THE RECONSTRUCTION OF LEADER'S CAREER AFTER THE CHANGE OF THE CORPORATE CONTROL: A CASE STUDY IN SÃO PAULO ELECTRICITY SECTOR

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Abstract

This research investigates how a company changes after the privatization process and how this change impacts its total structure. For Donadone and Sznelwar (2004), the pressures of new business owners, in this case coming out of the hands of the state to the hands of private companies, have a consequence of organizational design and the composition of power in companies. Therefore, this research focused on an exploratory study at AES Eletropaulo. This study has a central role in the Brazilian electricity sector because due to the radical changes it has been subjected since 90's financialization. However, no research on careers construction of leaders in the Brazilian context had been made so far. As a research procedure this study combined quantitative and qualitative methods in order to analyze the careers of leaders of AES Eletropaulo, we collected the curriculum of the Board and Directors, since its emergence as a state enterprise in 1979 to the year of 2012. These curriculums were analysed with a Multiple Correspondence Analysis (MCA). In addition, this research was complemented with an interview with the former president of the company where the study was performed. As a result, we were able to observe the several changes that AES Eletropaulo went through, especially that, the leaders of this company had to find ways to rebuild their careers according to the new logic of the moment, which would have been facing financially. The capacity for reconversion is very large in these companies that the engineers end up reconverting their careers, these workers update themselves through courses and degrees, acquire new skills in the human, administrative and social areas, to become more flexible in a first moment of organizational change and reconvert themselves into engineers who work in financial areas, so they can stay in their elite positions. All this is marked and explained by the preference of hiring of engineers in the large Brazilian companies for high ranking positions.

Keywords: Corporate Control, Privatization, Organizational Structure, SPSS, Finance

1. INTRODUCTION

Since 1990, the largest companies in the world have gone through a continuous process of transformations. According to Donadone and Sznelwar (2004) in the United States the process is emphasized by which understanding and representations about the organizational world were being colonized by financial logic. In this period, the change occurs in corporate governance with the

performance of large institutional investors, represented by pension funds, insurance companies, and investment funds. The choice of the United States, by these scholars, is therefore presented as the main hub of influence and historical development of the sector, the headquarters of the largest leading companies and the largest world market.

According to Donadone and Sznelwar (2004), in Brazil the organizational dynamics highlighted the privatization process as one of the main events of 1990s: "The transfer to private sectors of large state companies was an important factor of change in the organizational arrangements of the period".

Privatizations bring about a new model of a company, called Model 2 by Grün (1999, 2003). The author explains that, while Model 1 refers to managers and engineers, the Model 2, to the experts in the financial area. For him, the privatization process in 1990s dramatically increases the relevance of the Model 2 in Brazil. The financial reason appears as a kind of common denominator that provides a shared minimum index of ways to understand and consequently to act on companies (Grün, 1999).

Associated with privatization, mergers and acquisitions occurred. In this movement, the conception that has been dominant in the major firms is the financial one. With this new reorganization, there are new owners. For Donadone and Sznelwar (2004) the pressures of new business owners have a consequence of organizational design and the composition of power in companies.

Brazilian state companies have been subjected to transformations since 1990. This factor was boosted when electric power companies participated in the government's privatization process (Pedroso, 2005).

This present work has as its central objective to analyse, in a company of this sector, in a corporate scope, the (new) forms of organizational management and production, as also its key actors and their forms of interrelation. To do so, the scope of this research focused on an exploratory study in AES Eletropaulo, the energy distribution company of the electric sector of State of São Paulo, with the focus on the analysis of the careers of the company's leaders, before and after privatization (AES Eletropaulo, 2012; AES Brasil, 2013).

This work will contribute to the study of a large Brazilian company, which has its particularities of culture and formation (Hirsch, et al., 1990). Report on the formation of the most important distribution company in the country, in order to investigate aspects related to the formation of leaders in the historical context of the company at the moment before, during and after privatization. This research is relevant, because there are few studies carried out in large Brazilian companies, and what has, according to the authors Bethlem (2014) and Lazzarini (2011), are translations of cases of large foreign companies.

In the company studied AES Eletropaulo, when analysing the board, it is known that they are mostly engineers, but this research investigates, if they are the same engineers, in relation to schooling and career building that occupied high-level positions before and after privatization. We need more studies like this one in Brazil with a focus on the economic sociology of big companies.

2. LITERATURE REVIEW

Some authors of economic sociology also studied large companies in the process of change of corporate control. Dunn (2004) unrolls the process of privatization of the Alima-Gerber factory. From the perspective of the author, she investigated the history, culture, and religion of the privatized factory. The author opens the door to the discussion and criticizes the changes of the new forms of domination.

In the case study of the US-Chinese joint venture, that is the formation of Lenovo, a personal computer maker, Useem and Liang (2011) comment on how Lenovo has sought directors and advisors to engage in the most important decisions.

