FACTORS THAT INFLUENCE THE CORPORATE GOVERNANCE: THE PORTUGUESE REALITY.

Pedro Vaz[1] (email: pedro.vaz@braviclasse.pt)
Elísio Brandão[2] (email: ebrandao@fep.up.pt)
University of Minho, School of Economics and Management, Department of Management
Campus de Gualtar, 4700 Braga, Portugal
University of Porto, Faculty of Economics, Department of Management
Rua Dr. Roberto Frias 4200-464 Porto, Portugal

Topics of the Conference: Ethics and Corporate Governance.

ABSTRACT
The goal of this paper is to study the factors that can influence the corporate governance, in particular, the impact of the chief executive office, CEO, in the performance of the firm. Firstly, we present the contributions of two schools, some studies concerning the concept of firms, their ownership and control as well as studies related with the impact of the CEO in the performance of corporate. Secondly, we analyse, from a statistical point of view, a sample of 5283 Portuguese firms belonging at 24 industries (3 digit, sic codes) and use the Wasserman, Nohria and Anand (2001) methodology for the statistic treatment of data. The research found evidence supporting the hypotheses that the CEO is a factor that has an impact on the performance. He has an higher impact when the industry's level of growth and debts are more important and where the level of concentration is lower.
KEY WORDS: Corporate Governance, Performance, CEO.

1. INTRODUCTION

One of the subjects of great actuality in the domain of the corporate finances says respect to the corporate governance. The main objective of this study is to analyse the factors that influence the government of the companies, in particular the influence of the chairman of the board of administration, CEO, in the performance of the firm.

For Montgomery and Kaufman (2003) the three components of the triangle (shareholders, CEO, and Board of administration) lead to mutual responsibilities and the exchange of information. The decision of the SEC, to demand to the North American CEO that personally certify the declarations of its companies who contain financial objectives, seem to strengthen the direction of CEO's responsibility.

The defenders of the call conventional management, supported, among others, for Thomas (1988), claim that the CEO can have a significant influence in the performance of the companies. From its position they elaborate the strategy, the organisational structure and the culture of the company. Making it, they are capable to detect the chances and to use to advantage them in benefit of the companies.

On the other hand, Hannan and Freeman (1989) among others, argue that the CEOs are so constrained by its half involving that its capacity to influence the performance of the companies is small. The culture of the company, the structure of the industry sector and the capital assets are inertia forces that reduce the capacity of the director to adopt the measures that have an impact in the company.

With the present study it is intended to analyse, with a sample of Portuguese companies, the impact of the CEOs in the performance of the companies. We desire to know what are the industries that have a more important impact in function of the level of growth, the debts and the concentration.

Taking regular intervals of time, for the same sample, we analyse the behaviour of the CEO of the Portuguese corporates through the time.

Our study, following the line of research of Wasserman, Nohria and Anand (2001), is focused in the circumstances where the CEO is a differentiated factor, that is, is has an important role in the performance of the corporate. The results, of the CEO, change in function of the characteristics of the industries. This perspective is fit in the "boarding of the contingencies" that strengthens for deciding the conflict between

[1] Research Student at University of Minho.
[2] Full Professor of Finance, at University of Porto, Faculty of Economics and Management

two lines of research: the pro direction school and the pro constraint school, whose main ideas were already presented during another meeting by Vaz and Brandão (2003).

The remainder of the paper is organised as follows. Section 2 will present the theoretical literature. Section 3 will describe the sample, the hypotheses, the variables, the model and the methodology. Section 4 will discuss the main results. The section 5 concludes.

2. REVISION OF LITERATURE

To understand the corporate governance it will be advisable to present some concepts of companies. The agency problems between the shareholders and the managers as well as among these and the creditors. We analyse the conflicts between the dominant shareholders and managers, on the one hand, and the small shareholders and the creditors, on the other hand. We will present the main ideas of two lines of thinking concerning the impact of the CEOs in the performance of the companies. For ending this section, we will display some empirical studies closely related with this matter.

2.1. Companies and its Governance

For Modigliani and Miller (1958) the companies are seen as a set of investments and "cash flows" that they generate is interpreted as proper debts and capitals. These authors do not interrogate themselves on the reasons that lead managers to return "cash flows" to the shareholders.

According with Jensen and Meckling (1976) the company is seen as a set of contracts between the different groups that have interests in it. They identified two kinds of conflicts. The first oppose the shareholders to the managers (concerning the policy of investments, considered not optimised by the shareholders). The other oppose shareholders and managers, on the one side, and the creditors, on the other side. This conflict is motivated by the dividend policy. In accordance with these authors the devolution of "cash flows" to the shareholders cannot be considered as certain.

Grossman and Hart (1988) and Hart (1995) has focused in the power of the investors face to "insiders", the right to the residual and contractual control. For these authors, the investors are only remunerated because they have power. The power is shown in the capacity to deliberate in the general meetings, for example, in substance of politics of shares, nomination and destitution of the **social agencies** of the companies, etc. according to these authors the alteration of the structure of capitals leads to an modification in the composition of the power between "insiders" and "outsiders" and, therefore, in the politics of investments and the government of the companies.

In the context of the right of contractual control, of Jensen and Meckling (1976) and residual, of Grossman and Hart (1988), the investors have its rights protected.

For La Porta, Lopes-de-Silanes, Shleifer and Vishny (LLSV 2002) the problem of agency appears between managers and dominant shareholders, on one hand, and external investors (small shareholders or investors and creditors), on the other hand. In accordance with these authors, the differences between the companies of the different countries are justified by the level of protection of the investors, the legal disposals of the countries and the effectiveness in its application.

Brandão E. (2003) evidenced the different concepts of company, the modalities that can assume the expropriation of the creditors (minority shareholders and creditors) by insiders (dominant shareholders and managers), the sources of protection of the investors, the consequences of the protection, as well as the principles that the protection must obey.

In accordance with Burkart, Panunzi and Shleifer (2003) exist two paradigms of corporate governance: the paradigm Anglo-Saxon centred in the conflict between the shareholders and the managers and the paradigm of the rest of the world centred in the conflict between great and the small shareholders. For these authors the two paradigms are special cases of an only model of management succession. In accordance with this model, the founder can simultaneously decide to contract an exterior professional manager and the number of shares that must be introduced in the stock market. The decision is influenced by the degree of legal protection of the minority shareholders since this degree affect the succession and the excellent shareholder’s structure.

Dyck and Zingales (forthcoming), had analysed the private benefits of control in 39 countries, having used 393 transactions of control, between 1990 and 2000 and had evidenced that the average value of control corresponds to 14 percent of the value of the proper capitals of the company. However, in some countries, as Japan, the value was four percent negative, and 65 percent positive, as in Brazil. The biggest private benefits of control are associates with the less developed stock markets, a bigger concentration of the shareholder's structure and privatisations done by direct negotiation.

