



COMPARATIVE ANALYSIS OF FACTORS THAT AFFECTS THE DISCLOSURE OF INFORMATION RELATED TO HUMAN RESOURCES (2004 – 2013)

ANÁLISE COMPARATIVA DOS FATORES QUE INFLUENCIAM A DIVULGAÇÃO DE INFORMAÇÕES SOBRE RECURSOS HUMANOS (2004-2013)

ANÁLISIS COMPARATIVA DE LOS FACTORES QUE INFLUYEN EN LA DIVULGACIÓN DE INFORMACIONES SOBRE LOS RECURSOS HUMANOS (2004 – 2013)

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ABSTRACT

This research had the aim of comparing the difference on the factors that influenced the level of voluntary disclosure of information related to human resources in the companies that form the IBrX-100 index. The comparison is between the years 2004 and 2013. To determine this level of disclosure in each of the fifty (50) companies in the sample, was calculated the Human Resources Information Disclosure Index (HRIDI), based on the analysis of the management reports. Furthermore, to determine the existence (or not) of significant differences between the factors that influenced the HRIDI, we chose to compare the year 2004 to year 2013. It allowed to test if, after ten years, there were changes on the factors that influenced the HRIDI. The factors evaluated in relation to the influence on the spontaneous disclosure of information regarding human resources were drawn from the academic literature. They are: the company size, profitability, age, nature of business, the size of the firm and the disclosure of social balance. These factors were assessed by regression in the ANCOVA model, based on the perspective of cross-section. Two regressions were made: one

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with the information relating to 2004 and other with the data of 2013. In conclusion, it was found that in both 2004 and 2013, despite the existence of disparities between the levels of disclosure, the characteristics that influenced the Human Resources Information Disclosure Index were the size of companies and the publication of social balance.

Keywords: Voluntary Disclosure. Human Resources. Influence.

RESUMO

O objetivo desta pesquisa surge com o papel de verificar de forma comparativa a diferença acerca dos fatores que influenciam o nível de divulgação voluntária sobre recursos humanos das companhias listadas no Índice IBrX-100, entre os anos de 2004 e 2013. Para determinar o nível de *disclosure* sobre pessoal de cada uma das 50 (cinquenta) companhias da amostra, foi calculado e utilizado o Índice de Divulgação de Informações sobre Recursos Humanos (IDIRH), a partir da análise de seus relatórios da administração. Em seguida, para averiguar a existência (ou não) de diferenças significativas entre os fatores que influenciaram o IDIRH, optou-se por comparar o ano de 2004 ao ano de 2013 – o que permite testar se, passados dez anos, houve mudanças nos fatores que influenciam o IDIRH. Os fatores avaliados com relação à influência sobre a evidenciação espontânea das informações concernentes a recursos humanos foram extraídos da literatura acadêmica, sendo estes, o tamanho da empresa, a rentabilidade, a idade, a natureza da empresa, o tamanho da empresa de auditoria e a divulgação ou não do balanço social. Estes fatores foram avaliados por meio da técnica de regressão no modelo ANCOVA, baseando-se na perspectiva do *cross – section* (corte transversal), estimando uma regressão com as informações concernente ao ano de 2004 e uma referente ao ano de 2013. Concluindo-se que tanto no ano de 2004, quanto no ano de 2013, apesar da existência de diferenças entre os níveis de divulgação, as características que influenciaram o índice de divulgação de informações sobre recursos humanos foram o tamanho das companhias e a divulgação do balanço social.

Palavras-chave: Divulgação Voluntária. Recursos Humanos. Influência.

