Feminization of Boards and Cameroonian Public Enterprise Performance

Désirée Ngomesse Njiké¹ & Robert Wanda²

¹ UIT Fotso Victor of University of Dschang, Cameroon
² University of Yaoundé-2, Cameroon

Correspondence: Désirée Ngomesse Njiké, UIT Fotso Victor of University of Dschang Cameroon, P.O.Box : 134 Bandjoun, Cameroon. Tel: 237-677-670-295. E-mail: dngomesse@yahoo.fr

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Abstract

If in the past few years, many authors seek to characterize the boards of directors in connection with performance proposing classifications based on sociodemographic characteristics of administrators, particularly in terms of gender diversity, the results of previous studies show that connection between the feminization of the boards of directors and the performance of the company is not consensual. We then try to test the impact of the feminization of the boards of directors on the performance of the Cameroonian public enterprises.

We have formulated a probabilistic model which is tested from a logistic regression based on data from a sample size of 26 public companies in Cameroon over a period of 4 years (2009-2012). Our results demonstrate that Cameroon public enterprise performance cannot be attributed to the gender diversification resulting from their presence at the level of management.

Keywords: board of directors, corporate governance, Cameroon, feminization, performance

1. Introduction

The active policies of the feminization of the board of directors (BOD) whose implementation is ensured since the early 2000s has led to significant changes in the configuration within enterprise management boards. (Note 1). The issue of equality is central in a particular institutional context necessitating active presence of women's participation at the level of enterprise management (Toé, 2012).

Women now represent 31.5% of management positions in all sectors of the Cameroonian economy (INS, 2012) and constitute a large percentage of entrants into the labor market. This figure is also valid for the public companies in Cameroon, particular form of organization in which state intervention in the appointment of officers and members of the board of directors does not free from the obligation to optimize the management of its resources and maximize its value.

If financial theories of corporate governance assumes that the composition of BOD affects the way it performs its functions and in part determines the performance of the organization, gender diversity, which is one of the important aspects to take into account in the structuring of the BOD can influence its actions, and therefore, the company's performance. However, researchers like Carter and al. (2003), Francoeur et al. (2008), indicate that the impact of gender diversity on performance is not automatic. We mobilize the Research Based Resources theory or theory of resources and expertise (Tywoniak, 1998) and the human capital theory (Becker, 1975) to analyze this relationship.

We try in this article to see if the nature of the link between gender diversity and performance stated in other studies and in other contexts can be extended to a developing country like Cameroon, taking into account two considerations:

Firstly, in Cameroon, certain legislative and constitutional texts establish the principle of equality between man and woman (the revised Constitution of 18 January 1996, the penal code, the labor code and the electoral code, the general status of the public function).

Similarly, in the specific field of education, we notice the politics of scholarships imposing a 40% quota of scholarships to be given to girls and the project – Child friendly School-friends of girls– which puts an emphasis
on encouraging the girl to attend school. (Note 2). Finally, in the administrative field, reference is made to the appointment of two women in the territorial administration by Decree No. 2006/231 of 17 July 2006 appointing the sub-divisional officers. This act is one of the major innovations introduced into territorial administration.

Working class women are increasingly skilled in Cameroon through the expansion of education, up to the University level. Data obtained from the Statistical Yearbook 2015 of the Ministry of Women's Empowerment and the Family show that gender parity in the group of students from Cameroonians universities from 2009 to 2012 does not fall below 70%. This suggests that on average, there are 10 male students for every 7 female students. We could therefore predict a similar ratio in the distribution of positions of responsibility in the workplace.

Secondly: in practice in Cameroon, it is the parent organizations that should represents the public interests in the BOD of public companies. Thus, within the limit of the number of terms permitted by law, the state shall appoint representatives to the BOD of its portfolio companies.

These findings led us to analyze the representation of women in the BOD of Cameroonian public companies in connection with their performance. Thus, our research question is: what is the impact of the feminization of the boards of directors of the Cameroonian public companies on their performance? We will present the problem, methodology and results of the study.