In accordance with Burkart, Panunzi and Shleifer (2003) there are three theories relative to the benefits of a family to preserve the control of a company. In accordance with the first one, exists significant "potential of amenity" in the control of the families. The term "amenity potential", suggested by Demsetz and Lehn (1985), mentions to the private not pecuniary benefits of control, meaning utility for the founder that does not come by the cost of the profits. The second theory for the preservation of the control for the family is based on the fact of the name, itself, might be a reputation career, in the economic and politicians markets. The third theory to justify the control is arrested with the possibility of expropriation of the external investors in the terms of Jensen and Meckling (1976).

2.2. Lines of Research concerning the impact of the CEO.

The studies concerning with corporate governance diverged in its evaluations of the impact of the CEOs in the performance of the companies. The "pro direction school" argues that the CEOs have great impact in the performance of the companies. The "pro constraint school" supports that the directors are very regulated by their constraints to affect performance.

2.2.1. Pro direction school

The studies fit in this boarding support that the CEOs, when adapt the missions, strategies, structures and cultures of its organisations to respective environments, have a substantial impact in the performance of the companies.

Child (1972) argues that the CEOs make strategically material options that can influence the performance of the company. These strategically options not only include the establishment of structural configurations but also the manipulation of the main characteristics of the involving environments, as well as the choice of parameters of performance.

Drucker (1954) is an energetic defender of the direction approach for who the quality and the performance of the managers determines the success of a business and its survival.

According to Barnard (1938), the CEOs are the force that creates, observes and studies the chances and, in this way, stimulates the differences in the organisational performance. For example, the CEOs formulate the collective rules that bind the members of the organisation.

In accordance with Thompson (1967) the CEOs also adapt the organisational structures in answer to the technological and market changes. When organisational contingencies change significantly also the strategies selected by the directors differ, producing, thus, great variations in the performance of the company.

Kotter (1996) defends that the CEOs can be crucial agents of change, through development of a strategically vision, establishing a direction of urgency, forming a coalition guided to support them, getting victories of short term to construct the moment and institutionalise new approaches.

Rotemberg and Saloner (1998) argue that the central task of the CEO is to have the vision to take idiosyncratic options. The directors who have such vision can have a great impact in the performance.

Khurana and Nohria (1999) defend that the different ways by which the CEOs reach its position affect the performance of the company. While that the CEOs that arrives at a company after a forced turnover of its predecessors, tends to develop the performance of the company, the CEOs who reach its position normally harms the performance.

For Wiersema (1992), the CEOs external has greater probability to provoke significant changes in the strategy of the organisation.

However, as the CEOs are very different in its qualifications and capacities, as well as in its perceptions and beliefs, its actions will probably differ very significantly. By all these reasons, are waited that the CEOs contributes in wide measured for the efficient performance of the companies.

2.2.2. Pro constraint school

The pro coercion or pro constraints school supports that external factors to the CEO impose as many constraints to its shares that its impact, in the performance of the company, is limited. Both constraints, internal and external, hinder the CEOs to produce an impact in the performance of the company.

Hannan and Freeman (1989) defend that inertia hinders the executives to modify the strategy and the structure in order to react to the changes of the involving environment. Examples of internal factors of inertia sources are the internal politics, the existing systems of control, the investments in fixed assets and the organisational norms. And examples of external factors of inertia sources are the barriers in the exit or the entrance of the markets. The inertia forces hinder the majority of organisations to quickly modify the strategies and the structures. For that, Hannan and Freeman (1989), conclude, that the CEOs does not contribute for the addition of wealth in the organisations.

For Burkhardt (1991) the existing relations of power will provoke inertia when the attitudes and the behaviours become highly institutionalised.

As Martin (1992) the existence of various cultures in an organisation can inhibit the efforts of the CEOs to change the organisation.

For Simon (1976) the inherent complexity to the management decisions imposes cognitive, organizational and political constraints to the decision taking.

As Powell and Dimaggio (1991) the impact that the CEOs can have is also limited by its unreflective behaviours that show practical and institutionalised beliefs and took as granted.

Instead of having idiosyncratic visions that shape its actions, Pfeffer (1977) argues that the managers of career and the institutionalised processes of selection filter the entrance of idiosyncratic people and result in a relative homogeneity between CEOs. In consequence, the CEOs will not be apt to have great impact in the organisational performance since they are severely constrained in its capacities to take decisions that affect their companies, so that are not expected that the CEOs have great influence in the total variation.

2.2. Empirical studies

The results of the empirical studies, concerning the impact of the CEOs in the performance of the companies, do not lead to the same impact.

Lieberson and O'Connor (1972) have led a pioneer study on this subject. With a sample of 167 companies, in the period of 1946 to 1965, had examined the impacts that the year, the industry, the company and the director had in the profit edges. Using a sequential decomposition of the variation (deducting first the effect of the year, after the activity sector, the company and finally of the director), they had attributed the variation in the performance to each one of the four factors and had evidenced that the effect of the directors represents 14,5% of the total variation in the profit edges, and the activity sector explains 25,8% of the variation, having the biggest impact in the yield.

In a replication to the study of Lieberson and O'Connor (1972), Weiner (1978) used a sample of 193 industrial companies during the period between 1956-1974. In this work, discovered that the directors were responsible for 8.7% of the variation in the profit edges.

Weiner and Mahoney (1981) had observed that the directors explained 12,8% of the variation in the yield, in the line of the results of Lieberson and O'Connor (1972).

More recently, Thomas (1988) used a sample of 12 retailing companies of the United Kingdom, and evidenced that the director explained only 5,7% of the variation in the yield.

The study of Johnson (2002) it is leaned over on the conditions where a CEO produces an impact in the company. For Wasserman, Nohria and Anand (2001) exist two dimensions that influence the magnitude of the impact of the CEOs. The first one is the availability of resources and the second a scarcity of chances.

Wasserman, Nohria and Anand (2001) used the model of decomposition of the variation to analyse the impact of the CEO, having elaborated it from the methods introduced by Rumelt (1991) for the decomposition of the performance of the company in components, such as, the activity sector, the company. This method helps to explain the importance of each factor instead of only indicating that an independent variable is significant.

Schmalensee (1985) decomposed the performance of the company in function of the sector of corporate (the sic code) and arrives to explain 20% of the variation of the performance. However, this author used data concerning alone one year, 1975, do not estimated the impact on performance explained by the effect of the year.

McGahan and Porter (1997) used data relative to 14 years (1981-1994) and, had been capable to add to the variable relative to the sector and the company the variable relative to the year. They used hierarchic regressions, by the method of the ordinary least squares (OLS), in which they had reintegrated the performance with the variable of year, variable of year and sector, as well as variable of year, sector and company. Thus, as indicator of the importance of each class of effect they used R^2 generated by the addition of each variable to the regression to explain the performance of the company. In the total, they had concluded that the factors year, sector and company explained 52% of the variation of the performance.

Wasserman, Nohria and Anand (2001) extended the approach of McGahan and Porter (1997) including the effect of the CEO. They tested how much of the variation in company performance was explained by the year, industry, company and director effects. As well as, using the approach of the contingencies they had tested in what circumstances the CEOs have a significant impact.