RESUMEN

Esta investigación viene con la función de verificar de manera comparativa la diferencia sobre los factores que influyen el nivel de divulgación voluntaria de informaciones sobre recursos humanos en las empresas que forman el índice IBrX-100, entre los años 2004 y 2013. Para determinar el nivel de disclosure a este respecto en cada una de las 50 (cincuenta) empresas de la muestra, se calculó el Índice de Divulgación sobre los Recursos Humanos (IDIRH), a partir del análisis de sus informes de gestión. Además, para determinar la existencia (o no) de las diferencias significativas entre los factores que influyeron en la IDIRH, se optó por comparar el año de 2004 al año de 2013 - lo que permite probar si, después de diez años, hubo cambios en los factores que influyen en el IDIRH. Los factores evaluados en relación a la influencia sobre la divulgación espontánea de información relativa a los recursos humanos fueron extraídos de la literatura académica. Son ellos: el tamaño de la empresa, la rentabilidad, la edad, la naturaleza de los negocios, el tamaño de la firma de auditoría y la divulgación o no del balance social. Estos factores fueron evaluados por regresión en el modelo ANCOVA, basado en la perspectiva de *cross-section* (sección transversal), lo que permitió estimar una regresión con la información relativa al año 2004 y otra para el año 2013. En conclusión, se verificó que tanto en 2004 como en 2013, a pesar de la existencia de diferencias entre los niveles de divulgación, las características que influyeron el Índice de Divulgación sobre los Recursos Humanos fueron el tamaño de las empresas y la publicación del balance social.

Palabras clave: Divulgación Voluntaria. Recursos Humanos. Influencia.

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1. INTRODUCTION

Human resources are responsible for performing services and/or produce products for organizations aiming their development through these negotiations. Thus, the human factor has been a recurrent theme of discussions in business and Academy.

In large companies, the care of human resources is mostly expressed through communication. Because of the staff of companies be of fundamental importance, investments in human resources are seen as a distinction for investors.

Based on work previously done on the disclosure of information on human resources (HOSSAIN, KHAN and YAMIN, 2004; Mamun, 2009; WHITE and RODRIGUES, 2009; Balasundaram, 2010; DOMÍNGUEZ, 2012; MICAH, OFURUM and IHENDINIHU, 2012). As seeking to contribute to this research topic, this study has the objective of research and comparatively verify the difference of factors influencing the voluntary disclosure level of human resources of the companies listed on the IBrX-100 Index between the years 2004 and 2013 .

For such, it was firstly necessary to verify that between the current (2013) and ten years ago (2004), the disclosure level of human resources information behaved the same way, namely if they were verified in the same proportion as shown in Table 1.

Table 1 - Comparative Analysis of Disclosure Levels

Stock	IDIHR 2004	IDIHR 2013	Difference	Stock	IDIHR 2004	IDIHR 2013	Difference
Aes tiete	41,18	41,18	0,00	Itaunibanco	0,00	29,41	29,41
Allamerlat	0,00	5,88	5,88	Klabin S/A	29,41	47,06	17,65
Banrisul	29,41	5,88	-23,53	Localiza	23,53	52,94	29,41
Bradesco	35,29	29,41	-5,88	Lojas americ	23,53	29,41	5,88
Bradespar	17,65	5,88	-11,77	Lojas renner	11,76	23,53	11,77
Brasil	17,65	70,59	52,94	Marcopolo	29,41	52,94	23,53
Braskem	23,53	11,76	-11,77	Natura	0,00	29,41	29,41
Brf as	23,53	35,29	11,76	Oi	58,82	58,82	0,00
Ccrsa	11,76	17,65	5,89	P.Acucar-CDB	47,06	0,00	-47,06
Cemig	52,94	35,29	-17,65	Petrobras	47,06	47,06	0,00
Cesp	29,41	29,41	0,00	Porto Seguro	5,88	0,00	-5,88
Cia Hering	23,53	5,88	-17,65	Raiadrogasil	11,76	5,88	-5,88
Copel	47,06	52,94	5,88	Randon Part	11,76	23,53	11,77
CPFL energia	58,82	41,18	-17,64	Rossi Resid	0,00	0,00	0,00
CyrelaRealt	0,00	17,65	17,65	Sabesp	52,94	41,18	-11,76
Ecorodovias	17,65	11,76	-5,89	Sid Nacional	11,76	17,65	5,89
Eletrobras	47,06	29,41	-17,65	Souza Cruz	0,00	0,00	0,00
Eletropaulo	35,29	35,29	0,00	Suzano Papel	0,00	0,00	0,00
Energias BR	11,76	23,53	11,77	Telef Brasil	17,65	35,29	17,64
Fibria	5,88	17,65	11,77	Tim Part S/A	11,76	41,18	29,42
Gafisa	0,00	29,41	29,41	Totvs	35,29	0,00	-35,29
Gerdau	29,41	17,65	-11,76	Tractebel	58,82	23,53	-35,29
Gerdau met	29,41	17,65	-11,76	Ultrapar	23,53	17,65	-5,88
Gol	11,76	5,88	-5,88	Usiminas	47,06	17,65	-29,41
Itausa	23,53	11,76	-11,77	Weg	29,41	0,00	-29,41
Average 2004				22,86			
Average 2013				24,08			

