Privatization of Tunisian Companies: A Study of Corporate Governance Mechanisms

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Abstract The purpose of this paper is to examine corporate governance mechanisms applied to a particular form of ownership structure: the privatization. Using a series of statistical and econometric analysis, we show that privatization is likely to occur in an environment that validates supports and promotes the conditions for atomicity, free exercise, flexibility and transparency. This environment is characterized by the existence of foreign investors and the independence of their boards. These findings suggest that a successful privatization should be accompanied by structural changes after which it would be possible to formulate the principles of governance.

Key words Privatization, foreign investor, board independence, firm performance

1. Introduction

Nowadays, the public company is at the heart of discussions related to governance and to the involvement of the government in managing those companies.

After the independence, the Tunisian State was engaged in different development axes to guide the economy and ensure social welfare.

Until the eighties, the Tunisian economy was characterized by the dominance of public companies in deficit due to inefficient management systems. These systems were based on the reorientation of economic and financial profitability for the benefit of the social aspect.

Tunisia called the International Monetary Fund in 1986 to obtain funds and facilities. This financial assistance was conditioned by the implementation of a structural adjustment plan that primarily focuses on the need to limit the size of the public sector through the disengagement of the state from the activities called non-priority or competitive. This orientation was characterized by the restructuring of public enterprises, which took various forms including privatization.

According to Chatelin C. (2003), the privatization can be seen as the changeover from a public to a private organizational state.

In practice, the privatization is the “deliberate” disposal of a part or the totality of the capital of an enterprise-initially being part of the government patrimony- to private owners (Megginson and Netter (2001)).

According to Boss (1991), the privatization is generally associated with the opening of the capital to private shareholders conferring to the enterprise a form of managerial type. When an enterprise carries out such an operation, the government modifies its organizational form which shifts from a single propriety structure to a more diffused capital. But a transfer of that kind does not only concern the internal structure of the enterprise but also the relationship between the different partners defining it.

Based on these elements of the governance theory, we will suggest an organizational approach of such a phenomenon.
Many studies focused on the impact of privatization on firm performance (Megginson and Netter (2001)), Djankov and Murrell (2002), Megginson (2005) and Omran (2004a, b, 2005, 2007). But a few of them were interested in the relation between governance and privatization.

Thus, the objective of this article is to try to identify the link between the nature of propriety (public Vs private) and the organizational dynamic within the privatization framework.

The theoretical perspective of this study is aimed at showing that the governance system, in the general a set of mechanisms regulating the leaders’ decisions, when associated with privatization would appear to be superior to the governance system of the public firm.

This study will be structured as follows: section 2 provides an overall view of the literature and develops hypothesis concerning the relationship between governance mechanisms and privatization decision. Section 3 draws on data collection and the presentation of the model and data emission points presented in section 4 where we will be discussing our results. The section 6 we will be a conclusion of the work.

2. Literature review and hypothesis formulation:

The privatization has been the subject of an important number of theoretical and empirical works in which the central problematic was the link between public/private nature of propriety and the performance (Boardman et Vining, 1992). These works are essentially on the propriety rights theory and the governing companies’ theory.

In order to determine the importance of corporate governance, through some measures showing its mechanisms, we used several variables and assessed the governance indicators on firms’ organizational characteristics, namely:

2.1. Functions accumulation

The power structure in the board of directors is an aspect of its independence, through the separation - or not- of the positions of general manager and the board chairman. According to Fama and Jensen (1983), agency costs could be reduced by the separation of the management and control functions.

Thus, the supporters of this theory see in the dual structure (accumulation of the two positions), where all powers are concentrated in the hands of the chief executive, the possibility of a rising risk of opportunism that works against the shareholders interests.

In contrast, those who base their belief on the non-contractual theory of organizations consider this dual structure as a means of leadership reinforcement at the top of the organization. Many shareholders, mainly institutional investors, criticized this structure and the majority of governance committee reports recommend the separation of the two functions.

Many studies have analyzed the impact of the dual functions of the Chief Executive Officer (CEO) and the board chairman on performance and provided us with results which are often contradictory (Boyd 1995).