3. SAMPLE, HYPOTHESES, VARIABLES, MODEL AND STATISTICAL METHODOLOGY

The sample was formed from the database of the “Central de Balanços” of the Portuguese Central Bank that includes aggregate data of 5283 companies pertaining to 24 industrial groups, 32 class and 63 sectors of activity. We considered only the sectors for which it was possible to get the decomposition of the variation for four-independent variables that appear in the methodology adoptee, in a total of 38.

The sample says respect to the years from 1993 to 1999 because in this period the classification of the sectors did not suffer significant alterations.

The tables edited by the Portuguese Central Bank had obeyed the following conditions: the aggregate has more than three companies; the added value of a company represents less than 75% of the added value of the aggregate; the sample did not get classification "very weak" according to criteria of the Portuguese Central Bank.In the groups of industries we choose the ones that contained data for the classrooms and sectors of activity.

The data relative to the concentration had been gotten from the database of the National Institute of Statistics, INE, for the companies belonging at our sectors of activity and was grouped by classes.

The testing hypotheses are the following ones:

Hypothesis 1: The effect of the CEO varies in function of the activity sector.

Hypothesis 2: In sectors with high concentration, the CEOs will have greater impact than in sectors with low concentration.

Hypothesis 3: In sectors of high growth, the CEOs will have minor effect in relation to sectors with low levels of growth.

Hypothesis 4: CEOs in situations of high indebtedness will have little effect

Hypothesis 5: CEOs in situations of high slack will have high effect.

In accordance with Wasserman, Nohria and Anand (2001) in sectors with high constraints to the commercial exchanges and high concentration, the opportunities are scarce. In these conditions, the capacity of the CEO to get advantages of all the chances is an important element in the performance of the company.

Wasserman, Nohria and Anand (2001), reiterate that in the sectors where the chances are abundant, if a CEO loses a chance, its company will be capable to possess another chance with relative easiness. On the other hand, in industries of low growth, the actions of the CEO will have greater impact in the performance of the company since the chances are scarce and to take advantage of all is important.

When a company has a high indebtedness tax, the probability of undo the payment is high. Thus, the creditors will be much more rigorous when analysing add of credit by the company, reducing the impact that the CEO can have. For these reasons, high indebtedness wills constraint the actions of the CEO.

The variable used to quantify the performance of the company is the return on Asset-ROA. This ratio was also used by Wasserman, Nohria and Anand (2001).

Table I shows the definition of the used variables.

The effect of the CEO is affected by the structure and dynamics of the activity sector, which stimulates the scarcity of chances, and the availability of resources, that, in turn, stimulates the capacity of the CEO to take off advantage of the chances that appear to it. In this way, to test the other hypotheses, we shape the boosters of the effect of the CEO, using variables that characterize the sector and we test its main characteristics that are associates with the effect of the CEOs.

Table I

Definition of the variables

This table prosecutes the variables, used by us, in the test of the first hypothesis that defines that the effect of the CEO varies in function of the activity sector. This table shows the authors who had also used the cited variables.

Item	Variable	Definition	Authors
1	Effect of the year	"dummy" that reflect the macro economic conditions, such as the state of the financial markets and the stage of the business cycle	•**McGahan**, A.M.; **Porter**, M.E. (1997). • **Wasserman, Nohria ; Anand** (2001).
2	Effect of the activity sector	"dummy" that reflect the conditions that affect the competitive environment between the companies of a given activity sector	•**McGahan**, A.M.; **Porter**, M.E. (1997). • **Schmalensee**, R. (1985). • **Rumelt**, R.P. (1991). • **Wasserman, Nohria ; Anand** (2001).
3	Effect of the company	dummy" that reflect the competitive disadvantages or advantages unique to a particular company, and show when its performance consistently differs from the average performance of the companies of its sector of activity, in a given year.	•**McGahan**, A.M.; **Porter**, M.E. (1997). • **Schmalensee**, R. (1985). • **Wasserman, Nohria ; Anand** (2001).
4	Effect of the *CEO*	"dummy" that reflect the impact of the CEO in the performance of the company. This effect arise when the CEO takes decisions that result in actions that affect the performance of the company, and are noticed when it consistently differs from the average of the remaining companies of its sector of activity, in a given year.	• **Wasserman, Nohria ; Anand** (2001).
5	ROA (Return On Assets)	Return on Assets is used as measure of performance of the company. Ratio between operating income to total assets	• **Schmalensee**, R. (1985). • **Rumelt**, R.P. (1991). • **Gunduz**, Lokman; **Tatoglu**, Ekrem (2001). • **Ke**, Bin; **Petrony**, Kathy R.; **Safieddine**, Assem (1999). • **Barber**, Brad M.; **Lyon**, John D. (2001). • **Guardino**, John; **Johnson**, Jane L.; **Borde**, Stephen F.; **Thome**, Theodore (1996). • **Easton**, George S.; **Jarrell**, Sherry L. (1997). • **Shelor**, Roger M.; **Anderson**, Dwight C. (1998).
6	Tax of concentration	Boolean variable that takes the value 1 if average results of 8 companies of the sector > 80% of the total results.	• **Wasserman, Nohria ; Anand** (2001).
7	Tax of growth of the sector	Tax variation of sales and rendering of services	• **Wasserman, Nohria ; Anand** (2001).
8	Tax of indebtedness (of the sector)	Ratio that measures the relation between the other capitals of not commercial nature (accounts of shareholders, partners, financings and short-term debts to financial institutions) and the proper resources.	• **Wasserman, Nohria ; Anand** (2001).
9	Slack	Ratio that it indicates in what measure the immobilized values is covered by steady resources	• **Wasserman, Nohria ; Anand** (2001).

To test the effect of the CEO we analyse the variation in the performance of the company (dependent variable) outperformed by the independent variables, verifying the part of the additional variation that is explained, each time that we add a variable to the regression.

The methodology consisted of the following: First in using the regression, using the dependent variable and the variable year, and observing the amount of variation explained by the year (R^2_{Year}). Second, to add the sector of activity to the regression, which started to include the year and sector of activity as independent variables. The additional amount of explained variation (difference between the new regression R^2 and R^2_{Year}) is the additional amount of variation explained by the sector of activity ($R^2_{Industry}$). Third, to add the variable company to the regression, we started by including year, Industry and company as independent variables. The additional amount of variation (the new R^2 of the regression minus $R^2_{Year}+R^2_{Industry}$) is the additional amount of variation explained by the company ($R^2_{Company}$). Finally, to add the CEO to the regression, which started to include the four, independent variables. The additional amount of explained variation (the new R^2 of the regression minus $R^2_{Year}+R^2_{Industry}+R^2_{Company}$) is the additional amount of variation explained by the CEO (R^2_{CEO}).

In accordance with the available data that accuse that the capital of the companies is withheld in its majority for its administrator, we esteem the effect of CEO from the values gotten for the effect of the company. To test in what measure the effect of the manager varies by activity sector (Hypothesis 1), will be appealed the basic analysis, using these regressions for the different sectors. For each sector we sequentially divide the variation of the performance of the company by year, company and CEO, calculating the explained incremental variation, through the addition of each independent variable to the regression.