Source: elaborated by authors based in researched data.

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Performed this analysis, it was found that despite the fact that the average disclosure of these years are similar, individual companies have significant differences in their level of disclosure: some companies have to disclose more information about the 2004 years of human resources for the year 2013 while others revealed more information in 2004 and in 2013 began to spread less. With that said, the research question that guided this study was: Is there a difference between the years 2004 and 2013 about the factors influencing the voluntary disclosure level of human resources of the companies listed on the IBRX-100 Index?

To meet the research goal, were analyzed, the annual reports of the companies in the sample work, extracting the information about human resources disclosed by these companies, noting the factors that influences this process using the ANCOVA regression model for observation of each year studied.

In addition to this introduction, the work has the theoretical framework that dealt on the dissemination of information on human resources and previous studies related to this subject, the research methodology that describes the collection and analysis procedures performed the presentation and discussion of the collected data and completing of the study.

2. LITERATURE REVIEW

2.1 The development of voluntary disclosure of information

Part of the studies focused on voluntary disclosure are concentrated in the areas of social and environmental responsibility. Studies such as Cunha and Ribeiro (2008), researching the companies listed on the BM & FBOvespa, found that the level of corporate governance, financial performance, size (size), and the disclosure in the previous period, are factors that are positively associated voluntary disclosure in this business universe: they motivate, stimulate and drive this practice.

In Brazil, Conceição et al. (2011) investigated a group of 123 companies listed on the BM & FBOVESPA in order to identify the level of disclosure relating to Corporate Social Responsibility (CSR), finding that the voluntary disclosure that sample kept close relationship with the possibility of publications on CSR kind organizational advertising to the community (social marketing).

In this same vein, Almeida (2014), in a longitudinal study, from the perspective of the Tradeoff Theory and Pecking Order, found that companies that provide what more information to the market about their corporate social responsibility, could more easily get resources and thus improve the structure of its capital.

2.2 Disclosure of human resources and previous studies

Investment in human resources and dissemination of actions for people in the organization are elements that, if properly managed, can have benefits that go beyond the internal customer satisfaction (employee). Hossain Khan and Yasmin (2004), for example, ensure that - to realize a differentiated and competent workforce - investors glimpsed the possibility of higher returns. Consequently, proclaim the investment in human resources has become a tactic for fundraising.

Regardless of whether there is, in recent years, a strong social appeal for information on the people in the organization, and although disclosure is important (particularly for

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external users), the number of companies making them public is still small (Bontis, 2003). And even among the companies in their annual reports, add informational subsidies in this regard, there is a low level of disclosure, ie, a small amount of information - as found Mamun (2009) in his study with companies Bangladesh.

Researchers in several countries using distinct methodologies and weaving analysis under different theoretical perspectives have been studying the issue of voluntary disclosure on human resources organizations. Table 2 presents the objectives and results of some of these studies - which served as a theoretical background for this work.