2. Problem

The feminization of the boards of directors from the perspective of human capital brings together two major research groups: those who advocate the education and socialization of women to acquire the human capital required to be part of BOD and those who recommend to organizations to feminize their BOD because women have a human capital that differs from that of men and complete it (Saint-onge & Magnan, 2010).

2.1 The Development of Human Capital

A first stream of authors and researchers adopt the traditional principle of equal opportunities aimed at helping to prepare women, who are at a disadvantage, to take their place in all settings and at all levels of organizations. According to this view, women can, and must, take their place. These authors suggestion imply that women lack the essential qualities such as aggression, assertion, self-confidence, ambition and the aim in the long term, independence, to name but a few, and it is up to them to develop these skills for success “insured” (Fortier & Giasson, 2007). Gutek (1993) named it as the individual deficit model which completely denies any external component related to the social problems of women in the society and in the organizations.

To date, many authors have proposed actions to women who aspire progress in management positions or directors of companies (Anderberg, 2008; Burgess & Tharenou, 2002): develop skills, create a network of relationships, seek out a mentor, etc.

2.2 The Difference Man/Woman

Here, the reflections in terms of women's contribution to business performance is based on two foundations: the first foundation concerns the so-called feminine qualities and thus the valuation of women's specific performance as a factor. The second view is the concept of diversity, the latter being regarded as a source of performance. In both cases, there is a valuing difference, but if in the first case, it is the feminine qualities which are highlighted, in the second case, it is the valuation difference of sex in the workforce, or both, among other diversity factors (Landrieux-kartochnian, 2004).

2.2.1 Psychological Foundations: The So-Called Feminine Qualities

Many psychological studies emphasize the difference between the sexes, although the debate between supposedly innate or socially developed qualities is not decided. For example Gilligan (1993) emphasizes the idea that women would speak of a «different voice †. Thus, if men and women use similar words, they do not necessarily have the same meaning because of their experience of social relations and self-awareness. The different voices of women would borrow an ethic of care and the link between relationship and responsibility.

2.2.2 The Basic Management Principles: The “Business Case” for Diversity

Responding to a delicate balance between social and economic logics of action, the business case of diversity management is based on the idea that a diverse workforce improves the overall performance of the company (Cornet & Warland, 2008).

Thus, four economic logic form the business diversity of box:

- "The search for greater efficiency in terms of goals and missions of the organization: to improve the products and
or service to customers and users;
- The Search for greater efficiency that aims to optimize the use of internal and external resources and skills and improve work processes;
- The Law enforcement and national and European directives with the aim of avoiding lawsuits that could generate costs and be damaging to the image of the organization;
- The Desire to improve the image and the legitimacy of the company or organization with the aim to differentiate an employer, but also to attract new customers.” (p. 49).

Here, researchers are trying to compare attributes, skills and contributions of women and men in leadership positions or BOD on various plans like abilities (wisdom, diligence, etc.), interaction styles (the search for compromise, concern for people), leadership styles (democratic, transformational, based on trust), the modes of decision making, risk attitudes, attraction to the competition concern interpersonal or human factors (Briere & Rinfret, 2010).

Overall, the study results confirm the alleged particularities of women and conclude that there should be more recognition and use their services since they complement the contributions of the men and have added value (Saint-Onge & Magnan, 2010). For this, according to the theory of resources and expertise, the company must acquire resources that maintain or achieve a sustainable competitive advantage, that is to say, of scarce resources, valuable and difficult to imitate.