For the remaining hypotheses, the vector of the observed effect, when testing the hypothesis of that the effect of the CEO varies in function of the activity sector, is our dependent variable, and our independent variables are the factors that probably affect significantly the effect of the director: structure of the sector of activity and the availability of resources.

To test the hypotheses 2 to 5, will be appealed to the correlation analysis. As measure of the degree of linear association between the variables, we will use the Coefficient of correlation of Pearson. For each one of the hypotheses we analyse the relation between the dependent variable, effect of the CEO, and each one of the independent variables.

4. RESULTS

The results, of the regressions of the decomposition of the variation, appear in annex 1 and are summarised in table II.

Table II
Decomposition of the variation
4 Quartile of the effect of the changeable company

SIC (code)	The Sector	R^2_{Ano}	New R^2	$R^2_{Industria}$ (R^2 - R^2_{Ano})	New R^2	$R^2_{Empresa}$ (R^2 - (R^2_{Ano}+$R^2_{Industria}$))
1 53 3 5	Prep. and Conservation of Fruits and Hort. by proc. N.S.	0.03735	0.137501	0.100151	0.45102	0.313519
2 92 2 1	Man. Ascensor, mounts loads, steps and Pass. Roll.	0.353725	0.419083	0.065358	0.743798	0.324715
1 41 1 2	Extraction of granite and Similar rocks	0.004832	0.006618	0.001786	0.367323	0.360705
2 95 6 4	Man. Other Diverse machine for specific use	0,135559	0,501995	0,366436	0,865498	0,363503
3 51 1 2	Const. Repair of Not met. Boats., Except Fun and Sport	0,037381	0,308978	0,271597	0,731628	0,42265
5 51 1 8	Tourist apartments with Restaurant	0,39687	0,461799	0,064929	0,9613	0,499501
2 46 6 1	Manufacture of auxiliary Chemistries Prod for ind use.	0,18646	0,193147	0,006687	0,756434	0,563287
2 87 5 1	Man. Of metalic Ware and articles for domestic use	0,000121	0,035858	0,035737	0,624598	0,58874
5 51 1 7	Tourist Resorts with Restaurant	0,015224	0,337435	0,322211	0,935183	0,597748
5 51 1 2	Accommodation with Restaurant	0,22468	0,359873	0,135193	0,988478	0,628605
2 95 6 1	Man. Machines for the Industries of Construction Mat	0,061292	0,262578	0,201286	0,915174	0,652596
2 95 6 3	Manufacture of metallic molds	0,144032	0,28762	0,143588	0,996349	0,708729
0 11 3 2	Grape growing	0,052248	0,246516	0,194268	0,990055	0,743539
1 41 1 1	Extraction of marble and similar rocks.	0,000568	0,009893	0,009325	0,778929	0,769036

The results that appear in table II state the decomposition of the variation and show that there are significant differences, with respect to CEO effect, across the sectors of activity. These results, ordered by the fourth quartile of the effect of the variable company, show the sectors where the impact of the CEO is more important. These sectors are the extraction of marbles and similar rocks, grape growing and the manufacture of metallic molds. In sectors where the effect of the year and the sector of activity are greater, the impact of the CEOs is lesser.

When the Return On Assets (ROA) is used as dependent variable, the variable "year" contributes for the biggest variation, followed by the "CEO" (inferred through the variable "company"), such as it is shown in the results of the decomposition of the total variation (attached 1).

In the aggregate analyses, when the ROA is used as dependent variable, the effect of the set (Company and "CEO") contributes with 31.2% of the variation of the performance of the company.

The results confirm hypothesis 1, according to which the effect of the CEO vary in function of the sector.

Table III shows the matrix of correlations for the independent variables that we used to test hypotheses from 2 to 5.

Table III

Correlations

This table shows the results of the test of correlation of Pearson.

Sectors		Coefficients of correlation of Pearson			
CAE	Description	**Concentration**	**Growth**	**Indebtedness**	**Slack**
0 11 3 1	Culture of Fruits		-0,04	-0,7	0,5
0 11 3 2	Grape growing		0,98	0,15	-0,81
1 41 1 1	Extraction of marble and similar rocks		0,36	0,94	0,52
1 41 1 2	Extraction of granite and similar rocks		0,42	0,11	-0,21
1 53 3 5	Prep. and Conserv. Fruits and hort. by processes, N.S.	0,13	0,64	0,75	-0,34
1 58 9 3	Manufacture of other diverse Alimentary Products	-0,57	0,27	-0,52	0,79
1 59 3 2	Production of foaming and frothy wines		0,084	0,77	-0,83
1 75 4 1	Manufacture of “Passamanarias” and Sirgarias		0,57	-0,65	0,51
1 75 4 2	Manufacture of Embroidering		0,75	0,49	0,68
1 75 4 4	Other diverse textil industries, N.S.	0,59	0,85	-0,34	0,08
2 05 1 1	Manufacture of mortuary coffins in wood		0,49	0,62	-0,06
2 05 1 2	Manufacture of other workmanships in wood, N.E.		-0,13	0,65	0,38
2 12 1 1	Manufacture of Paper and Card (It includes emb.)		0,1	0,26	0,44
2 12 1 2	Manufacture of other packings of Paper and card		-0,39	-0,65	0,74
2 46 6 1	Manufacture of Chemistries prod. auxiliary for industrial use		0,64	-0,33	-0,22
2 46 6 2	Lubricative oil manufacture and Masses...		0,19	-0,62	-0,34
2 61 3 1	Packing glass manufacture		0,46	-0,55	0,27
2 61 3 2	Cristalaria		0,57	-0,67	0,22
2 62 1 1	Adobe pottery		0,67	-0,74	-0,36
2 62 1 2	Porcelain and fine stoneware		-0,94	0,12	0,44
2 62 1 3	Articles of ornamental porcelain and stoneware		0,66	0,64	-0,05
2 86 2 2	Manufacture of mechanical tools	0,83	0,85	-0,71	0,31
2 87 4 1	Manufacture of rivets and screws		-0,34	-0,06	-0,29
2 87 5 1	Manufacture of Metallic ware and articles of domestic use		0,41	0,23	-0,56
2 92 2 1	Manufacture of elevator, mounts loads, rolling stairs		0,84	-0,24	0,71
2 92 2 2	Manufacture of Equipment of Elevation and Movement, N.S.	0,34	0,43	0,52	-0,86
2 95 6 1	Manufacture of Machines for Industries of Construction mat.	0,35	-0,12	0,77	-0,25
2 95 6 2	Manufact. of Machines for industries of Rubber and Plastics		-0,34	0,31	-0,07
2 95 6 3	Manufacture of metallic molds		0,93	0,04	0,33
2 95 6 4	Manufacture of Other Diverse machines for specific use		0,11	-0,73	0,21
3 51 1 1	Construction and Repair of met Boats Except fun and sport	0,13	0,49	0,39	0,68
3 51 1 2	Const. Rep. Of non metal Boats Except fun and sport	0,29	0,83	0,09	-0,14
5 51 1 1	Hotels with restaurant		0,69	-0,21	0,64
5 51 1 2	Accommodation with restaurant		0,17	0,41	0,96
5 51 1 7	Tourist resort with restaurant	-0,47	-0,37	0,98	0,09
5 51 1 8	Tourist apartments with restaurant		-0,65	-0,88	-0,87
6 31 2 2	Not refrigerating storage		-0,52	0,16	-0,55
	MEDIUM (MEDIANA)	-0,47	0,42	0,11	0,09

These results point with to the occurrence of a positive relation between the variable effect of the CEO and the variable growth and indebtedness, that is, for important values of the effect of the CEO, in general, are associates important values of growth and indebtedness.