Table 2 – Previous Studies

Authors	Objectives	Results
Hossain, Khan e Yamin (2004)	Identify the nature of the voluntary disclosure made on human resources, based on this analysis to the year 2002 management reports related to 40 (forty) Bangladesh companies listed on the Dhaka Stock Exchange.	The results conclude that 42.5% of Bangladeshi companies are making some disclosures about human resources, even if such disclosure is not required by any regulatory authority. And most of the respondents in this survey said that this type of disclosure is important for decision making.
Mamun (2009)	Analyzed companies from Bangladesh, listed on the Dhaka Stock Exchange, assessing the influence of variables such as nature, size, profitability and age, on the disclosure process on human resources.	We conclude that the disclosure of the companies surveyed occurs Mid form by 25% and the variable size, nature and profitability are significantly related to the disclosure index of Human Resources proposed in his work.
Branco e Rodrigues (2009)	Examined the dissemination through the internet, on social responsibility, focusing on human resources, the best companies to work for published by Exame magazine in 2004, defined by the Great Place to Work, the Portuguese companies compared to those who were not listed among the best companies to work for.	The companies that were among the best to work divulged more items related to social responsibility with a focus on human resources than non-participants. It also concludes that companies consider having a good relationship with your human resources, seek more evidence to improve the perception about their reputation.
Balasundaram (2010)	Rate the practices developed with human resources in the context of Bangladesh.	There are five factors (HR practices), such as training, selection, management attitude, performance evaluation and salary survey.
Domínguez (2012)	Investigated determinants of corporate disclosure in human resources of 105 companies listed on the Madrid Stock Exchange, based on 2004 annual reports.	The results confirmed the impact of variables such as size, type of industry concentration and property on the disclosure of human resources.
Micah, Ofurum e Ihendinihu (2012)	Evaluated the relationship between financial performance and disclosure of human resources of the entities listed in NigeriaStock Exchange in the period between 2005 and 2009, assuming return on equity (ROE) and Return on Assets (ROA) as representatives of financial performance .	They came to the conclusion that the combined effect of financial performance of companies accounted for 75.9% of the variation on dissemination of information on human resources, the positive correlation between the return on equity (ROE) and the dissemination of information on resources human assumes that an increase in return on equity incentive firms in the dissemination of human capital information.

Source: elaborated by authors based in researched data

3. METHODOLOGY

3.1 Definition of Sample and Data Collection

The research was developed from the one hundred most traded shares on the BM & F

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Bovespa in 2013 (IBrX-100). Frequent exposure and trading of these securities makes companies that issue them have a greater concern with the disclosure of information on certain sensitive issues to society, such as human resources.

Contrary to what one might think at first, these actions do not belong necessarily to 100 companies (there are companies who trade more than one action). Thus, the sample was composed of 50 entities. The reasons why some companies were excluded from the scope of the research were as follows: a) 6 preferred shares (PN) were eliminated because they were issued by companies that had already launched common shares; (ON) b) 37 shares of 37 companies that were not made or did not participate in the BMF & BOVESPA in 2004; c) 7 shares of 7 companies did not present data in 2004.

Data for the survey were collected in February 2015 by the Financial Statements and Annual Reports. This information was obtained through the External Disclosure System DIVEXT, with regard to 2004, and through EmpresasNet for the year 2013. Also information was obtained through the relationship of the site with the investor companies now studied (site of the BM & FBOVESPA).

3.2 Definition of variables and assumptions of the study

All variables and hypotheses of this study took a comparative analysis between the years 2004 and 2013, therefore, we will evaluate the influence of each variable brought up as an independent on the Information Disclosure Index on Human Resources, defined as dependent on both years.

The Disclosure Index of Human Resources (IDIHR) was designed by Mamun (2009), as shown in Table 2, and was adapted to the reality of companies doing business in Brazil as read on the paragraph 15.2.2 of NBC T 15 - Social and Environmental Nature of information (Table 4). Table 3, in turn, brought the information post-adaptation established, to be analyzed in the Management Reports for the formation of so IDIHR.