3. Impact of the Feminization of the Boards on Performance

The results of studies on the direction of the relationship between gender diversity of the board and enterprise performance are highly controversial. Erhardt et al. (2003) found a positive relationship between Return On Assets (ROA), Return On Investments (ROI) and the percentage of women in the board. Harrigan (1981) uses a sample of 112 companies and found a positive relationship between profitability and the proportion of women in top management. Singh and al. (2008) holds that women are contributing richly within diversified international framework in their boards meeting, they are highly skilled and have good experience accumulated through their participation in the boards of small and medium enterprises. Conversely, some studies give a neutral view, or even negative economic issues of women’s participation in the board. Thus, Shrader et al. (1997) studied the relationship on a sample of 200 US firms and found a negative relationship between performance measured by ROA and ROI and the percentage of women in the board. Adams and Ferreira (2009) also find a negative relationship between the proportion of women in the board and performance measured by the Tobin’s Q ratio. Carter et al. (2010) analyzed the relationship on a sample of enterprises in the S&P 500 list observed over a period of five years (1998-2002). They apply the multiple regression method (ordinary least square) and least square triple (3SLS) in a total sample of 2563 observations. The results of this study show that the number of women in the board has no statistically impact on ROA and Tobin’s Q ratio.

Despite the controversy over the nature of the link between gender diversity of the board and performance, the human capital theory teaches that each member serving in the board brings a set of knowledge, experience and skills (Becker, 1975; Westphal & Zajac, 1995; Kesner, 1988). That is why we postulate:

\( H1:\) The performance of public enterprises is directly proportionate to the number of women present at the board’s level.

Moreover, several recent social sciences research have shown that men and women behave differently in organizations. They differ notably in their attitude to risk (Booth & Nolen, 2009; Byrnes et al., 1999; Eckel & Grossman, 2002), their management practice (Fenwick & Neal, 2001), their attraction to the competition (Niederle & Vesterlund, 2007), their decision making (Barber & Odean, 2001) and their motivations (Kalleberg &Leicht, 1991). They argue that unlike men, women are more oriented towards harmonization of relations and help from others. They are socialized by common values and are less likely to frustrate business ethics. Moreover, they adopt a participatory and democratic leadership style based on trust (Trinidad & Normore, 2005). This style allows them to establish cooperative relationships with leaders, facilitating their access to information and reducing information asymmetry (Jelinek & Adler, 1988).

We will then pay a particular attention to the release of feminine values in the board and we make the following hypothesis:

\( H2:\) The more female values (participatory leadership, risk aversion, altruism) are implemented in the enterprise mainstream, the more performing the enterprise will be.
4. Methodology

In the empirical part of this study, we will proceed in stages, from the sample design to the definition of study variables, followed by data collection and processing.

4.1 Sample Study

It is constituted of 26 public enterprises in Cameroon including the service sector where public enterprises are most numerous (with a rate of 59.6%), followed by public enterprises of the industrial sector (32.68%) and those of the primary sector (7.69%).

4.2 Period of Study and Data Collection

It covers four years which are 2009, 2010, 2011, 2012. For each enterprise, financial data were obtained from financial statements published by the National Statistics Institute (NSI) and those made available by the chamber of Accounts of the Supreme Court in Cameroon (Note 3). Missing data were added through the administration of a set of questions and an interview with the directors of the said enterprises.

4.3 Variables

- **Endogenous variable**: Prod = labor productivity. Its formula is \(\text{Prod} = \frac{\text{sales or net profit}}{\text{number of employees}}\).

  The use of productivity as a measure of performance is justifiable for our study because of the nature of the sample. Indeed, only constituted of public enterprises, they face conflicting goals, making it difficult to assess their performances. The aim of technical efficiency or productivity is interesting because it is compatible with all the other objectives of an enterprise (Note 4).

  Labor productivity in engineering units is here a dichotomous variable and is set to 1 to reflect the enterprise’s performance status and 0 if not (Note 5).

- **Exogenous variables**
  - Board diversity (DIV) is measured in terms of presence of women in the board. This presence is an additional useful resource, particularly in a complex and uncertain environment (Pfeffer & Salancik, 1978; Francoeur et al., 2008).
  - Disclosure of feminine values (FEV) measures the existence or not of feminine values in the board.
  - The size of the board (SBO) is measured by the number of directors in the board level. Agrawal & Knoeber (2001), Carter et al. (2003) raise a positive relationship between board size and the presence of women within it.

