be dual or not and participate in the capital of the company, they may have some other form of remuneration based on shares of the company. It is clear that CEOs are relatively well-paid in Tunisia, but even if some of them deserve their pay in proportion to their generalize. cannot performance. we Indeed. observation of performance indicators (ROE and Qtobin SVA), shows that they range from a positive value that is maximum and a negative value that is minimal. So we can conclude that the remuneration is not based on performance and does not substantially increase the performance of the company.

Besides, the system of governance is a political process that is determined by the balance of power between two groups of action, the Board of Directors and the manager. For the first group, the study reveals that boards of directors of Tunisian firms have an average size of 9 members and they are dominated by a number of external administrators that equal to 82% of the size of the board directors. We therefore stipulate that the boards of Tunisian firms are dominated by outside directors because of their reputations as independent experts. So we must wait until they have an important role in the control. Regarding the second group, we note that managerial participation accounts an average value of 22% in the capital of the company so the structure of ownership of the manager can moderate the results of the company. On the other side, institutional investors account for an average of 35% so they can play a crucial role in the discipline officer.

2.2.2 Interpretations:

On the ground of our empirical investigation, we found that in the three models shown in Tables 2, 3 and 4, the effect of managerial ownership is significant and positive about fixing the compensation to the manager. This is related to its power structure. In fact, according to Murphy (1985), Vancil (1987) and Jensen (1993), managers who hold a dual function tend to enjoy greater compensation. But they do not seem to enjoy the power to expropriate shareholder wealth. This appears in Model 3 where the variable duality has a significant and positive impact on shareholder value creation. Therefore, the

determination of compensation is a political process determined by the empowerment of the manager. This corroborates the work of Cheng and Firth (2005) who found that the managerial ownership moderates the compensation but there is little evidence that it encourages the components of pay based on company performance.

The impact of the firm size, measured by the logarithm of total assets, affects significantly and positive in the compensation of the manager (Table 2). This confirms the hypothesis of carved and Carroll (1980); Arijit Ghosh (2003) and Julie Wulf (2005) who suggest that the size of the company contributes to the improvement of the compensation paid to executive officers and the most competent leaders that ensure a high yield manage large companies. This positive relationship between firm size and compensation can be explained by the theory of the tournament (Lizer and Rosen 1981), the human capital theory and the political perspective.

For the first, it predicts that it is necessary to pay a fee high enough for large companies to ensure that there is a difference between adequate remuneration levels (Gomez - Mejia, Simon 1957). Concerning the human capital theory (Agarwal, 1981), it favours the evaluation of the leadership quality. Indeed, the magnitude of the business size involves a complexity of its structure and organization, an intensity of international relations and the development of social relationships, perform a depth analysis on the economic, political, social and technological. All these implications make the task of the director general increasingly difficult and risky, which requires distinctive skills and high qualifications. Therefore, he deserves a reward and a sizable bonus in return for his/her efforts (Becker 1964, Rosen1982).

Finally, the effect of the firm size on executive pay may also be explained by the prospect of power (or political perspective). Indeed, the French studies of Bauer and Bertin-Mourot (1987.1996) on large companies emphasize the role of belonging to networks to achieve the management of these companies. Besides, George D. Cashman (2010) found that the firm size positively influences executive pay. So the quality of human capital alone is not sufficient to explain access to the highest offices and higher salaries, but it must have the ability to integrate networks and control them to complete the origin of these correlations.

This theory assumes that in the context of domestic politics, instead of protecting the shareholders by minimizing executive pay and linking it to company performance, the Board decisions on remuneration can serve the manager through the maximization of its compensation by linking it with less performance. This is confirmed through the study of the significance of the variable ROA (in all three tables) that has a negative impact on the political executive compensation. This means that



compensation based on performance in Tunisia destroyed shareholder value this corroborates with the results found by Kato and Kubo (2004) and contradicts the agency theory, which predicts that the compensation to the manager is a motivational tool and an incentive to compensate the risk incurred by the latter favouring the interests of shareholders. So we can see, from the results displayed in the three tables, that remuneration is not determined on the basis of performance and has no impact on it. We can conclude that financial incentives do not play their role effectively in ensuring fair compensation according to the criteria of good governance.

While in theory it represents a moderating effect of the compensation policy, age is not a determinant of executive pay policy in Tunisia. This contradicts other research such as that of RJ Bardéro who found that the negative association between tenure, compensation and performance suggests that older managers tend to replicate their previous decisions while RLMoore found a positive influence since the proximity of the retirement age leads to a certain vigilance of the manager. This also appears in the descriptive statistics, we note that the age ranged from 45 to 72 years exceed the retirement age specified in the codes of companies.

Concerning the study of internal controls, we find that the Board acts on the company's performance through its two characteristics. The size of the board of directors is significant with a positive sign. This means that the larger the board size, the better is the performance of the company. This relationship is confirmed by Zahra and Pears, 1989 and Vance, 1983 who believe that a larger size of the board is better for efficient control of management.

The authors based their analysis on the ground that it is more difficult for leaders to lead a board composed of a large number of directors. Our result contradicts the studies of Yermack (1996), Eisenberg et al. (1998) and Olubunmi Faley (2004) that reveal the existence of a negative correlation between the size of the board of directors and the firm performance in their samples.