Table 3 – Disclosure Items According to Mamun (2009)

N	Disclosure Items	N	Disclosure Items
1	Separate HRA statement	9	Human resource development fund
2	Total Value of Human resource	10	Employees/workers fund
3	Number of employees	11	Employee categories
4	Human resource policy	12	Managerial remuneration
5	Training and development	13	Retirement benefits
6	Management succession plan	14	Performance Recognition
7	Employment report	15	Superannuation fund
8	Employees' value addition	16	Other employees benefits

Source: Mamun (2009)

NBC T 15 establishes procedures for disclosure of information of social and environmental, in order to demonstrate to society participation and social responsibility of the entity. It is understood as social Nature and Environmental information: a) the generation and distribution of wealth; b) human resources; c) the entity's interaction with the external environment; d) interaction with the environment.

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Table 4 - Disclosure Items According to NBC T 15

Nº	Disclosure Items
15.2.2.1	Should contain data relating to the remuneration granted benefits, workforce composition and the contingencies and labor liabilities of the entity.
15.2.2.2	Regarding the compensation and benefits granted to employees, directors, contractors and self-employed, must include: a) Gross remuneration segregated by employees, directors, contractors and self-employed; b) ratio between the highest and the lowest remuneration of the entity, considering employees and directors; c) expenses related charges; d) food expenditures; e) transport costs; f) cost of private pension; g) health spending; h) expenditure on safety and occupational medicine; i) education spending (excluding the environmental education); j) expenditure on culture; k) expenditure on training and professional development; l) cost of day care or day care allowance; m) profit sharing or results.
15.2.2.3	This information should be expressed in monetary terms the total amount of spending on each item and the number of employees, freelancers, contractors and benefit administrators.
15.2.2.4	The information on the composition of human resources must be disclosed: a) total number of employees at year-end; b) total admissions; c) Total layoffs; d) Total number of trainees at the year end; e) the total of employees with special needs at the end of the year; f) total number of outsourced service providers at the end of the year; g) total number of employees by gender; h) total employees by age group, in the following ranges: under 18, 18 to 5 years, 36-60 years and over 60 years; i) total number of employees by level of education, segregated by: illiterate, with elementary school with high school with technical, with higher education, post - graduates; j) percentage of occupants of management positions by gender.
15.2.2.5	The information relating to labor claims filed by employees against the company must be disclosed: a) number of labor lawsuits filed against the company; b) number of labor lawsuits upheld; c) number of labor lawsuits dismissed; d) the total amount of compensation and fines paid by justice.
15.2.2.6	By the end of this information, the processes provided partially or terminated by agreement must be considered well founded.

Source: Conselho Federal de Contabilidade (2005)

The Disclosure Index of Human Resources (IDIHR) was composed of 17 disclosure items (Table 5) on investment in human resources. In order to avoid double counting of disclosure items were considered for counting purposes, once each item part listed in Table 5. Thus, the most common terms and the least mentioned have equal weight.

Table 5 – Items for Formation of Information Disclosure Index of Human Resources (IDIHR)

N	Disclosure Items	N	Disclosure Items
1	Payroll / gross compensation	10	Turn Over
2	Personnel expenses: payroll taxes, food, transportation, pension, health, safety and occupational health, culture, child care or day care allowance	11	Employees' value addition
3	Training and Development	12	Human resource development fund
4	Profit sharing	13	Managerial remuneration
5	Number of employees	14	Retirement Benefits
6	Employees' Education Level	15	Performance Recognition
7	Employees' categories	16	Labor claims filed by employees
8	Human Resources Policy	17	Other disclosure items
9	Plan for jobs and wages		

Source: elaborated by authors based in researched data

To make it possible to assign a communications company index of each component of the sample was made a content analysis in the years 2004 and 2013 the administration reports, based on the disclosure items categorized in Table 5. By means of a dichotomic procedure based on Mamun (2009), each disclosure item that is shown in the management report, the surveyed companies, will add one (1) point, otherwise the item will be considered 0 (zero),

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after this analysis, we used the IDIHR proxy, formed by dividing the score achieved by each company and the many points that it could achieve, thus forming its disclosure percentage as follows in Equation 1:

$$\text{IDIHR} = \frac{\text{Score of Company}}{\text{Maximum Score Obtained}} \times 100 \quad (1)$$

As the independent variables, the following were used:

Company size (SIZE): Based on studies of Alsaeed (2006) and Dominguez (2012), the proxy used to represent the size of the company has total assets. The variable in question was studied in this research, as in the studies already developed by Mamun (2009) and Domínguez (2012), evaluating the relationship between the size of companies and their level of dissemination of information on human resources.