Some studies found the positive impact of the separation of the two positions on performance (Baliga and Moyer, 1966). From their side, Brickley et al. (1997) believe that this separation could cause agency costs linked to the control of the board chairman behaviour and data costs it could also disrupt the succession process and dilute the power of the directors’ board in time of crisis. They found that the possibility of the non-separation could have a positive impact on businesses performance.

On the other side, Boujenoui, Bozec and Schatt (2000), when studying 2037 companies, found out that only 176 of them have chosen the separated position structure and that companies managed by a CEO were significantly more successful.

However, according to Agrawal and Knoeber (1996), the accumulation would have a negative effect.

Thaddée and Ndonzuau (2000) found in their turn that the effect of power structure on performance is neutral and noted that the impact of this structure depends on the institutional context. The behaviourist study of power distribution in CA would be linked to other variables (Finkelstein and D’Aveni, 1994).

Based on the agency theory on one side and the input of all the empirical works mentioned above on the other one, we can formulate our first hypothesis:

**H1**: CEO duality has a positive impact on the privatization process.


2.2. Float

Aiming to facilitate the process of privatization, Quan and Huyghebaert (2006) argue that the government should limit the public share quota to reduce the problem of data asymmetry. Tian (2001) and Sun and Tong (2003) examined the financial and operational performance of the Chinese companies which have been privatized from 1994 to 1998 and consider that the floating is significantly linked to the performance of the privatized companies.

Referring to these works, we can submit the following hypothesis:

\[ H_2 \]: There is a positive relationship between the non-nominative shares of equities and the process of privatization.

2.3. Independent directors

The directors’ board plays a primordial role in the control of leaders’ performance. The role of directors’ board consists on nominating and dismissing the CEO and general directors and fixing their remunerations. It has also a disciplinary role which becomes more efficient when the board is dominated by qualified and independent outside directors.

Leftwich et al. (1981) admit that the presence of outside directors lead to a more efficient control of the leaders. Fama and Jensen (1983) advocate the “the externality” to reduce the possibility of understanding with leaders, hence a more efficient protection for the shareholders interests.

Some empirical works among which the one of Charreaux (2004) revealed that the directors’ board composition is significantly altered subsequently in the privatization operation. According to this author, the proportion of independent directors rises along with privatization.

Consequently, we pose the following hypothesis:

\[ H_3 \]: The proportion of outside directors rises along with privatization.

2.4. Foreign investors

Foreign investors are seen as the most important actors in the process of privatization in the developed countries.

In this context, foreign investment is generally admitted as a mechanism in order to bring a new capital often to make reconstruction works if it’s necessary for the newly privatized companies and to contribute in the transfer of technology and managerial expertise to the host country. The foreign investors help equally improve the management of the newly privatized companies by recommending a perfect data disclosure (Dick, 2001; Shirley, 2002).

Insofar as the contribution of outsiders in the capital is highly correlated with the identity of investors (Frydman et al., 1997) it would be judicious to contemplate the scope of foreign participation in capital.

The contribution of such a practice is reflected mainly on productivity and organizational learning. These authors show that by substituting the participation of the state for outsiders, foreign investors will be less aggressive in their employment and dismissal policies.

In fact, they demonstrate that in the developing countries governments are often tempted to resort to massive dismissals in order to increase the revenue.

Consequently, the presence of foreign investors might influence post privatization performance. By the participation of foreign taxpayers, there will be a transfer of tangible and intangible resources for the benefit of the new organisational structure. The international participation should contribute to the reinforcement of financial resources by introducing a new and different managerial know-how and foreign expertise in the management of the company.

We will examine the impact of the participation of the foreign investors on the process of privatization testing the next hypothesis:

\[ H_4 \]: the privatization of Public companies influences favourably the participation of foreign investors.

2.5. Size of the board

According to agency theory, a larger size board of directors is less effective in fulfilling its control function and would be more subject to influence the direction. In practice, when the size of the board tends
to become important, agency problems increase and the directors’ board witnesses more internal conflicts leading to more manipulations by the general director. For some people, the limitation, and mainly the reduction of the size of the board could only improve its efficiency (John and Senbet, 1998).