The duality variable (in Table 3) has an impact only on the measurement of performance as performed by VAS. This is explained by the fact that if an officer is positioned in a unitary structure, he enjoys a relatively high salary in addition to his shareholding. He becomes an officer shareholder so he tries to maximize the wealth of all shareholders at the expense of other donors and other stakeholders. Duality does not affect the overall performance of the firm measured by Qtobin and ROE. This corroborates the work of Changanti et al. (1985), Baliga et al. (1996), Brickley et al. (1994), Dalton et al. (1998) and VAFEAS and Theodorou (1998) which stipulates that the cumulative functions have no effect on corporate performance, but they can only create value for shareholders.

As for the third characteristic of the board, which is the presence of outside directors, the results of the estimation models 1, 2 and 3 indicate that the percentage of outside directors does not have a significant impact on the performance of Tunisian firms, conversely to the results of Ivan E. Brick N.K. Chidambaran (2010), and Christine Prevost Panasian K (2004) who found that the presence of outside directors affects performance positively. This result has been proved by other authors such as Arosa Blanca and Amaia Maseda Txomin Iturralde (2010) who found that independent outside directors and affiliates (Anderson & Reeb, 2004). have a positive impact on corporate performance measured by ROA Spanish family and ROE. However, this result contradicts the work of Hermalin and Weisbach (1991), Mehran (1995), Klein (1998), Adams and Mehran (2002) and Bhagat and Black (2002) who state that outside directors are not able to understand the complexity of business activities, resolve agency conflicts and to perform their primary role to learn the discipline of officers.

The estimated model reveals that the presence of institutional investors has a positive effect on the performance of Tunisian firms. In Tunisia, institutional investors are involved in the control and management companies. Mutations affecting mainly the insurance sector and the banking sector, probably affect the degree of interest shown by institutional investors in companies where they are shareholders. Moreover, governments in Tunisia develop these institutions, which are mostly public enterprises, to participate in the capital of certain companies and facilitate their funding, either through the purchase of commercial paper issued by these companies where they are shareholders, or by easy lending. Similarly, the majority of sample firms have short-term loans and important overdrafts. Institutional investors can influence patterns of organization by allowing firms by their expertise in various fields. This could improve performance.

3. Highlighting the Unique System of Governance in Tunisia before the Revolution

The empirical results of our investigation show the following characteristics of the governance system in Tunisia:

- The executive compensation in Tunisia does not seem to be explained by the determinants identified by the theory of governance, and control mechanisms supposed to discipline managers are absent or ineffective. In addition, financial incentives are also supposed to alleviate agency problems by linking pay to performance; now we note that in Tunisia there are wide disparities in executive pay without any correlation with the performance or shareholders

value added¹¹. This result contradicts the work of Gianluca Papa, Biagio Speciale (2011), Michael Hadani et al (2011) who found that executive compensation is very sensitive to corporate performance and that it generates improved business results. Therefore, the failure mechanisms, that controlled the deviant behaviour of leaders, largely explain their entrenchment. Moreover, their position, often dual, reinforces their opportunism.

- Through the models that estimated the impact of executive compensation and governance mechanisms on performance, we have noted a failure and poor articulation of the control system. The smallness of the Tunisian financial market, the geography of Tunisian Capital coast, characterized by a concentration of family and state, explains in part the ineffectiveness of governance mechanisms.
- A malfunction of the Board directors through its characteristics (size, composition, function), as such, we assist on the appointment of administrators Tunisian so that contradicts the principle of independence and impartiality. Therefore, these members who are supposed to regulate the discretion of managers and act positively on growth *in fine*, are mere agents appointed by the leaders (sometimes family members) endorsing their sometimes questionable behaviour.
- In short, we can say that the Tunisian financial system before the revolution period is characterized by poor corporate governance of listed companies. This situation is exacerbated by the existence of rampant corruption and the absence of effective regulation and effective means of control and rigorous coercion.
- The majority of listed companies were in the hands of unscrupulous managers who managed their business with impunity and opacity violates any business ethics

4. The Ways of Rehabilitation for Governance Mechanisms in the aftermath of the revolution

In the aftermath of the revolution and after ousting the leading personalities involved in financial corruption scandals and whose loyalties were questionable and especially those who have family ties with the deposed regime, it is inconceivable not to lay new bases for corporate governance in Tunisia. The consolidation of the financial sector requires:

- The establishment of a system for defining the remuneration of executives on a grid that obeys well-defined objective criteria (education, age,

experience). Ending all forms of harmful entrenchment.

- The establishment of financial incentives in connection with the performance achieved and by the same consequently penalize an underperformance
- Rethinking the structure of boards with a view to achieving greater efficiency and independence. The members of boards of directors should be chosen in a transparent manner. We must also choose an optimal size and respect the organization's Board of Directors and its Supervisory Board of Management. Indeed, the combined roles of Chairman and CEO may be the main cause of inefficiency of the control system
- Strengthening the presence of institutional investors ensuring a stability of the ownership and its quality.
- Extolling the rules of transparency, making of the market mechanisms the main regulators of corporate life.
- Modernizing or updating the regulations and laws
- Ensuring the application of the law on security of financial information to enhance its effectiveness.