In order to verify the degree of financialization of the company in this case of AES Eletropaulo, parameters used in the largest companies in the United States and the United Kingdom were used, according to the study by Froud and Johal et al. (2006).

Thus we introduce the study for economic sociology with similar international cases, from the perspective of economic sociology analysis in changes that occur in large companies after the change of ownership.

2.1. Formation of the engineer from the history of teaching in Brazil and in the world – highlights to the period Fordist and post-Fordist

On the history of engineering schools, Bruno and Laudares (2000) note that the first school of engineering was the École des Ponts et Chaussées, established in France in 1775. At that stage, the formation of the engineer was focused on construction. Twenty years later it was created in 1798, the École Polytechnique.

In Europe, in the United States and also in Brazil, the first engineering schools date back to the beginning of the nineteenth century, because the practice of the engineer was in political society. Both training and work were linked to military art; its technology functioned as a means of security and repression (Bruno & Laudares, 2000).

In the years 1980, with the crisis of Fordism, occurred the deregulation of work, accompanying the movement of the flexibility of production systems. Such changes affected the basis of vocational training, especially engineers (Bruno & Laudares, 2000).

At this time of the passing of Fordism to the post-Fordism, there were changes in the factories as to the demands and qualifications of the engineer. The engineer from that context occupies a strategic position of management of people and processes that require human and social resources added to those of purely technical nature (Bruno & Laudares, 2000).

With the Third Industrial Revolution, in Brazil in 1990s, and with the leap in the development of microelectronics and the computer industry, the new World demand to global integration. Until recently, engineers exercised technical activities. Currently, with the change in the organization of companies and the increase of outsourcing and reduction of workers, including engineers, its assignments were expanded and became more diversified, including administrative, commercial and managerial

knowledge, leadership and cost structure (Bruno & Laudares, 2000).

According to scholars, capital is no longer industrial but financial and commercial. To the extent that various forms of organization collapse, they differ from previous periods, whether within the work process, where Fordism gives way to flexible accumulation, whether in economic policy, capitalist relations, with the Creation of the global plant and multinational companies (Silva, 2004).

In this passage of privatization and deregulation, new working relationships are developed. In this way, the engineer's work requires different skills from the previous industrial period. The engineer's education is certainly no longer only in areas of exact, its requalification in the service requires new know-how, with the social relations originated from the flexible position, in the face of the demands of the opening of work processes.

By occupying prominent positions in the factories and being multipliers and diffusers of processes, it is necessary to insert the engineers in programs of continuing education, of administrative content, general and humanistic, which complement their technical training and enable better elaboration of the knowledge acquired in practice.

For Bruno and Laudares (2000), the engineer needs to have a historical memory, for the transfer and applicability of knowledge. Its requalification is done by the new processes of organization and management of work, which bring, besides the technical requirement, management skills of production, behaviour and interaction originalised by the productive decentralization, present in the current management models (Zilbovicius, 1999).

2.2. Performance and qualification of the engineer from the changes that occurred in the socio-political-economic scenario

After the brief history of the construction of the engineering course in Brazil and in the world, some changes are highlighted by which this profession has passed, due to alterations in the socio-political-economic scenario in which it enters. In a nutshell, it is the change of the Model 1 of a company, Industrial, for the Model 2 of a company, Financial. In the mid-1990, there is a new focus of the company that serves to contemplate the interests of the shareholders: the movement of financialization. From this change, new forms of organization of the work are developed and alter the performance of the engineer (Donadone & Fantti, 2016).

According to Martins (2014) and Crivellari (2000), the changes that occurred in companies during the transition period between Fordism and post-Fordism were concomitant to the transformation of productive capitalism into financial capitalism. Such changes in the organizations had an impact on the careers of the leaders, in this case, the engineers.

According to Martins (2014), with the Fordist crisis occurred the decline in labour productivity, loss of economic competitiveness and the solution was neoliberal policy, with the reduction of State participation in companies as an attempt to solve this crisis.

Crivellari (2000) explains that, if in the past the state formed engineers for the large state industry, today, in the post-Fordist era, the policy of the small state is characterized by the privatization of the industry. This new business structure will result in another relationship of forces that can be ordered in an educational relationship, among the actors involved in the policy of industrial production, and training of labour.

With the new socioeconomic logic that arises, if your ability to work is the merchandise you have to sell, in a highly competitive market, it is necessary for the merchandise to gain differentiated attractions to gain space in the market (Silva & Cecílio, 2007). Cunha (2000) complements the need to consider that the market will mandate the engineers a range of skills, reminding that the company's goal is to profit and survive in the market.

This historic moment, according to Grün (1999), is important for the transformation and restructuring of productive capitalism, which in turn redirects some careers and professions. With function cuts and the process of outsourcing a large contingent of leaders, engineers are moved from their old jobs. It is within this process of organizational change that one can see a strong change in career plans and professional insertion of various agents linked to the business context, as is the case of reconverted engineers.