The empirical research revealed that the boards of large size use to have more chance to better fulfil their control functions and mainly in resources contributions. In addition, due to the heterogeneity that increases along with size, the leaders would have more chance to undertake rooting strategies (Aleexendre and Paquerot, 2000) with a low probability of replacement unless a serious crisis.

Some of these studies have also found a negative correlation between the size of the board of directors and the company’s performance (Eisenberg et al., 1998).

On the other side, Dalton et al. (1998) found a positive relationship, with more significant impact in the case of small businesses. Research in the French context revealed that the size of the board of directors doesn’t have any significant influence on the company performance (Godard, 2001).

D’Souza et al. (2000) hold a dummy variable to indicate an important change (renewal more than 50%) of the Board of Directors. Most of the time, even if the legal changes affecting particular representation of the state and employees, boards of privatized French companies have been modified beyond this threshold and, in this case, a variable measuring the change would not have been discriminating. Consequently, the indicator used by D’Souza and al. hasn’t been kept. Despite the difficulty to measure the discipline exercised by the directors’ board only from the quantitative criteria as well as the size of the board or the proportion of outside directors, for comparison with other studies, however, we conducted tests on these two indicators.

According to Charreaux (2004), the size of the directors’ board varies significantly after the privatization: the average size goes from 18 to 15 directors.

This leads us to our last hypothesis that is:

H5: there is a positive relation between the size of the directors’ board and the privatization process.

3. Data and the empirical sample

3.1. Data collection

In order to evaluate the impact of privatization on performance, we selected two samples of 20 Tunisian companies. The first is made up of 10 private companies, belonging to 4 fields of activity, which were privatized between 1997 and 2003. The second sample include 10 public companies belonging to 3 fields of activity.

Data on accounting and financial indicators have been collected directly from the stock market of Tunis (Tunis Stock Exchange). Data on the government mechanisms for companies were collected from the website: www.tustex.com. The most important added value of this sample results in its sectorial diversity.

3.2. Sample description

1. Presentation of the sample of privatized companies

At the beginning, we have chosen to work on a sample of 17 privatized Tunisian companies almost in the same period characterized by a relatively stable economic situation in the national and international scale. In fact, in Tunisia the government has adopted many measures in order to encourage and stabilize the financial market. It established equally structures to follow up and control the operations of privatization. Thus, the majority of companies in our sample are listed in the stock market. Due to the lack of data, on the 17 privatized companies and listed in the stock market, we could only hold 10 of them.

Tables 1 and 2 provide us with some statistics describing the sample of the 10 privatized Tunisian companies (Sample 1). We will present the sample by years of privatization and according to the sectorial belonging of each firm (see table 1).

According to this table, we observe that 30 % of the companies of our sample were privatized in 1999, and 40 % of privatization were carried out between 2001 and 2002 (see table 2).

The table 2 shows that our sample is quite diverse as 10 Tunisian companies belong to 4 fields which are: industry, transport, financial and finally the service sector. We can observe a considerable belonging of 50 % to the industrial sector and an equal spreading out between the financial and service sector of 20 %.
2. Presentation of the sample of public enterprises

We have chosen to work on a sample of 10 non-privatized Tunisian companies (sample 2). Similarly, these enterprises are characterized by a relative stability in the economic situation in the national and international scale. These companies are all listed in the stock market of Tunis (BMVT) (see table 3).

Table 3. Description of the sample of non-privatized companies by field of activity

<table>
<thead>
<tr>
<th>SECTEUR</th>
<th>NOMBRE</th>
<th>POURCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDUSTRIE</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>FINANCIER</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>SERVICES</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: [www.tustex.com](http://www.tustex.com)

In contrast with the sample of privatized companies, our second sample is less diverse. In fact, the 10 public companies belong only to 3 different sectors that are: industry, e-finance and service sector. The most important portion of 50% was represented by the finance sector made of three banks (Amen Bank, ATB and UBCI), an investment company (SPIDT) and a company of leasing (CIL).