In similar way, the results suggest a relation negative between the variable effect of the CEO and the variable concentration. For higher values of the CEO’s effects generally are associated lower values of concentration.

In contrast with what was found by Wasserman, Nohria and Anand (2001), these results reflect the Portuguese reality, where in the majority of the corporate, there is no separation between the property and the management. In this case does not exist agency conflicts.

However, in the U.S.A the average dimension of the companies is consistently bigger and exists separation between the property and the management what becomes the detention of the effect of the CEO is consistently easier.

4.1. Statistical tests of diagnosis

We used the statistic of "Durbin-Watson" for testing the autocorrelation among the variables.

Table IV

1st Quartile of the statistic of Durbin Watson

CAE	Description	"Std. Error of Coefficient"				Durbin Watson Stat	"Coefficient AR(1)
		C(1)	C(2)	C(3)	C(4)		
1 53 3 5	Prep. conservation of Fruits and hort. for processes N.S.	6,67196	0,34326	2,431173	3,835446	0,901116	0
5 51 1 7	Tourist resorts with Restaurant	0,983852	0,075644	0,66648	0,676415	1,0483	0
0 11 1 1	Culture of cereals	1,813782	0,120843	2,098172	2,60906	1,05695	0
1 75 4 2	Manufacture of Embroiderings	1,012711	0,072463	0,97297	0,753566	1,28988	0
1 75 4 4	Other diverse textil industries, N.S.	0,362717	0,037205	0,434014	0,386908	1,369472	0
3 51 1 2	Const. Rep. ñ met. boats, Except fun. and Sport	3,796167	0,29719	4,143658	3,915959	1,371933	0
2 46 6 1	Manufacture of Chemistries prod. auxiliary for ind. use	3,912321	0,601844	2,231554	2,496078	1,464614	0
3 51 1 1	Const. Rep. metallic Boats, except fun and sport	2.191987	0.163225	1.614208	2.15076	1.491373	0
2 46 6 2	Lubricative oil manufacture and masses	4.415401	0.524063	2.928249	2.805959	1.498186	0
1 41 1 2	Extraction of granite and similar rocks	2.705428	0.251675	2.166317	1.989799	1.505684	0
0 11 3 2	Grape growing	0.157234	0.009914	0.194735	0.220698	1.578629	0
2 05 1 2	Manufacture of other Workmanships in Wood, N.S.	1.916882	0.161525	1.344464	1.447704	1.618576	0
6 31 2 2	Not refrigerating storage	0.985686	0.144324	1.119771	1.345353	1.695418	0
2 62 1 2	Porcelain and fine Stoneware	0.742577	0.079839	1.56785	0.88184	1.74294	0
5 51 1 8	Turistic apartments with restaurant	1.014806	0.093807	0.806295	0.684894	1.938118	0

Such as we observe, in the values gotten for the first Quartile of the statisticians of Durbin Watson (Table IV) all the sectors presents values below of 2. What demonstrates the autocorrelation absence.

Observing the results of the Tests of multicolinearity and autocorrelation (Attached 2), we verify that the biggest values of standard error of the coefficients are C(1) associate to the variable year and C(4) associate to the variable company. The greaters of these values meet in sector 1 59 3 2-Production of foaming and frothy wines, for that we advise prudence in the inferences in this sector. In the remaining sectors the values, in its majority are below of 1, what suggests that the judgements, made, by us, concerning the effect of each independent variable relatively to the explained variable, offer satisfactory degree of security.

5. CONCLUSION

This study had for objective to analyze the conditions under what the companies are governed e, in particular, the paper that the CEO has in its performance.

In the level of the revision of literature, in a first phase, different conceptions of companies had been presented, in accordance with recent contributions, in the context of the corporate governance. In a second phase, studies relative to the analysis of the effect of the CEO on the performance of the company had been presented.

Later, to test the effect of the CEO across the sectors of activity, from the database of the “Central de balanços” of Portuguese Central Bank that includes aggregate data of 5283 companies pertaining to 24 industrial groups, 32 class, and 63 sector of activity, we choose 38 sectors for which was possible to decompose the total variation, for the four variable that appear in the methodology that we use. The period of study understood the years of 1993 the 1999.

The results show that the effect of the CEO varies, significantly, in function of the activity sector. The concentration of the activity sector is an important factor in the determination of the effect of the CEO, being lesser its effect in sectors with high concentration. Also the available resources, that is, the level of indebtedness and Slack affect the impact of the CEO. The effect of the CEO is bigger in sectors of high growth and indebtedness.

To test hypotheses 2 the 5, we use the same sample that we used to test the effect of the CEO, across the sectors, with the exception of the one of the cereals, and for the year of 1994 for not having been possible to get the elements for the calculation of the measure of concentration.

The perspectives for new studies can consist of analyzing the excellent shareholder's structure of the Portuguese companies, the level of legal protection of the minority shareholders and the consequences to the level of the development of the real economy.

BIBLIOGRAPHY

Barnard, C (1938); "The functions of the executive"; *Harvard University Press*.

Berle, A., e **Means**, G. (1932); "The modern corporation and private property"; *Macmillan*; New York.

Blackwell, D.W.; **Brickley**, J. A.; **Weisbach**, M. S. (1994); "Accounting information and internal performance evaluation"; *Journal of Accounting & Economics*; nº 17; pp. 331 – 358.

Brandão, Elísio (2001); "Finanças"; *Porto Editora*; Cap. VII; pp. 398-424.

Brandão, Elísio (2003); "A abordagem Jurídica das Finanças", capítulo do livro em Honra do Prof. Doutor Jorge Areias Ribeiro de Faria.

Bulow, Jeremy; **Rogoff**, Kenneth (1989); "Sovereign debt: Is to forgive to forget?"; *American Economic Review*; 79; 43-50.

Burkart, Mike; **Panunzi**, Fausto; **Shleifer**, Andrei (2003); "Family firms"; *Journal of Finance*; October; Forthcoming; pp. 1 – 6.

Burkhardt, M. E. (1991); "Institutionalization of technological change"; Working paper; *Wharton School*; University of Pennsylvania.

Burt, R. (1980); "Autonomy in a social topology."; *American Journal of Sociology*; nº 85; pp. 892 – 925.