- **Control variables**
  - The size of the enterprise: the literature shows that the “size” variable was operationalized in different ways. We identify three measures, namely the number of employees, sales volume and total assets. As part of our study, and the manner of Trébucq (2002), Poulain-Rehm (2006), and Gharbi and Lepers (2008), we hold as a measure of the “size of the enterprise” the natural logarithm of total assets.

  Carter et al. (2003), Adams and Ferreira (2003) and Agrawal and Knoeber (2001), emphasize existence of a positive relationship between firm size and the presence of women in the board. Adams and Ferreira (2003) state large enterprises encourage and capitalize on diversity because they are more visible and more accountable, to investors.

  - The age of enterprise: the age of enterprise (AGE) is measured by the natural logarithm of the age expressed in years.

  - The activity sector: the creation of business value must be assessed in relation to the performance of the sector. To consider it, a dummy variable was included in our modeling taking the value (1) if the company operates in the service sector; otherwise, the value (0). The sectoral specificity remains crucial in explaining the presence of women in the board (Fryxell & Lerner, 1989; Harrigan, 1981). For example, Harrigan (1981) concluded that women are better represented in the boards of enterprises of the service sector unlike manufacturing enterprises.

3.4 Statistical Model

We used the logit regression which is suitable for a dichotomous endogenous variable and which is a method of prediction of the conditional probability of the influence of endogenous variable by significant exogenous variables.
The model is specified by the following equation:

\[ Prod: P = \text{Prob} \left( \prod_{i,j=1,2,3,4,5,6} \right) \]

with \( X_i \) representing the exogenous variables. This is a conditional probability that the \( Prod \) variable takes the value 1, expressing the performance of state under constraints exogenous variables that have an impact on it.

The processing of data by SPSS software version 18.0.0 was done by top-down method, that is to say, at each step, the variable whose coefficient has the worst significance according to the Wald test is excluded from the next model. The process is repeated until a model where all variables have a significance less than or equal to 0.05.

5. Results and Discussion

Our analysis of the results will initially be done from descriptive statistics of the study sample. Then, we will appreciate the effects of the presence of women (in the board) on the performance of these enterprises from the results of our regressions.

5.1 Analysis of Descriptive Statistics

![Figure 1. Distribution (%) of enterprises having women in their board](image)

Analysis of this figure shows that on the whole sample, the enterprises in which at least one woman is present represent 38.5%. The results of several other studies show in the US case 70% of enterprises that have at least one woman in their board (Farrell & Hersch, 2005) while in the case of Spain only 23.7% of enterprises have at least one woman in their board (Campbell & Minguez-Vera, 2008).

![Figure 2. Distribution of the enterprises considering feminine values](image)

The figure 2 shows that less than a quarter of the sample firms consider feminine values into their decision making process. It should be noted that the existence of feminine values in the board is not dependent on the existence of women in these boards. These values can be detected even in homogenous boards. For example,
listening and communication are values that can be propagated in a board; these are feminine values that can be carried by men.

![Figure 3. Distribution (%) of enterprises according performance](image)

Descriptive statistics on the performance variable, which is in this study measured by productivity shows that 46% of sample enterprises are performing against 54% which do not.

<table>
<thead>
<tr>
<th>Table 1. Gender based qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
</tr>
<tr>
<td>Bachelor’s degree or equivalence</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>DEA / DESS / MBA / Master 2</td>
</tr>
<tr>
<td>Engineering Degree /Diploma</td>
</tr>
<tr>
<td>Total</td>
</tr>
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<td></td>
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</tbody>
</table>

Descriptive analysis on the type of qualification as per gender demonstrate that Cameroonian women are also qualified as men: indeed, all women under this analysis have a university degree and worth noting is that 13/16 hold a post graduate qualification.

5.2 Estimation of the Model Parameters

As mentioned above, the objective of this study is to disambiguate the nature of the relationship between the feminization of board of directors and the enterprise performance. This perspective involves at the same time a distinction from endogenous and exogenous factors. The logit regression is most appropriate in this model and can be summed-up in a conditional probability in order for the Prod variable to take the value of 1, thus expressing the state of performance under external variables (feminine values and diversity) which are likely to have an impact on her. The feminization of board of directors is measured in terms of the presence of women and exhibition of their feminine values. The first variable (presence of women) is represented by value 1 if at least one woman is on the board of directors and 0 if not. The second variable (vulgarization) exhibition of feminine values is represented by value 1 if feminine values are taken into consideration in the process of decision making and 0 if not.