In the transformation of productive movements into financial movements (Fligstein, 1990; Useem, 1999), The AES Eletropaulo reduces the management hierarchy by eliminating supervisory functions. These changes in the work attribute remodelling of the positions of the engineers associated with this productive unit researched.

According to Martins (2014), with the cutting of the functions and the processes of outsourcing, a contingent of major leaders, the engineers, is shifted from their possible jobs. Thus, it is possible to work with the idea of professional isomorphism or isomorphism normative, using the nomenclature of DiMaggio and Powell (1983). According to the authors, the mechanism in which the professions and occupations are subject to coercion and mimetic pressure from other organizations is called isomorphism. Martins (2014) uses this concept to explain the adherence and proliferation of professional conduct in the financial area by social actors, and points out that this isomorphism can be in two ways: by formal education and the growth of the network between professionals (Scott, 1995).

Even more, Martins (2014) states that the financial elites control the social system through their command and positioning in front of the organisations. And in that way they create and recreate ceremonies and myths that can direct professional conduct to the benefit of their interests. For the author, the leaders who were excluded from their social spaces used financial legitimacy to subsequently work for financial capitalism.

The first realization is that directors of AES, mostly, have a degree in Engineering. This type of profession underwent transformations over the years after the financialisation process. According to Martins and Donadone (2018), as a result of these

transformations, in relation to the labour market, there are changes in the school education of directors and a board of directors, and the tendency to the internationalization of training in business and finance as a means of career maintenance and professional status.

As far as the profession is concerned, both before and after the privatization process, among the board of directors and directors, the profession that stands out is engineering. The process of internationalization is also highlighted through the degrees of the studied individuals. After privatization, there is an opening for courses carried out abroad and also in national institutes focused on administrative and financial management.

According to Martins (2014), Medicine, Law, and Engineering are the elite careers in Brazil since the beginnings. However, Engineering faces the need for its insertion in other areas – considered to be of lesser importance traditionally.

3. METHODOLOGY

For the development of this work, the focus is on the analysis of the careers of the company's leaders. It would be a study to verify who the agents of the company's change process are. It is aimed in this analysis to verify how the careers of the directors of AES Eletropaulo are built and rebuilt after the major transformations.

In this research, the Multiple Correspondence Analysis (MCA) was used, because at the first moment the presence of engineers in the ruling body of the AES was verified. Therefore, as it is a company that underwent transformations and walked to financialization model, the fact that there are engineers before and after privatization is a relevant data because it was investigated whether the engineer before the privatization, that is in the ruling body, is the same from the post-privatization period.

The name given in this research to the engineer to be analysed will be Type I (before privatization), and Type II (after privatization). It is expected in the MCA to verify if these types are the same. First of all, it is known that we have engineers in the leadership body of the AES company, before and after. However, what is expected in Multiple Correspondence Analysis is to associate this variable with others to form Types I and II.

These Types I and II must have interconnected characteristics, referring to the period before accumulated and after accumulated, characteristics that form a set. Seeks to find out what are the dominant attributes of the engineers, explain whether they are engineers of different types and also consider that we have two different groups to be analysed: the board of directors and the executive board, each with its defined functions within the organization.

From this analysis, the objective is to show that there is a set of variables related to Type I and a set of variables related to Type II. And that even though they are both engineers, they carry other associated variables that allow them to say that they are different Types of engineers at different times in the company.

The choice in analysing the board of directors and the executive board was due to the concept given, according to Bethlem (2014) that a company has two main functions: the proprietary function and the leadership function. The proprietary role in the AES company is exercised by the shareholders because the difficulty of meeting the shareholders was created the board of directors. And the leading function performs the determinations of the proprietary function, which in the case of AES Eletropaulo are the directors.

The methodology used to understand the Types I and II was the combination of two methods: quantitative and qualitative. For quantitative analysis, the MCA statistical tool was used, and for qualitative, the interview tool was used.

3.1. Data analysis technique: quantitative method - multiple correspondence analysis (MCA)

For the survey of who are the agents of the company, statistical analyses were made, for the analysis of the curriculum of its leaders, from its emergence as a state company in 1979 until the year of 2012.

The curriculum information of the board of directors and the executive board of the year of 2012 were withdrawn from the institutional site of the company AES. In the "Investor Relations" section, it was possible to have access to the summarized curriculum of the current board of directors and the executive board. Documents pertaining to the years between 1998 and 2008 were withdrawn from the library of AES Eletropaulo, the Historical Heritage Foundation of Energy and Sanitation, and mainly data from the Securities and Exchange Commission - CVM (2012). The information from the years between 1993 and 1997 was not yet scanned, however, could be found at CVM, so it was necessary a visit to the company. The names of the board of directors and the executive board from 1983 to 1986 of AES Eletropaulo were collected in the annual reports of the Historical Heritage Foundation of Energy and Sanitation.