Burt, R. (1992); "Structural holes"; *Harvard University Press*; Cambridge.

Child, J. (1972); "Organizational structure, environment and performance: The role of strategic choice"; *Sociology*; nº 6; pp. 1 – 22.

Daily, C. M.; **Dollinger**, M. J. (1992); "An empirical examination of ownership structure in family and professionally managed firms"; *Family Business Review*, Vol. V, No. 2, summer, pp. 117-136.

Demsetz, Harold (1983): "The structure of ownership and the theory of the firm."; *Journal of Law and Economics*; Vol. 26; Iss. 2; pp. 375 – 390.

Demsetz, Harold; **Lehn**, Kenneth (1985); "The Structure of Corporate Ownership: Causes and Consequences"; *Journal of Political Economy*; nº 93; pp. 1155 – 77.

Demirguc-Kunt, Asli; **Vojislav**, Maksimovik (1998); "Law, finance, and firm growth"; *Journal of Finance*; 53; 2107-2138.

Dyck, Alexander; **Zingales**, Luigi (2004); "Private benefits of control: An international comparison"; *Jounal of Finance*; Forthcoming.

Drucker, P. F. (1954); "The practice of management"; *Harper & Row*; New York.

Easterbrook, Frank (1984); "Two agency cost explanations of dividends"; *American Economic Review*; 74; 650-659.

Eisennhardt, K. M. (1989); "Agency theory: an assessment and review"; *Academy of Management Review*; vol. 14; nº 1; pp. 57 – 74.

Fama, E. E **Jensen**, M. (1983a); "Separation of ownership and control", *Journal of Law and Economics*; 26; pp. 301-325.

Fama, E. E **Jensen**, M. (1983b); "Agency problems and residual claims"; *The review of Financial Studies*; 11; 383-418.

Fama, E. (1980); "Agency Problems and the theory of the firm"; *Journal of Political Economy*; Vol. 88; nº 2; pp. 288 – 307.

Fiedler, F. E. (1967); "A theory of leadership effectiveness."; *Mcgraw-Hill*; New York.

Foss, Nicolai (1998); "Understanding Leadership: A coordination Theory"; *Copenhagen Business School, Department of Industrial Economics and Strategy*, nº 21; Copenhagen; December.

Galbraith, J. R. (1973); "Designing Complex Organizations."; *Addison-Wesley*.

Gujarati, Damodar N. ; "Econometria básica"; *Makron Books*; Terceira Edição.

Hambrick, D. C., **Finkelstein**, S. (1987); "Managerial discretion: A bridge between polar views of organizational outcomes." *Research in organizational behavior*; nº9; pp. 369-406.

Hannan, M. T; **Freeman** (1989); "Organizational Ecology"; *Boston, MA: Harvard University Press*.

Harvey, S. J. (1999); "Owner as manager, extended horizons and the family firm"; *International Journal of the Economics of Business*, Vol. 6, No. 1, pp. 41-55.

Holderness, Clifford; **Kroszner**, Randall; **Sheehan** (1999); "Were the good old days that good? Changes in managerial stock ownership since the Great Depression."; *Journal of Finance*, nº 54; pp. 435 – 469.

Jensen, Michael C.; **Meckling**, William H. (1976); "Theory of the firm: managerial behavior, agency costs and ownership structure"; *Journal of Financial Economics*, October, Vol. 3, No. 4, pp. 305-360.

Jensen, Michael C. (1983); "Organization theory and methodology"; *The Accounting Review*, Vol. 58, No. 2, pp. 319 – 339.

Jensen, Michael C. (1986); "Agency costs of free cash flow, corporate finance, and takeovers"; *American Economic Review*, May 1986, Vol.76, No. 2, pp. 323-329.

Johnson, Aaron C., **Johnson**, Marvin B., **Buse**, Rueben C. (1989); "Econometrics"; *Maxwell editions*; pp. 91-95.

Johnson, Lauren Keller (2002); "Do CEOs matter?"; *Mit Sloan Management Review*; volume 43, pp 8-9; ISSN 15329194.

Johnson, Simon; **La Porta**, Rafael; **Lopez-de-Silanes**, Florencio; **Shleifer**, Andrei (2000); "Tunneling"; *American Economic Review*; 902; 22-27.

Ke, Bin; **Petroni**, Kathy R.; **Safieddine**, Assem (1999); "Ownership concentration and sensivity of executive pay to accounting performance measures: evidence from publicly and privately-held insurance companies"; *Journal of Accounting & Economics*; Vol. 28; No. 2; December; pp. 9 – 26.

Kennedy, Peter (1979); "A guide to econometrics"; *Martin Robinson & Company*; pp. 12, 52.

Khurana, R.; **Nohria**, N. (1999); "The performance consequences of CEO turnover."; Working Paper; *Harvard Business School*; Boston; MA.

La Porta, Rafael; **Lopez-de-Silanes**, Florencio; **Shleifer**, Andrei (1999); "Corporate ownership around the world; *Journal of Finance*; nº 54; pp. 471 – 517.

La Porta, Rafael; **Lopez-deSilanes**, Florencio; **Shleifer**, Andrei; **Vishny**, Robert (1997); "Legal determinants of external finance"; *Journal of Finance*; nº 52; pp. 1131 – 1150.

La Porta, Rafael; **Lopez-deSilanes**, Florencio; **Shleifer**, Andrei; **Vishny**, Robert (1998); "Law and finance"; *Journal of Political Economy*; nº 106; pp. 1113 – 1155.

La Porta, Rafael; **Lopez-deSilanes**, Florencio; **Shleifer**, Andrei; **Vishny**, Robert (2000); "Agency problems and dividend policies around the world"; *Journal of Finance*; nº 55; pp. 1 – 33.

La Porta, Rafael; **Lopez-deSilanes**, Florencio; **Shleifer**, Andrei; **Vishny**, Robert (2002); "Investor Protection and corporate valuation"; *Journal of Finance*; nº 57; pp. 1147 – 1170.

Langlois, Richard N; **Foss**, Nicolai J (1998); "Capabilities and Governance: The Rebirth of Production in the theory of economic organization; *ISBN 87-7873-020-1*.

Levine, Ross; **Zervos**, Sara (1998); "Stock markets, banks, and economic growth"; *American Economic Review*; 88; 537-558.

Lieberson, S; **O' Connor**, J (1972); "Leadership and organization performance: A study of large corporations."; *American Sociological Review*; nº37; pp. 117-130.

March, J. G.; **Simon**, H. A. (1958); "Organizations"; *Wiley*; New York.

Martin, J. (1992); "Cultures in Organizations: Three Perspectives."; *Oxford University Press*; New York.

McConaughy, D. L.; **Mathews**, C. H.; **Fialko**, A. S. (2001); "Founding family controlled firms: performance, risk, and value"; *Journal of Small Business Management*, Vol. 39, Iss 1, pp. 31-49.

McGahan; A. M.; **Porter**; M. E. (1997); "How much does industry matter, really?"; *Strategic Management Journal*; nº 18; pp. 15 – 30.