Hypothesis 1: There is a significant relationship between company size and the Information Disclosure Index of Human Resources.

Profitability (PROF): As the study Dominguez (2012), this research took as profitability proxy Return on Assets (ROA). In the study by Domínguez (2012), as in the work of Micah, and OfurumIhendinihu (2012) ROA was established according to Equation 2, ie by dividing the net income and total assets.

To Mamun (2009) and Bhayani (2012) generally a company with better profitability objective to disseminate more information about its operations to maintain its reputation.

$$\text{PROF} = \frac{\text{Net Profit}}{\text{Total Assets}} \quad (2)$$

Hypothesis 2: There is a significant relationship between the Company's profitability and Disclosure Index of Human Resources.

Age Company (AGE): The proxy to set the age was based on the year of establishment of companies and the years defined for the study (2004 and 2013), according to Equation 3, the variable age of the companies in this study we reassessed according to research Mamun (2009), verifying the existence of the relationship between the age of the company and its disclosure on human resources.

$$\text{AGE} = \text{Year of Collected Data} - \text{Foundation Date}$$

Hypothesis 3: There is a significant relationship between age company and the dissemination of information on Human Resources.

Nature Company (NAT): In this study, this variable was characterized as dummy, defined as proxy nature variable: belonging to the Financial sector (1) and belonging to the sector Non-Financial (0), as in the study of Mamun (2009).

Hypothesis 4: There is no significant difference between nature (financial or non-financial) and the Information Disclosure Index of Human Resources.

Audit (AUDIT): For the analysis of this variable, it was assumed as a proxy, audit companies belonging to the group of the Big Four. In a perspective of dummy variable. It was assigned (1) for companies that have been audited by Big Four (Ernst & Young, KPMG, Deloitte Touche Tohmatsu and Pricewaterhouse Coopers) and (0) to those that have been audited by other auditing companies.

Hypothesis 5: There is no significant difference between the Company Size Audit and Disclosure Index of Human Resources.

Social Balance Sheet (SB): assumed this variable as a dummy, and was assigned as a proxy for the analysis of this variable (1) for companies that perform disclosure process of Social and (0) for those which do not realize the process of disclosure Social Report.

Hypothesis 6: There is a significant difference on the fact of making public or not the Social and Information Disclosure Index of Human Resources.

3.2 The model of regression and the treatment of data

In order to assist in the interpretation of the data, the regression technique was used in ANCOVA (Equation 4) model as Gujarati (2006) is a model that includes both quantitative covariates, the quality, or binaries. It was based on cross perspective - section (cross-section), estimating a regression with the information concerning the year 2004 and for the year 2013, which made possible the realization of comparison on the characteristics matters that influence the level of disclosure on human resources in both years.

$$Y_i = \beta_1 + \beta_2 D_{2i} + \beta_3 D_{3i} + \beta_4 X_i + u_i$$

Y is the dependent variable, D2 and D3 are qualitative regressors, X is the quantitative regressor, u_i is the error term Stochastic, and i , the i -th observation.

We used the Gnu Software Regression, Econometrics and Time-series Libray (Gretl 01.09.92) ® for the estimation of regression models and their validity tests, listed below. The results have been formulated through Microsoft Office Excel package®.

It has been estimated by Equation 5, the regressions of the years 2004 and 2013, expressing the influential role of disclosure index on human resources, seen in the following writing:

$$Idirh = \beta_1 + \beta_2 NAT + \beta_3 TAM + \beta_4 IDA + \beta_5 REN + \beta_6 BS + \beta_7 BF + u_i \quad (5)$$

For the disclosed results are considered consistent, analysis by cross section regression experienced some validation procedures, as follows:

By means of the correlation matrix was analyzed for the existence Multi collinearity between data. There was no strong link between the independent variables, with the highest

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correlation between the variables Social and size ($R = 0.437$) in 2004 and Age and Size ($R = 0.462$) in 2013, it is estimated that there is no multi collinearity which according to Wooldridge (2006) can come to destabilize the estimation if the correlation coefficient exceeds 0.60. After this analysis regressions were estimated in both years to verify the presence of specific error, heteroskedasticity and the normality in the waste.