As in the reports for the period from 1983 to 1986, there were only names of the board of directors and the executive board, but not their minicurrículos, the researchers resorted to search sites on the Internet. Those who are teachers were easier to find because they appeared on the sites of the University of São Paulo (USP) and on the curriculum platform. The difficulty with the others was due to the fact that, in the said period, several data are incomplete or difficult to find because of the lack of use of information technology. Thus, the reading of the curricula in this time interval was made with some gaps (Fundação Patrimônio Histórico da Energia e Saneamento, 2012).

When the company was nationalized, with the purchase of the company Light S.A., it was two years under the rule of the Federal government. Thus, it first two presidents were the same as in Eletrobrás, as can be seen in the Biographical Dictionary of the Brazilian Electric Energy Sector (Correa and Carneiro, 2002).

Among the variables selected for the analysis of the curricula, categories were created: University

of Undergraduate (abroad, state, private, federal, IBMEC/GV); Undergraduate Training (Engineering, Law, Economics, Administration, etc.); Graduate University (abroad, state, private, Federal, IBMEC/GV, do not have); Graduate Training (Engineering, Law, Economics, Administration, do not have); Professional past (government, AES Group, other 1 – Companies, other 2 – Union, academic and others, financial, electrical sector). It was considered IBMEC and GV as categories because they are renowned business colleges in Brazil.

As a sample of this research, 56 boards of directors and 21 directors were analysed, and this was the ruling body of the period before privatization (from 1993 to 1996). And from 1998 to 2012, 226 boards of directors and 85 directors were analysed, i.e. leaders of the privatization period.

3.2. Data analysis technique: Qualitative method – interviews

For the study of the company, throughout its history, from its creation to the present day, the qualitative tool interview was used. The interview was held on August 8, 2014, with Eduardo Bernini (2014), former president of AES Eletropaulo. He prepared the company for privatization (1996-1998) and returned to the presidency of the company in 2003-2007 when he sewed the agreement with BNDES (National Development Bank) for the formation of Brasiliana, a holding company that aggregates BNDES and the American group of AES. The interview was held on August 8, 2014.

3.3. Development

The operation of the MCA had data validation by the Statistical Group - Junior Company Planning & Consultancy, linked to the Department of Statistics of the Federal University of São Carlos - UFSCar.

Often when analysing categorical variables together and verifying the relationship between them, it is not possible to observe numerically the answers. For this, contingency tables are used, in which the numbers of simultaneous occurrences of the categories of all the characteristics in the study are organized (Roux & Rouanet, 2010).

The usual situation of analysis is to verify the existence or non-association of the variables in the study, considering the combinations two by two through Pearson's chi-square statistic, the equation used is given below (Equation 1):

$$\sum_{i=1}^{p}\sum_{j=1}^{p}\frac{(o_{ij}-e_{ij})^2}{e_{ij}} \qquad (1)$$

In this way, the values of the deviations in relation to the hypothesis of independence are studied, verifying the existence or not of association of the characteristics. It is known that, when they are independent, there is no relationship between them, but when there is the association, the knowledge of one of the characteristics implies the occurrence of certain values in the other with greater or lesser likelihood.

The analysis of correspondence is a multivariate exploratory procedure for the study of contingency tables, in which it is possible to observe these relationships. When there are only two variables in the study, the matching analysis is simple, while, for the case of more variables, it is multiple. This analysis, by its statistical properties and richness of interpretations, has become a very used method in the description of categorical data. Your two great goals are:

– analyse all the information contained in a contingency table;

– graphically represent the structure of this table.

The data in a survey is usually obtained by a questionnaire; in this case, it was collected at minicurrículos. The researchers have a standard list of mutually exclusive categories. Thus, researchers can associate each of them with a code, so that it can facilitate the interpretation of the results, as applied in this research.

In the case of MCA, the construction of a contingency table is impossible, due to the inability to "cross" all the observed characteristics, and it is necessary to seek alternatives such as the logical table and the Burt table.

The Burt table summarizes the information through a symmetrical table that presents the set of contingency tables that can be constructed by crossing, two to two, the observed characteristics. Thus, it presents:

– At the intersection of the J-th line with the J-th column, the value indicates the number of individuals presenting the J-th mode of a given characteristic.

– At the intersection of the J-th line with the K-th column, the value is equal to zero if the J-th mode and the K-th mode belong to the same characteristic.

– At the intersection of the Q-th line with the K-th column, the value indicates the number of individuals who simultaneously presented the Q-th mode of a characteristic and the Q-th mode of another characteristic.

The distance is calculated as follows – Note the Equation 2 given below:

$$d^2(j;j') = \sum_{k=1}^{k}\left[\sqrt{\frac{n}{p}}\left(\frac{n_{jk}}{n_{j\cdot}\sqrt{n_k}}\right) - \sqrt{\frac{n}{p}}\left(\frac{n_{j'k}}{n_{j'\cdot}\sqrt{n_k}}\right)\right]2 \qquad (2)$$
$$\frac{1}{p}\sum_{k=1}^{k}\frac{n}{n_k})$$

Following the calculation of distances, it is noted that two modalities of the same variable will be distant in the space of representation; two modalities common to the majority of the observed individuals will be represented by the same point in the space of representation. Already low-frequency modalities will be far removed from the others.