4. The study of the relationship between privatization and the governance mechanisms

4.1. Definition and measurement of variables

In order to determine the importance of corporate governance, through some measures showing its mechanisms, we used the same describing method as the previous sections.

An analysis of the average and the median of public versus private companies are used to realize the importance of structural changes and another logit analysis is applied in a second stage.

Tests on governance indicators concerning firms’ organizational characteristics were appreciated by many variables, that is:
• The contribution of foreign investors, which implies a re-setting of shareholdings; this variable allows us to display the importance of the existence of these investors in the creation of an additional value of the performance.

• The outside administrators: it is the proportion of independent directors in the Directors’ board;

• The size of the Directors board according to the total number of directors;

• The accumulation of functions of The CEO (Chief Executive Officer) and the Directors’ board Chairman;

• The float which is calculated through the number of non-nominative shares i.e. the number of shares held by various shareholders (the public);

• The variable of profitability: the profitability is measured by the ratio ROE (results reported on equity); this ratio measures the financial return from the perspective of owners who have contributed with equity. In fact, this ratio is called the ratio of equity return because it measures the net benefit made by the company for every currency unit invested by shareholders

4.2. Descriptive analysis

The efficiency of the control practiced by the directors’ board can be defined through these three characteristics: the size of the board, the proportion of the outside directors in the board and the accumulation of the CEO and the board chairman functions (see table 4).

Table 4. The statistic characteristics of public versus private companies

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>ESES PRIVATISEES</th>
<th>ESES PUBLIQUES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MOYENNE</td>
<td>MEDIANE</td>
</tr>
<tr>
<td>AD EXT</td>
<td>0,48</td>
<td>0,4</td>
</tr>
<tr>
<td>TAILLE DU CA</td>
<td>10,8</td>
<td>10</td>
</tr>
<tr>
<td>CUMUL</td>
<td>0,9</td>
<td>1</td>
</tr>
<tr>
<td>FLOTTANT</td>
<td>34,25</td>
<td>27,27</td>
</tr>
<tr>
<td>PART DES INV ETRANGERS</td>
<td>11,4</td>
<td>1</td>
</tr>
<tr>
<td>ROE</td>
<td>0,06</td>
<td>0,09</td>
</tr>
<tr>
<td>SAL</td>
<td>282869</td>
<td>158782</td>
</tr>
<tr>
<td>END</td>
<td>0,16</td>
<td>0,06</td>
</tr>
</tbody>
</table>

The directors’ board plays a primordial role in the control of the leaders’ performance. The role of the directors’ board consists on the nomination and dismissal of the CEO and general directors and fixing their remunerations.

Thus, it has a disciplinary role which becomes more efficient when the board is dominated by qualified and independent outside directors. In fact, according to table 4, we can conclude that the average of outside directors is 0.48 for public and private companies.

The holding of both CEO and board’s chairman functions: the companies, in which one individual holds these two functions, are called monist structures in the board. In our sample of the Tunisian companies, the adoption of a monist structure in the board can be risky. When the leader holds the two functions, his has more capacity to influence the decisions in the directors’ board becomes. Due to this last interpretation, we can affirm that the private companies are more successful compared to public companies.

As much as the contribution of the outsiders in the capital is strongly correlated to the identification of investors, it would be wise to contemplate the scope of the foreign participation in the capital. The benefit of such a practice affects mainly the productivity and the organizational learning.

Consequently, the presence of foreign investors could affect the post-privatization performance. Through the contribution of foreign taxpayers, there will be a transfer of tangible and intangible resources in benefits of the new organisational structure. The international participation has to contribute in the reinforcement of financial resources by the introduction of a new and different managerial know-how and a foreign strategic expertise about corporate governance. In our sample, the share of foreign investors is more important in both public and private companies (public 19.57, private 11.40).
According to Jensen and Meckling (1976), the use of debt as a funding source avoids the use of capital and thus reduces agency costs which lower the capital. We can conclude that the internal debt as a mechanism plays an active role in corporate governance, insofar as its operation is used to complement the partial role of external mechanisms.