Modigliani, Franco; **Miller**, Merton (1958); "The cost of capital, corporation finance, and the theory of investment"; *American Economic Review*; nº 48; pp. 261 – 297.

Montgomery, Cynthia A.; **Kaufman**, Ronda (2003); "The Board's Missing Link"; *Harvard Business Review*; March.

Nohria, N.; **Gulati**, R. (1997); "What is the optimum amount of organizational slack?"; *European Management Journal*; nº 15; pp. 603 – 611.

Myerson, R. (1979); "Incentive Compatibility and the Bargaining problem"; *Econometrica*; Vol. 47; pp. 61 – 73.

Ortega, Eva (2003); "La eficiencia de la empresa familiar bajo el punto de vista de la teoria de la agencia"; *XXIII Jornadas Luso-Espanholas de Gestão Científica; 2003*; pp 45-49.

Pfeffer, J (1977); "Towards an examination of stratification in organizations"; *Administrative Science Quaterly*; nº 22; pp. 553-567.

Pfeffer, J.; **Salancik**, G. R. (1978); "The external control of organizations: A resource dependency Perspective."; *Harper & Row*; New York.

Pindyck, Robert S., **Rubinfeld**, Daniel L. (1991); "Econometric models"; *McGraw Hill*; pp. 76-80.

Powell, W.W.; **DiMaggio**, P.J. (1991); The New Institutionalism in Organizational Analysis"; *University of Chicago Press*; Chicago.

Rajan, Raghuram; **Zingales**, Luigi (1995); "What do we know about capital structure? Some evidence from the international data"; *Journal of Finance*; 50; 1421-1460.

Rumelt, R. P. (1991); "How much does industry matter?"; *Strategic Management Journal*; nº 12; pp. 167 – 185.

Rotemberg, J. J.; **Saloner**, G. (2000); "Visionaries, managers, and strategic direction."; *RAND Journal of Economics*; Vol. 31; nº 4.

Ricart, J. E. (1991); "Una introducción a los Modelos de Agencia"; *Marinon, R y Calsamiglia, X. (Eds): Invitación a la teoría Económica*; Barcelona; pp.195 – 210.

Schmalensee, R. (1985); "Do markets differ much?"; *American Economic Review*; nº 75; pp. 341 – 351.

Simon, H. A. (1976); "Administrative Behavior, 3rd ed."; *Macmillan*; New York.

Tannenbaum, A. S. (1968); "Control in Organizations"; *McGraw-Hill*; New York.

Thomas, A B (1988); "Does leadership make a difference to organizational performance?"; *Administrative Science Quaterly*; nº 33; pp. 388-400.

Thompson, J. D. (1967); "Organizations in Action"; *McGraw-Hill*; New York.

Vaz, Pedro; **Brandão**, Elísio (2003); "Factores que influenciam o governo das empresas"; XIII Jornadas Hispano-Lusas de Gestão, Organizadas pela Universidade de Santiago de Compostela, Lugo, Espanha, Fevereiro.

Wasserman, Noam; **Nohria**, Nitin; **Anand**, Bharat (2001); "When does leadership matter? The contingent opportunities view of CEO leadership"; *Social Science Research Network Electronic Paper collection 278652*; Harvard Business School working papper nº 01-063; April.

Weiner, N. (1978); "Situational and leadership influence on organization performance."; *Proceedings of the Academy of Management*; pp. 230-234.

Weiner, N., **T. A.**, **Mahoney** (1981); "A model of corporate performance as a function of environmental, organizational, and leadership influences"; *Academy of Management Journal*; nº24; pp. 453-470.

Whited, Toni M.; **Erickson**, Timothy (2001); "On the Information Content of Different Measures of Q"; *SSRN Electronic Working Paper*, August 1; pp. 1, 3, 8, 16, 17.

Zingales, Luigi (1995); "What determines the value of corporate votes?"; *Quaterly Journal of Economics*; 110; 1047-1073.

Annex 1: Decomposition of the total variance

CAE	Description	R^2_{Ano}	Novo R^2	$R^2_{Industria}$ (R^2 - R^2_{Ano})	Novo R^2	$R^2_{Empresa}$ (R^2 - (R^2_{Ano}+$R^2_{Industria}$))
0 11 1 1	Culture of cereals	0,580036	0,744466	0,16443	0,795674	0,051208
0 11 3 1	Fruits	0,482137	0,539036	0,056899	0,706462	0,167426
0 11 3 2	Grape growing	0,052248	0,246516	0,194268	0,990055	0,743539
1 41 1 1	Extraction of marble and similar rocks.	0,000568	0,009893	0,009325	0,778929	0,769036
1 41 1 2	Extraction of granite and similar rocks	0,004832	0,006618	0,001786	0,367323	0,360705
1 53 3 5	Prep. & Conserv. Fruits and hort. for processes, N.S.	0,03735	0,137501	0,100151	0,45102	0,313519
1 58 9 3	Manufacture of other Aliment. Prod Diverse	0,773485	0,893664	0,120179	0,980625	0,086961
1 59 3 2	Production of Foaming and Frothy Wines	0,05056	0,229124	0,178564	0,244595	0,015471
1 75 4 1	Manufacture of Passamanarias and Sirgarias	0,811415	0,866707	0,055292	0,988757	0,12205
1 75 4 2	Manufacture of Embroiderings	0,230639	0,657977	0,427338	0,805169	0,147192
1 75 4 4	Other diverse textil industries, N.S.	0,930059	0,965324	0,035265	0,988868	0,023544
2 05 1 1	Manufacture of mortuary coffins in wood	0,041201	0,704754	0,663553	0,965284	0,26053
2 05 1 2	Manufacture of Workmanships in Wood, N.S.	0,414082	0,607033	0,192951	0,634371	0,027338
2 12 1 1	Manufacture of Paper and card (includes packages)	0,334311	0,413003	0,078692	0,413504	0,000501
2 12 1 2	Manufacture of others packages of Paper and card	0,166264	0,361638	0,195374	0,511865	0,150227
2 46 6 1	Manufact. of Chemistries Prod auxiliary for ind use	0,18646	0,193147	0,006687	0,756434	0,563287
2 46 6 2	Lubricative oil manufacture and Masses...	0,009759	0,221147	0,211388	0,529688	0,308541
2 61 3 1	Packing glass manufacture	0,006403	0,043565	0,037162	0,115238	0,071673
2 61 3 2	Glassers	0,003919	0,860797	0,856878	0,872584	0,011787
2 62 1 1	Adobe pottery	0,884457	0,993144	0,108687	0,998195	0,005051
2 62 1 2	Porcelain and fine Stoneware	0,231275	0,512318	0,281043	0,751721	0,239403
2 62 1 3	Articles of ornamental of porcelain and stoneware	0,770089	0,878356	0,108267	0,952656	0,0743
2 86 2 2	Manufacture of Mechanical Tools	0,399418	0,435431	0,036013	0,633992	0,198561
2 87 4 1	Manufacture of Rivets and Screws	0,131455	0,131737	0,000282	0,151372	0,019635
2 87 5 1	Manufacture of Metallic ware and arti. domestic use	0,000121	0,035858	0,035737	0,624598	0,58874
2 92 2 1	Manufacture of Elevator, mounts loads, rolling stairs	0,353725	0,419083	0,065358	0,743798	0,324715
2 92 2 2	Manufacture of elevation equipment and Movement,	0,46436	0,886861	0,422501	0,933244	0,046383
2 95 6 1	Manufact. Of Machines for Industries Constru. Mat.	0,061292	0,262578	0,201286	0,915174	0,652596
2 95 6 2	Manufact. Of Mach. for Indust. of Rubber and Plastics	0,08727	0,894646	0,807376	0,958923	0,064277
2 95 6 3	Manufacture of metallic molds	0,144032	0,28762	0,143588	0,996349	0,708729
2 95 6 4	Manufacture of Other machine for specific use	0,135559	0,501995	0,366436	0,865498	0,363503
3 51 1 1	Const. Rep. met Boats., Except fun and sport	0,051857	0,697948	0,646091	0,773592	0,075644
3 51 1 2	Const. Rep. ñ met. boats, Except fun. and sport	0,037381	0,308978	0,271597	0,731628	0,42265
5 51 1 1	Hotels with restaurant	0,626715	0,666015	0,0393	0,678868	0,012853
5 51 1 2	Accommodation with Restaurant	0,22468	0,359873	0,135193	0,988478	0,628605
5 51 1 7	Tourist resort with Restaurant	0,015224	0,337435	0,322211	0,935183	0,597748
5 51 1 8	Tourist apartments with Restaurant	0,39687	0,461799	0,064929	0,9613	0,499501
6 31 2 2	Not refrigerating Storage	0,044801	0,743762	0,698961	0,836314	0,092552