Therefore, from the Multiple Correspondence Analysis, it is possible to study all the individuals in question, based on the whole of all the variables, the relationships between all the modalities of the observed variables and summarize the set of variables in a small set of new quantitative variables related to the set of all the variables in the study.

Another important aspect is the contribution of inertia (variability) of a modality and the total inertia of the points. It is given by the following Equation 3:

$$Contrib(j)_{I_{G_M}} = \frac{1}{p}x\left(1-\frac{n_j}{n}\right) \qquad (3)$$

As a consequence, it turns out that the rarer a modality is, the greater its contribution to the total inertia of the point-modality cloud. Thus, this category will be isolated, making it difficult to interpret the others. It can also be observed that the total inertia will be given by Equation 4, presented below:

$$I_{G_M} = \sum_{j=1}^{K} Contrib(j)_{I_{G_M}} = \sum_{j=1}^{K} \left(\frac{1}{p} x \left(1 - \frac{n_j}{n}\right)\right) = \frac{K}{p} - 1 \quad (4)$$

That is, total inertia is a fixed value and depends solely on the number of variables observed and the number of modalities defined for these variables.

To define the number of axes to be used for analysis, an alternative generally used is to analyse the structure of the growth of auto values. In this case, the axes whose auto values do not fall under the "regular" form of auto values should be investigated.

The software used to perform the Multiple Correspondence Analysis was the Statistical Analysis Software – SAS, which would be more appropriate for programming flexibility. The Statistical Package for the Social Sciences - SPSS software was also used, as it presents a practical data and graphics facility. Even using SAS or SPSS software, the results obtained should be the same. The graphic result was analysed in a subjective manner by the researchers.

4. RESULTS

In Table 1 below are the variables and categories created for analysis of the curriculum of the executive board and the board of directors of AES Eletropaulo. Aiming for a better graphical presentation, a caption was prepared for the possible responses of each variable.

Table1. Legend of the variables

Variable	*Answers*	*Legenda*
Undergraduate Universities	Abroad	G1
	State	G2
	Particular	G3
	Federal	G4
	IBMEC/FGV	G5
Formação da Graduação	Graduate of engineering	GF1
	Law	GF2
	Economics	GF3
	Others	GF4
	Business	GF5
Universidade da Pós-Graduação	Abroad	PG1
	State	PG2
	Particular	PG3
	Federal	PG4
	IBMEC/FGV	PG5
	Do not have	PG6
Formação da Pós-Graduação	Graduate of engineering	PGF1
	Law	PGF2
	Economics	PGF3
	Others	PGF4
	Business	PGF5
	Do not have	PGF6
Passado Profissional	Government	PP1
	AES group	PP2
	Others 1 (companies)	PP3
	Outros 2 (unions, academics, others)	PP4
	Financial	PP5
	Electricity sector	PP6

Source: Prepared by the authors

4.1. Pre-privatization period

To have a certain notion of the academic and professional profile of the board of directors and directors of the AES from 1993 to 1996, a descriptive analysis was carried out, keeping the positions in accordance with their two possible options 56 boards of directors and 21 directors were analysed.

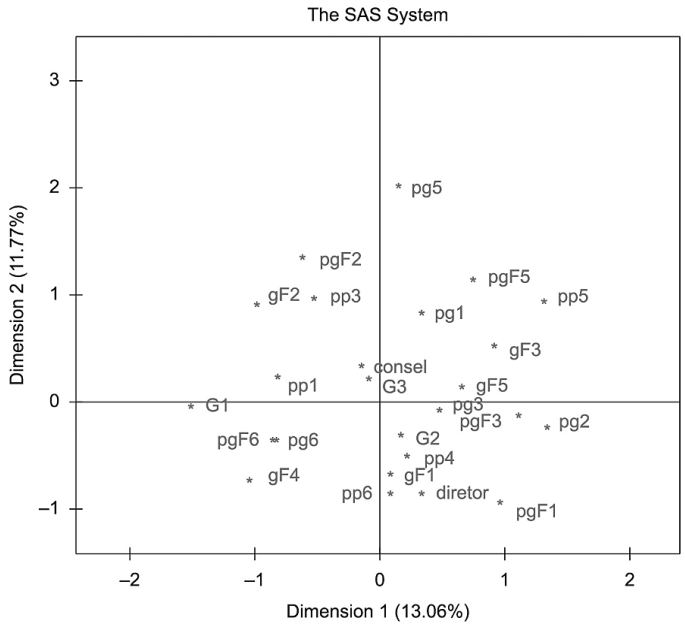
Figure 1 graphically shows the result of Multiple Correspondence Analysis representing the two dimensions.