Conclusion

The Tunisian people's revolution led undeniably to profound social, political, economic and financial change. It allowed to know a number of malfunctions observed in the financial system.

In this work, we wanted to review the feature of the governance system of Tunisian companies during the period before the revolution.

Using a simultaneous equation system, we studied, along a panel of 30 Tunisian companies listed on the Tunis Stock Exchange between 2008 and 2009, the determinants of executive compensation. Then, we showed the impact of these components as well as other variables reflecting the control mechanisms (compensation, board and ownership structure) on the performance (stock market, book value and hybrid).

Regarding the determinants of compensation, we found in the three models that only the variable firm size appears to have a significant and positive effect on earnings. Age and performance have no decisive impact on them.

Furthermore, the variable executive compensation has no significant impact on company performance. These results enabled us to conclude that in the Tunisian context, executive pay does not play a crucial role in the system of corporate governance.

Regarding the variable CA, the results show that it is significant through some of its characteristics including size and duality.

The Variable of the outside directors is not critical and is not statistically significant; suggesting that it does not contribute to strengthen control in contrast to the variable institutional investors



¹¹ These differences will be accentuated if we considered the other benefits of the manager

improving performance contributes to and maximizing the value of the company.

All these results have highlighted the failure of the governance system of Tunisian companies through weak internal controls that existed during the period before the revolution.

As part of this research, we also found it necessary to sit new governance rules that meet the values established by the revolution. Values that seek to cut with past practices and unscrupulous braving all market mechanisms.

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Table 1. Descriptive Statistics

	Average	maximum	minimum	Standard Deviation
LNW	17.997	22.2	15.00100	1.539
BOUT	0.8277	0.9166	0.428500	0.1019
BSIZE	2.265	2.484900	1.609400	0.2197
DIROWN	0.2257	0.7463	0	0.2768
INOWN	0.35	0.8819	0.000000	0.275
DUAL	0.6833	1	0	0.491
SIZE	19.2498	22.35	16.93200	1.871
AGE	4.0255	4.21	3.85	0.0969
ROA	0.047606	0.189700	-0.153400	0.067161
ROE	0.035	0.332	-1.11	0.247
SVA	15547.03	276080	-42944.55	51930.09
Qtobin	1.899	8.48	0.623	1.4811

Table 2. The Impact of Governance Mechanisms on the Market Performance Measured by Qtobin

	$\mathbf{LW}_{=} \beta_{0} + \beta_{1} \mathbf{DIROWN} + \beta_{2} \mathbf{AGE} + \beta_{3} \mathbf{SIZE} + \beta_{4} \mathbf{ROA}$				
	coefficient	p> z			
constante	-3.36	0.355			
LW	0.237	0.316			
BSIZE	0.611***	0.073			
DUALITE	0.5108	0.186			
BOUT	0.513	0.774			
INOWN	0.288**	0.03			
DIROWN	2.773*	0.000			
AGE	-2.207	0.866			
SIZE	0.136	0.190			
ROA	-6.932*	0.001			

(*) Significant to 1%

(**) Significant to 5%

(***) Significant to 10%

Table 3. The Impact of Governance Mechanisms on Accounting Performance Measured by ROE

Model 2: POE = a + a + b + a + b + a + b + b + b + b +				
ROE $_{it} = \alpha_0 + \alpha_1 \mathbf{LW}_{it} + \alpha_2 \mathbf{BSIZE}_{it} + \alpha_3 \mathbf{DUALITE}_{it} + \alpha_4 \mathbf{BOUT}_{it} + \alpha_5$ INOWN $_{it} + \varepsilon_{it}$ LW ₌ $\beta_0 + \beta_1 \mathbf{DIROWN} + \beta_2 \mathbf{AGE} + \beta_3 \mathbf{SIZE} + \beta_4 \mathbf{ROA}$				
	coefficient	p> t 		
constante1	0.439	0.45		
LW	-0.0053	0.889		
BSIZE	0.439**	0.033		
DUALITE	-0.0644	0.303		
BOUT	-0.063	0.828		
INOWN	0.3813**	0.014		
Intercept 2	16.6013**	0.002		
DIROWN	2.6*	0.000		
AGE	-0.586	0.662		
SIZE	0.175***	0.10		
ROA	-6.4828**	0.003		

(*) Significant to 1%

(**) Significant to 5% (***) Significant to 10%

Table 4. The Impact of Governance Mechanisms on Creating Shareholder Value as Measured by VAS

	coefficient	p> w
Intercept1	96343.94	0.484
LW	-7221.97	0.42
BSIZE	21338.07	0.532
DUALITE	26405.19***	0.066
BOUT	-16563.02	0.803
INOWN	3.388***	0.007
Intercept2	19.8394*	0.000
DIROWN	3.093*	0.000
AGE	-0.975	0.442
SIZE	0.0833	0.410
ROA	-6.943*	0.001

(*) Significant to 1% (**) Significant to 5% (***) Significant to 10%