From the results produce by the SPSS software, it is pertinent to note that we are interested in the variables with significance less than or equal to 0.05. The estimated coefficients of the model are presented in the following table.
Table 2. Estimates of model coefficients

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>E.S.</th>
<th>Wald</th>
<th>ddl</th>
<th>Sig.</th>
<th>Expo(B)</th>
<th>CI for Expo(B) 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st step</td>
<td>DIV</td>
<td>2,155</td>
<td>1,963</td>
<td>1,206</td>
<td>1</td>
<td>.272</td>
<td>8,630</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.184</td>
<td>404,387</td>
</tr>
<tr>
<td></td>
<td>FEV</td>
<td>2,360</td>
<td>3,089</td>
<td>.584</td>
<td>1</td>
<td>.445</td>
<td>10,594</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.025</td>
<td>4511,833</td>
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<tr>
<td></td>
<td>SECT</td>
<td>.741</td>
<td>.472</td>
<td>2,467</td>
<td>1</td>
<td>.116</td>
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<td></td>
<td></td>
<td></td>
<td>.832</td>
<td>5,294</td>
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<tr>
<td></td>
<td>AGE</td>
<td>.184</td>
<td>.087</td>
<td>4,456</td>
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<td>1,013</td>
<td>1,427</td>
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<td>SZE</td>
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<td>.685</td>
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<td>.408</td>
<td>3,105</td>
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<td></td>
<td></td>
<td></td>
<td>.212</td>
<td>45,460</td>
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<tr>
<td></td>
<td>SBO</td>
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<td>2,075</td>
<td>.639</td>
<td>1</td>
<td>.424</td>
<td>5,253</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>.090</td>
<td>306,354</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-20,410</td>
<td>10,192</td>
<td>4,010</td>
<td>1</td>
<td>.045</td>
<td>0.000</td>
</tr>
</tbody>
</table>

The estimated parameters of the model (see table 2), show that only the age variable of the enterprise explains the variations in productivity. It is the only variable of table 2 which has a coefficient less or equal to 0.05. The presence of women in the board or the inclusion of women’s values would not explain the performance of these enterprises; that is why the following comments are presented.

5.2.1 Low Representation of Women on the Board as a Factor Explaining the Lack of Impact on Enterprise Performance

DIV variable is the presence of women in the board. She appears in the table above a coefficient (0.272). This allows us to conclude that the performance of the public enterprises in Cameroon in terms of productivity cannot be attributed to the diversity in gender (DIV) of their boards. The H1 hypothesis is not verified. This result is contrary to the referred authors like Thomas and Eily (1996) for who the impact of an effective management of diversity on employee moral enhances the enterprise’s productivity. By improving the position of women in the top management of the organization, the company gives a signal to his employees especially women and other minorities to which this presence can be experienced as a better consideration of their expectations and their concerns in business decisions (Mattis, 1993), (Schwartz, 1980), (Harigan, 1981).

Moreover, according to Torchia et al. (2011), it generally takes three women to form a critical mass that changes the dynamic of a board promoting creativity and the abundance of new ideas. Statistical weakness of women in the board of sample enterprises is noteworthy because they have no more than two women in their board.

5.2.2 Feminine Values in the Board: An Untapped Competitive Advantage

The FEV variable presents in Table 2 a coefficient of (0.445). This means that the existence of feminine values (FEV) has no significant effect on the performance of public enterprises in Cameroon which contradicts our second hypothesis H2. This result can be explained as Imen et al. (2011) precise it by the socialization process that the new members in the boards, in this case women, adopt the behavior and conveyed conventional standards in boards historically acknowledged as “male bodies”.