In considering the categories grouped in Figure 1, it is possible to infer that: directors tended to have graduated in state universities in the Engineering course, as well as the post-course. The professional past was in the electric sector or in trade unions, Academy (GF1, PGF1, PP4, G2, and PP6). Board of directors tended to have graduated from private universities, post abroad and professional past in government areas (G3, PP1, and PG1).

4.2. Post-privatization period

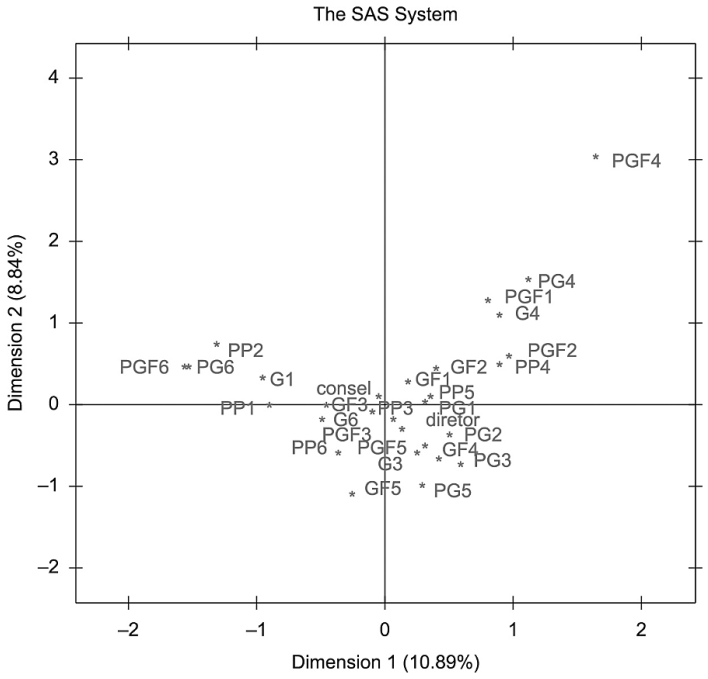
In order to have a certain notion of the academic and professional profile of the board of directors and the directors of AES from 1998 to 2012, the research carried out a descriptive analysis of the positions according to their two possible options 226 boards of directors and 85 directors were analysed. The following is the graph obtained through the Multiple Correspondence Analysis representing the two dimensions.

Figure 1. Graphic of the correspondence analysis without the categories PG4, G5, and G4-Pre-privatization period



Source: Prepared by the authors

Figure 2. Correlation analysis graph-privatization period



Source: Prepared by the authors

In this way, by Figure 2, you can identify the grouped categories, and so it is inferred that:

– directors tended to have graduated in Engineering and Law, post at universities of the foreign or state and the professional past in the financial sector (GF1, GF2, PG1, PG2, PP5);

– board of directors tended to have graduated from private universities in the course of economics, as well as the course of the post. The professional past in the electrical sector or in other companies (G3, GF3, PGF3, PP3, PP6).

5. DISCUSSION

The results obtained from MCA are organized in the theme "reconverted engineer". This is a discussion on the main career of the company's leaders of AES Eletropaulo in the present. On this occasion, the conversion of the career of its leaders is discussed, according to the changes in the structure of the company.

According to the results of the MCA, directors before the privatization tended to have graduated in

state universities in the Engineering course, as well as the graduate course in the same area, and the professional past in the electric sector or in trade unions and Academy (GF1, PGF1, PP4, G2, and PP6). In the period after the privatization, the directors tended to have graduated in Engineering and Law, the graduate degree in universities abroad or state and the professional past in the financial sector (GF1, GF2, PG1, PG2, and PP5).

This trajectory of the director, called in this research "reconverted engineer", is discussed through the interview with Eduardo Bernini. It is presented how these engineers create their trajectory at different times of the same company.

5.1. Reconverted engineer from AES Eletropaulo

Jardim (2011) is supported by two French authors to explain the concept of conversion, applying it to the Brazilian case. Thus, studying the interest of Brazilian trade unions for complementary pension, the author advocates the passage of the traditional strategies of struggles for "new union strategies", understood as the management of funds of pension in the financial market. The "movement" of the unionists towards the financial market is called the conversion, that is, a change that assumes not only change in the social space but above all cognitive alteration, of body, of language, symbolic, of new allies and new alliances, etc. Therefore, considering its empirical field (union management of pension funds), the author states that the conversion is the key to interpreting the mechanisms of social change, or, on the contrary, the absence of change. Being that reclassification means the result of the conversion of success. In this way, when it comes to the course of conversion, reclassification and downgrading are two opposing terms (Jardim, 2011).

With inspiration in the Jardim (2011) argument, we indicate that the engineers of AES Eletropaulo make the conversion towards the financial market, which legitimizes and justifies the maintenance of positions of elite position. Despite the lack of administrative training, the engineers seek legitimacy through degrees in the business areas, with a view to the new administrative requirements to deal with the stakeholders of the company, in the post-privatization period, focused to the financial market.