For the analysis of model specific action was used RESET specific test (Regression Specification Error Test) if accepting (p -value = 0.492) in 2004 and (p -value = 0.173) in 2013, the null hypothesis is that the regression model is specified adequately. He held the White test (p -value = 0.694) in 2004 and (p -value = 0.924) in 2013, and the Breusch- Pagan, (p = 0.314) in 2004 and (p -value = 0.172) in 2013 to test the null hypothesis is that there is no presence of heteroskedasticity in both tests this hypothesis was accepted.

Finally, there was the normality of the residuals of the estimated regression (p = 0.073) in 2004 and (p -value = 0.073) in 2013, accepting the null hypothesis that the residuals follow a normal distribution, as the Doornik-Hansen test.

4. PRESENTATION AND DISCUSSION OF DATA

Once realized and validated, statistical tests to validate the regression assumptions, it was possible to talk to the data comparing them with other studies focused on voluntary disclosure. It is what will be done in this section. To start, Table 6 presents the regression results for the year 2004.

Table 6 - Regression Result – Year 2004

Variable	Coefficient	t	p-value
Constant	14,092	3,704	0,000
Size	2,556	1,741	0,088
Profitability	0,001	0,346	0,731
Age	-0,006	-0,103	0,917
Nature	-4,594	-0,757	0,453
Audit	5,224	1,206	0,234
Social Balance	21,598	3,530	0,001
R Square		0,478	
Adjusted R Square		0,405	
P - Value (F)		0,000	

Source: elaborated by authors based in researched data.

Table 7 presents the regression results for the year 2013, thus, by the analysis of 2004, compare the influence of characteristics: Size, Profitability, Age, Nature, Audit Company and Social Balance, with the disclosure index on human resources.

Table 7 – Regression Result – Year 2013

Variable	Coefficient	t	p-value
Constant	-4,688	-0,574	0,569
Size	4,823	2,105	0,026
Profitability	0,366	0,926	0,359
Age	0,080	1,094	0,279
Nature	-10,414	-1,503	0,140
Audit	9,465	1,663	0,103
Social Balance	15,139	2,350	0,023

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R Square	0,344
Adjusted R Square	0,253
P - Value (F)	0,004

Source: elaborated by authors based in researched data.

4.1 Size (SIZE)

As the regression estimated in Tables 2 and 3, it has been accepted the hypothesis 1 that the company's size is significantly related to the disclosure of index information on human resources. In 2004 this variable was significant at the 10% level, with a p-value of 0.088, already in 2013 it owned a p-value of 0.026, noting that in both years was no influence of the company size on the level of disclosure.

These findings corroborate studies Dominguez (2012) and Mamun (2009). It was also found studies with the variable size with respect to the level of social disclosure, studies Eng and Mak (2003), Cunha and Ribeiro (2008) Bhayani (2012), the study of this variable was also found at a significance relationship with the level of governance through Bhiyan and Biswas work (2007).

4.2 Profitability (PROF)

Regarding the profitability of companies, it was evaluated that it has no significant relationship with IDIHR in both study years because in 2004 found a p-value of 0.731 and at 2013 a p-value 0.359. In this way, we reject the hypothesis 2 of this study, that there is a significant relationship between profitability and IDIHR. Thus, profitability has no influence on IDIHR.

These findings are similar to Dominguez (2012) also reached this conclusion in its search for the author; there is no significant relationship between profitability and disclosure index.

But differ from the results achieved by Mamun (2009) and Micah, Ofurum and Ihendinihu (2012), which achieved a significant relationship between the profitability of companies and IDIHR.