4.3. Multivariate analysis

In terms of methodology, the delivery of the privatization process will be highlighted through a binary logit model.

In order to provide a more intuitive interpretation of the logit regression results, we are equally showing a linear approximation of logit coefficients. The linear form of the logit regression lends itself to the same interpretation of the linear coefficients of regression according to MCO and, in fact both are often approached.

The measurement of variables models

This study aims to analyse the relationship which can exist between the decision of privatization and the organizational characteristics of firms’ governance; the used variables, for this purpose, are:

• The independent variable: the independent Yi used is: the situation in terms of privatization; the process of privatization has, in fact, two modalities:
  o Either the company is not privatized; in this case it is a public company;
  o Or it has one or several privatizations; in this case it is a private firm.

• The independent variable: the variables Xi are:
  o Contribution of foreign investors;
  o ADEXT: it is the proportion of independent outside directors in the board;
  o The size of the directors’ board : the total number of directors;
  o The accumulation of the CEO and DBC (Directors’ Board Chairman);
  o The floating: the number of registered shares;
  o ROE: the return on equity;
  o ENDETT: variable of indebtedness.

Based on the results of models of post-privatization performance used in literature, the indicators measure the performance; namely ROE (Return on Equity) and SAL gave the most significant results comparing to other performance measures. The introduction of this two performance measures in the binary logit model will lead to a bias in the results given that there is a strong correlation between these two variables. Therefore, we are going to use a single measure, which is the ratio of Return on Equity (ROE).

The model of logit regression takes the next form:

\[ \text{Privatization} = \beta_0 + \beta_1 \text{Flottant} + \beta_2 \text{Inv ETR} + \beta_3 \text{ROE} + \beta_4 \text{Cumul} + \beta_5 \text{Taille} + \beta_6 \text{Adm ext} + \beta_7 \text{Adm total} + \beta_8 \text{Endett} + \xi_2 \]

According to the table above, we can observe that the percentage of the dispersed capital in the public (floating), the size of the directors’ board, the accounting performance (ROE) and the proportion of independent directors in the board have a significant relationship with dependent variable, i.e. with the privatization of public companies (see table 5).

Table 5. Summary of the regressions of the binary logit model (performance of public vs. private companies) on performance measures:
According to the results of Table 5, we notice that the constant is negative and statistically significant; this implies that if we keep constant the remaining variables, the transfer of public property to private refers to a self degradation in performance; the constant therefore illustrates the intrinsic contribution of privatization, all things being equal.

Privatization as a restructuring of ownership usually results in a variation in the size of privatized firms which are, in fact, the evidence of a structural change evoked in private organizations. From the results of the last regression, we can say that size has a positive effect on the privatization variable implies that the large size is a characteristic of private firms.

Privatization as a restructuring of ownership usually results in a variation of privatized firms at the level of their size which is the proof of a structural change evoked in private organizations. From the last regression results, we can say that size acts positively on the privatization variable which implies that large size is one of the characteristic of private companies.

According to Alexander and Cremers (2003) and Chatelin (2003), large size public and private companies suffer from some centralization and bureaucracy that is difficult to handle. Thus, a restructuring that increases the size will as well increase the centralization and the rigidity of the governance system: privatized firms will have in that case, everything being equal therefore, with no comparable advantages with public firms.

According Frydman, Gray, Hessel and Rapaczynski (1997), it would be judicious to contemplate the scope of foreign participation in capital so far as the contribution of such a practice is reflected mainly on the recovery process of privatization.

Table 5 demonstrates that outside investors share has a negative coefficient. This means that the recovery of the privatization process is slower; that is the more foreign ownership is contributory; the more it becomes an obstacle to the privatization process. This indicates that privatization must be operated in an environment that validates supports and promotes the conditions for atomicity, free exercise, flexibility and transparency.

Thus, the negative effect of foreign ownership could possibly be due to the constraints of traditional governance related to internationalization (international standards) that are able to delay the recovery process for the privatized enterprises.

Regarding the accounting performance, we used the rate of return on equity (ROE) In one view of the regression results, we find that privatization seems to have a significant influence on performance for shareholders and the financial behaviour of firms, which allow us to confirm the hypothesis that privatization leads to gains efficiency.