Annex 2: Tests of multicolinearity and autocorrelation.

Test of Multicolinearity pointer: High Std. Error of the coefficients

Test of Autocorrelation pointer: "Durbin-Watson Statistic" very below of 2

Equation:
Performance=C(1)+C(2)*ano+C(3)*industria+C(4)*empresa

CAE	Description	"Std. Error" dos "Coefficient"				Durbin Watson Stat	"Coefficient" de AR(1)
		C(1)	C(2)	C(3)	C(4)		
0 11 1 1	Culture of Cereals	1,813782	0,120843	2,098172	2,60906	1,05695	0
0 11 3 1	Fruits	2,763012	0,088516	1,536878	1,970478	2,098757	0
0 11 3 2	Grape growing	0,157234	0,009914	0,194735	0,220698	1,578629	0
1 41 1 1	Extraction of marble and similar rocks	2,614081	0,240463	2,198165	1,55229	1,999092	0
1 41 1 2	Extraction of granite and similar rocks	2,705428	0,251675	2,166317	1,989799	1,505684	0
1 53 3 5	Prep. and conserv. of Fruits and hort. by proc. N.S.	6,67196	0,34326	2,431173	3,835446	0,901116	0
1 58 9 3	Manufacture of other Diverse Aliment Prod.	1,610116	0,215474	0,938246	0,99252	2,155287	0
1 59 3 2	Production of Foaming and Frothy Wines	2144632	3,847903	16,56822	20,00511	2,10541	0
1 75 4 1	Manufacture of Passamanarias and Sirgarias	0,325923	0,02085	0,305367	0,216826	3,326282	0
1 75 4 2	Manufacture of Embroiderings	1,012711	0,072463	0,97297	0,753566	1,28988	0
1 75 4 4	Other diverse textil industries, N.S.	0,362717	0,037205	0,434014	0,386908	1,369472	0
2 05 1 1	Manufacture of mortuary coffins in wood	1,703042	0,089814	0,782571	1,138405	2,309186	0
2 05 1 2	Manufacture of Workmanships in Wood, N.S.	1,916882	0,161525	1,344464	1,447704	1,618576	0
2 12 1 1	Manufacture of Paper and card (includes packages)	2,194622	0,187589	1,427528	1,317214	2,515067	0
2 12 1 2	Manufacture of others packages of Paper and card	3,451785	0,276825	2,688987	2,380678	2,257165	0
2 46 6 1	Manuf. of Chemistries Prod. Auxiliary for ind use.	3,912321	0,601844	2,231554	2,496078	1,464614	0
2 46 6 2	Lubricative oil manufacture and Masses...	4,415401	0,524063	2,928249	2,805959	1,498186	0
2 61 3 1	Packing glass manufacture	10,88254	0,741663	3,958524	4,130004	2,745879	0
2 61 3 2	Cristalaria	5,201994	0,412904	2,756223	1,625839	2,212469	0
2 62 1 1	Adobe pottery	0,209341	0,018246	0,343497	0,246819	2,191148	0
2 62 1 2	Porcelain and fine Stoneware	0,742577	0,079839	1,56785	0,88184	1,74294	0
2 62 1 3	Articles of ornamental porcelain and stoneware	0,945414	0,079377	1,327546	0,876742	3,207183	0
2 86 2 2	Manufacture of Mechanical Tools	9,633681	1,316637	3,048178	2,72215	3,384885	0
2 87 4 1	Manufacture of Rivets and Screws	2,830296	0,365491	1,428825	1,607594	2,830107	0
2 87 5 1	Man. Of metallic Ware and articles of domestic use	1,636252	0,296022	1,468267	1,502736	2,808807	0
2 92 2 1	Man. elevator., mounts loads, rolling stairs	1,743266	0,197071	0,822787	1,134627	3,263504	0
2 92 2 2	Manufact. of elevation equipment and Movement	1,119224	0,091878	0,518421	0,431911	2,948981	0
2 95 6 1	Man. Of Machines for Industries Construction Mat.	2,422858	0,218324	0,583954	0,751661	3,338816	0
2 95 6 2	Man. Machines for Industries of Rubber and Plastics	1,778985	0,171368	0,575579	0,722594	3,501391	0
2 95 6 3	Manufacture of metallic molds	0,291278	0,032304	0,069223	0,086148	3,031655	0
2 95 6 4	Manufacture of Other machine for specific use	2,238237	0,243955	0,508803	0,593903	2,225209	0
3 51 1 1	Const. Rep. met Boats., Except fun and sport	2,191987	0,163225	1,614208	2,15076	1,491373	0
3 51 1 2	Const. Rep. ñ met. boats, Except fun. and sport	3,796167	0,29719	4,143658	3,915959	1,371933	0
5 51 1 1	Hotels with restaurant	0,860958	0,082937	0,709424	0,741626	2,494781	0
5 51 1 2	Accommodation with Restaurant	0,385812	0,045352	0,362296	0,331119	1,973057	0
5 51 1 7	Tourist resort with Restaurant	0,983852	0,075644	0,66648	0,676415	1,0483	0
5 51 1 8	Tourist apartments with Restaurant	1,014806	0,093807	0,806295	0,684894	1,938118	0
6 31 2 2	Not refrigerating Storage	0,985686	0,144324	1,119771	1,345353	1,695418	0