Thinking of AES Eletropaulo, there is an example of the scenario of a company that goes through the movement of financialization and incorporates precisely the aforementioned engineers-reconverted. Through the analysis of the curriculum of the directors (the board of directors and the Executive board) of AES Eletropaulo, since its emergence as a state company in 1979 until the year of 2012, it is understood the reconversion of the career of its engineers.

In Eduardo Bernini's interview, he reports that AES Eletropaulo is an engineering company. The respondent says that engineers, after privatization, need to acquire more diversified skills by the high degree of exposure of the company to the market, referred to by corporate governance rules. Eduardo Bernini says:

"With post-privatization it continues to be an engineering company, but whose professional profile, by the demands of the new regulatory structure in which this business operates, has started to require a set of more diversified skills. And the last layer of diversification of skills was when obviously it became a company with a high degree of exposure to the market and had to be governed by the rules of corporate governance".

Eduardo Bernini talks about the trajectory of the former president of AES Eletropaulo from 2007 to 2016, Britaldo Soares:

"Britaldo left the College of Minas, graduated from Belo Horizonte directly to Citibank, to the Citibank trainee program, and never in life has he left the financial sector. And you will find certain evidence in the curriculum of Brazilians, in which the engineers became juice the day they formed. They cease to be engineers and will be financial administrators or will be managers. The strategies today have of course the condition of how to meet these multiple interests of the stakeholders".

Eduardo Bernini in his interview states: "You have a financial engineering, a regulatory engineering, which are not really Engineering, and it complements, where you have today the need for professionals very specialized in regulation and not generalists, many skilled professionals in the financial structuring of this business, which has even very large peculiarities". The former president clarifies the need for major specializations in order to meet the needs of the company's negotiations with the public and the private.

On the position of the board of directors, the former president of AES Eletropaulo, claims to have advisers of different types within the company: independent, internal and external, required by level 2 of corporate governance, in which the company AES Eletropaulo is. (Level 2 is a corporate level for Governance at Bovespa - Bovespa is the São Paulo State Stock Exchange).

In this sense, it is interesting to observe the finding of Bethlem (2014) on the existence of three types of advisers: The independent, external and the internal counsellors. Returning to Eduardo Bernini's position:

"Internal board of directors is a board of directors who are appointed by the AES Corp. and who exercise some type of professional activity linked to them. They are directors of other companies, or are directors of the AES Corp., or are directors of the holding, but are essentially employed in the activities that are indicated to compose the Board of director of subsidiaries or of participants.

The external board of directors is the adviser who at some point in his professional life had some employment or contractual bond with the AES Corp., so he may have been a former director, an external lawyer or a consultant who had some kind of contract with the controller, and then he is not an independent board of directors. The internal board of directors is a professional who has employment or contractual ties with the controller today, the external may not have this employment contractual bond, but has had it in recent past.

And the independent board, which is by exclusion, is one who has had no previous link with the controlling group and not with the company and the rules of the New market, the governance of the New market, the companies with that level have to have at least 20% of their Council composed of an independent".

For the way in which the curricula of the board of directors of AES Paulo were analysed, and how the results were grouped, this new form of governance is a relevant data. Also, the former president explains that in the period before privatization, the indication for the board of director was based on a policy of relationships: "In the Pre-privatization, the indication was dysfunctional, it was evidently of a political nature of relationships, and it was an honorific council, although it had all the responsibilities that the laws of A.S. foresee for the board of directors".

Already in the post-privatization period, he says that there was more transparency of choice of board of directors, motivated by the corporative governance rules of level 2 of Bovespa: "Today, to meet level 2 of Bovespa, and the fact that the 52% of its capital sprayed in the stock market, today you have a composition of independent counselors. If I am not mistaken, there are four independent counselors who would fall within this categorization".

Thinking about the results of the Multiple Correspondence Analysis on the characteristics of the board of directors before the privatization, already exposed, and in the classifications given by Eduardo Bernini, it is easier to understand why the differences of professional past of the board of director. Before the privatization, They were occupied by professionals who built their professional past in the government, that is, the nomination, cited by the former president, occurred by political ties; In the period after the privatization, for the greater transparency in the company of open capital, and belonging to level 2 of corporate governance, with the existence of independent, internal and external board, appear the advisers who had passed professional in other companies and in the same sector.

5.2. Final considerations on the reconverted engineer

Inspiring us in the concept of conversion given by Jardim (2011), the reconverted engineer of the company case seeks ways to stay in elite positions, acquiring degrees in the business area, according to the new needs of the company, which before was industrial and today financial, that is, focused on the interest of shareholders. The engineers end up having to communicate with different areas of the company and respond, according to former president Eduardo Bernini, to public and private contracts, and to meet the interests of various stakeholders in the new environment in which the company is inserted. The reconverted engineer is the figure that legitimizes himself and stays in charge in the post-privatization period.