5.2.3 The Company Lifetime Guarantees Productivity

Indeed, the significance of its coefficient (0.035) is below the 5% significance level, since one can say that with 95% confidence, the lifetime significantly and positively impacts changes in the productivity of an enterprise. The reasons for this phenomenon have been clearly identified; they are related to the company’s experience curve and can be grouped into six broad categories: learning, specialization, investment, the scale effect, the change in technology and the mastery of time. According to others cases, can be added other phenomena such as better use of raw materials, better knowledge of the customers in time, a decrease in working capital needs, the intermediate short-circuiting, etc…

6. Conclusion

The purpose of this study is to show the impact of the existence of women and feminine values in the board on the enterprises performance. Literature and empirical evidence are mixed about it. The results from empirical investigations are divergent and have not reached a consensus as to the improvement or deterioration of the enterprise’s value due to the diversification or not of its board.

From a sample of 26 public enterprises in Cameroon observed over the period 2009-2012, the logit regression is used to determine some significant features of the board that improve productivity. From this, it comes out that the probability of improving the productivity of public enterprises in Cameroon is not related to its diversity in gender (H1 not verified), and to the integration of feminine in the decision process (H2 not verified).

On the other hand, we detected a positive effect of enterprise’s age on productivity probably due to the
Knowing that the performance is basically contingent and the board is only a part of the executive control system, enterprises should use other mechanisms such as increasing the heterogeneity of the board, in terms of functional background, education, age, gender etc…

Finally, The lessons that one can draw from these findings emanating from this studies is that leaders are not chosen haphazardly, they are designated in relation to their expertise knowledge with connection to the running of the enterprise. This can also be in relation to their capacity of being proactive in their management of stakeholders. According to the theory of resource availability, organizations that feminize their management and thus their governance will better make use of their resources, a situation that will enable them to be more competitive (Schrader et al, 1997; Hillman et al., 2007). It becomes evident that feminization is an enabling factor for exploits exposure, providing a solution for the scarcity of human resource and in particular those with specific talents.

Moreover, as to the limitations and future development of this research, we underline the following: considering the nature of the enterprises under study, it may be certain ly interesting if statistics are available, to assess the social performance of these through indicators such as personnel turnover, rate of recruitment, salary ratio, the rate of absenteeism, the rate in training and voluntary departure etc.

References


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Notes

Note 1. Many countries have introduced legislation to impose a quota for women within enterprise management boards. The first initiative came from Norway in 2004 which imposed a quota of 40 % women in the board of listed companies. Since then, similar measures have been adopted by several other European countries: Spain, Italy, Holland, France with the proposal Zimmermann / Copé which provides for the gradual introduction of a quota for women in listed companies BOD 40%.

Note 2. In the three northern provinces of Cameroon in particular, the education of the girl is still hampered by economic and cultural obstacles. That is why the government and the United Nations Children's Fund (UNICEF) has always conducted awareness campaigns for girls' education in the country to ensure that all children are able to enjoy their right to education on an equal basis and respecting the principles of equity between girls and boys. This is the goal of the campaign in 2000 called Child Friendly School, friend of girls.

Note 3. A regulatory and institutional framework of governance was introduced in Cameroon from 2004. It is the Chamber of accounts and the Supreme state control. The organization’s headquarters of that chamber provides that the fourth section’s role is to review and audit the accounts of publics and parastatal enterprises. It published its first report on statistics and accounts of public enterprises in 2009.

Note 4. Whatever the other goals, regardless of their weight, there is no justification for the technical inefficiency. Suppose that a company is required to incur excessive manpower considering the quality of services that it provides, which amount is limited. It is open, for it eventually to use that manpower to improve the quality of its services. Technical efficiency is thus an essential goal. While a manager legitimate allocative inefficiency in the name of fairness test, he cannot do the same for technical efficiency. Another benefit, the calculation of technical efficiency is based on physical, qualitative and quantitative data. These data are generally more available and especially more reliable than financial data (Gathon & Pestiau, 1996).

Note 5. Amount produced per worker or number of pieces per hour.

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