Indeed, transfer of ownership of public officials to private agents will result in higher performance; such an increase can be explained by the trend given by the new leaders of privatized firms to maximize profits (Yarrow, 1986)). Similarly, it can also be explained by the fact that privatization typically transfers decision

<table>
<thead>
<tr>
<th>Les variables explicatives</th>
<th>Coefficient</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUMUL</td>
<td>25,073</td>
<td>0,125</td>
</tr>
<tr>
<td>FLOTTANT</td>
<td>0,595</td>
<td>0,0996*</td>
</tr>
<tr>
<td>ROE</td>
<td>67,632</td>
<td>0,034**</td>
</tr>
<tr>
<td>END</td>
<td>102,856</td>
<td>1,526</td>
</tr>
<tr>
<td>INEXT</td>
<td>-66,49</td>
<td>0,0997*</td>
</tr>
<tr>
<td>ADTOTAL</td>
<td>42,387</td>
<td>0,0876*</td>
</tr>
<tr>
<td>ADEXT</td>
<td>1,831</td>
<td>0,059*</td>
</tr>
<tr>
<td>TAILLE</td>
<td>16,007</td>
<td>1,995</td>
</tr>
<tr>
<td>Constante</td>
<td>-665,619</td>
<td>0,0995*</td>
</tr>
</tbody>
</table>

| R2 de Cox et Snell        | 0,75        |
| KHI DEUX                  | 27,726      |

* significativité au seuil de 10% ;
**significativité au seuil de 5% ;
***significativité au seuil de 1%.
rights and cash flows for leaders who, in return, aim to overcome the performance and efficiency over those output and employment covered by the government. (Boycko, Shleifer, Vishny (1996)).

From Table 5, we finally observe that the number of independent directors on the board of directors is a characteristic of private companies; in fact, we find that the positive sign of this parameter implies that it has a positive and significant impact on the variable privatization. The board of directors is a place to exchange information, debate and decision making. The quality of its decisions is strongly correlated with the nature of its members and their skills.

According to Chatelin (2001) and by centralizing the analysis on the organizational dynamic, privatization is seen as several-steps organizational process originated in a reconfiguration of the architecture organization and a reallocation of decision rights for the benefit of non-public agents.

5. Conclusions

The theoretical perspective has identified the main conclusions about the effectiveness of privatization. Indeed, it addresses two issues, one concerning the fundamental problem of the link between ownership and performance in the emblematic case of privatization, the other on the explanatory significance of the governance theory.

Our study analysed the relationship between the form of ownership and a set of governance mechanism. It is different from previous studies that focused on the use public and private Tunisian companies’ sample.

The main results are summarized as follows:

• The combination of functions has higher average value for private companies compared to public companies;

• For the outside investors share, its coefficient is positive which means that the more the foreign ownership is contributory, the more it promotes the process of privatization. This indicates that privatization should take place in an environment that validates supports and promotes the conditions of atomicity, free exercise, flexibility and transparency.

• The number of independent directors on the board of directors acts positively and significantly on the privatization variable, which lead us to the result that this variable is one of the characteristic of private companies.

• Privatization is an improving performance level; the ratio of return on equity (ROE) which constitutes, an accounting approximation of performance, acts positively on privatization. This ratio measures the financial return of the item from the owners’ point of view that provided the capital and constitutes one of the aspects of private enterprise.

According to these conclusions, it seems that, in order to test theories of privatization and better understand the impacts of this transfer of ownership on performance; it would be better to recourse, at least in complementary way, to qualitative clinical studies that seem more suited to assess the changes on the process which are at the origin of the formation of performance. Such studies, of common manipulations in some fields of organization theory, can probably help better define the impact of contextual effects and better understand how changes on governance systems and adaptations of the organizational architecture associated with privatization can improve performance.

In addition, this study would have been more relevant if the studied sample was of a larger size or if we have worked on a multinational sample to deepen the research on the effect of governance mechanisms on public versus private firms in different markets.

References