Several authors highlight this change in the career of the engineer according to the socio-political-economic scenario. They show that there have been changes in companies in the period of Fordism to the post-Fordism, culminating in the same period the transformation in the companies of a productive capitalism for financial capitalism. And that these modifications eventually impacted on the careers of the leaders, in this case, the engineers.

The educational relationship is linked to the type of production. In the Fordist period, efforts were focused on engineering specialties. In the years 1980, with the crisis of Fordism, changes occurred in the formation of the profession of engineering: there was the requirement of social knowledge because their skills should be extended to other areas and not only technical ones. In addition, they had to acquire knowledge in commercial, managerial, administrative, cost and leadership areas. It was the change of the industrial capital to the commercial and financial, according to Martins (2014) and Crivellari (2000).

Eduardo Bernini said that, after privatization, the engineers needed to acquire more diversified skills, by the high degree of exposure of the company to the market, reflected by the rules of corporate governance. He talks in his interview about the former president of AES Eletropaulo, Britaldo Soares, who acts as a financial professional and has worked as Chief Financial Officer – CFO (financial director in Brazil) before the company has a relationship area with investors. This need arose from the reorganization of the sector and required a new type of professional with administration specialties to manage the various stakeholders of the chain.

Already on the role of the executive board, the former president spoke of the need for internal, external and independent advisers, due to the requirement of level 2 of corporate governance. He points out that prior to privatization, the indication for the CA was based on a policy of relationships, and the indication was made in a dysfunctional manner.

In the face of the above, it is understood that the engineers accumulate new capitals – social, educational, cultural, for example – needed to meet the changes in the company. And this conversion of engineers to the financial market, through the search in administrative areas, is a way to demonstrate understanding and adaptation of this class to changes in society and its classifications and reclassifications (Matsuda & Donadone, 2015).

6. CONCLUSION

As a result, it was possible to observe a series of transformations in the company AES Eletropaulo in the period post-privatization. Especially its leaders, analysed in this research, had to create ways to rebuild their careers, according to the new prevailing logic of the moment, focused on the financial focus.

As was raised at the beginning of this research, there was the presence of engineers in the leadership body of AES Eletropaulo, and with the process of financialization of the economy, (Froud et al., 2006), it was tried to verify whether these engineers are the same, because it is a company that was privatized and, as a consequence, went through the financialization process.

Finally, it comes to the conclusion that the capacity for reconversion is very large in these companies that the engineers end up reconverting their careers. The analysis presents data with periods accumulated before and privatization by means of Multiple Correspondence Analysis.

With this analysis, applied in the period from 1993 to 1996, it was possible to identify groups in which the directors tend to have their characteristics explained by having studied in state schools, engineering with experience in the electric sector, Union and Academy. Already in the privatization

period (from 1998 to 2010), the directors tend to have their characteristics explained by the study at State University, abroad, in Engineering or Law, and for the career built in the financial sector.

The board of directors tends, before privatization, to have their characteristics explained by the study in private school, abroad, and worked for the government. Whereas, after privatization, the characteristic of the board of directors is the study in private university, courses of economics, post in economics and professional performance in the electric sector and in other companies.

The retraining of the engineer in the company AES Electrical case is defined by a new strategy of acting at the international level of the group AES Corporation, to which the AES Eletropaulo belongs. The conduct of the business by the group consists of a constant financialization policy.

As a result of these transformations, in relation to the labour market, there are changes in the school education of directors and the board of directors, and the tendency to the internationalization of training in business and finance as a means of career maintenance and professional status.

As far as the profession is concerned, both before and after the privatization process, among the board of directors and directors, the profession that stands out is engineering. The process of internationalization is also highlighted through the degrees of the studied individuals. After privatization, there is an opening for courses carried out abroad and also in national institutes focused on administrative and financial management.

The new professional, presented by studies in AES Eletropaulo, follows the line of the new elite worker, with directors who studied abroad and in financial areas. The figure of the Engineer remained, as explained earlier, for being an elite profession that, over the years, has remodelled his career, and for his need in an electricity supply company. Finally, the advisers switched from the company, that is, they worked in other companies before to reach the top.

The word reconversion to the engineer arises in the first time coinciding with the transition periods of Fordism to the post-Fordism, which occurs concomitantly with the change of industrial company to financial company. These workers update themselves through courses and degrees, acquire new skills in the human, administrative and social areas, to become more flexible in the first moment of organizational change and reconvert themselves into engineers who work in financial areas at a second time, so they can stay in their elite positions. All this marked and explained by the preference of hiring of engineers in the large Brazilian companies for high ranking positions.

This paper contributes to the literature in the sociology economics one of the few studies located in Brazil in this field that analyses the history of the company about career reconstruction after the change of ownership.

Despite the limitations of this study in one large Brazilian electricity sector company that has undergone the process privatization, it is recommended this study to other Brazilian companies. The study also complemented the literature review about career conversion after the financialization process.

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