4.3 Age (AGE)

It rejected the hypothesis 3 significant relationship between the age of companies and the level of disclosure on human resources in 2004 to a p-value of 0.917 and in 2013 to a p-value of 0.279. Thus, it appears that the age did not influence in both years the IDIHR, ie the fact that companies are more experienced in the market does not determine your level of disclosure.

The evaluation of this hypothesis is guided by the study of Mamun (2009) who performed the same analysis and also rejected the same hypothesis. Other studies using age, evaluating its relationship with the voluntary disclosure and also rejected, were to research by Alsaeed (2006) and Bhayani (2012), verifying so age is not a well-connected metric studies dealing on voluntary disclosure.

4.4 Nature (NAT)

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Both in 2004 ($p = 0.453$) as in 2013 ($p = 0.140$), accepted the hypothesis 4 that there is no significant difference between the nature of the companies, ie the fact that the companies are of financial or non-financial nature does not influence on the level of disclosure about human resources.

These findings corroborate the study by Mamun (2009), as well as with the study of Bhuiyan and Biswas (2007), which also found no significant relationship in their study, the relationship between the nature of the business and the level of governances companies.

The study by Domínguez (2012) was against the previous findings, that is, to the author there is significant relationship between the nature of the company, but it is noteworthy that in his study were not considered nature the fact that the companies or not financial, but if companies were types of high growth or low growth industry.

4.5 Audit (AUD)

Observed year 2004 ($p\text{-value} = 0.234$) and 2013 ($p = 0.103$) was found that there is a significant relationship between the size of the companies audit firm and the level of disclosure of information on human resources, accepting the hypothesis 5. Thus, the size does not influence the audit IDIHR.

But in other studies, where this variable took other looks, it evaluated significant relationship, as in the work of Oliveira (2012) which found the existence of influence of variable audit of the publication of Social Report. As well, the study Bhayani (2012), noting the relationship between the variable under study and the level of voluntary disclosure.

Already the findings of Almeida and Almeida (2009) assessed that companies audited by companies defined as the Big Four, had a lower degree of discretionary accruals.

4.6 Social Balance Sheet (BS)

Analyzing the variable social balance and its influence on the IDIHR accepted the hypothesis 6, concluding that both in 2004 ($p = 0.001$) and in 2013 ($p = 0.023$) there is a significant difference between the fact disclose or not the Social and Information Disclosure Index of Human Resources. Thus, it evaluates the importance of the Social Report as a diffuser of information about social aspects and in this case, especially human resources. Insofar as companies seek disclosure thus influencing the exposure process of human resources information.

The approach taken in this case took a different view of the already addressed because the social balance was already present in other works, but through different analysis of exposed here. Some of the work that used social balance in his analysis were the Trevisan (2002) who used the BS to demonstrate the practice of corporate social responsibility; Pinto and Ribeiro (2004), which sought to evaluate the disclosure, frequency and BS content of Santa Catarina companies; Ferreira et al. (2011) who used the BS to evaluate the wealth generated and social investments and the Lan et al. (2011) demonstrated that the actions that have been developed in recent decades in order to disseminate and consolidate the BS.

5. CONCLUSION

Possession of Table 1 there was a difference between the levels of disclosure presented by the companies in the comparison between the years 2004 and 2013. However,

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analyzing the chances of defined research, it was found that the results for both the years 2004 as for the year 2013 were the same, ie, the factors that influence on the information disclosure system of the human capital of the companies studied are the same in both years.

Thus, the study found that among the quantitative variables of the study, only the size of the companies shown to be related IDIHR. In the analysis of qualitative variables to dummy, social balance was the one who expressed the significance as IDIHR.

This fact shows that the factors that influence the dissemination of information on human resources are the same, and that the greater the larger companies tend it will have to display information on human resources and the other factor that is linked to this exhibition is the disclosure of social balance, ie, companies that care about the construction of this report this likely to achieve greater exposure on human resources.

Possible future research can be made using other variables, in order to better understand the factors that influence the IDIHR, as well as the use of the comparison between other years. As a research limitation we have high sample companies' disposal index, which does not provide the generalization of results. Have to respect the contribution of work, this shows that over the years the companies will achieve a higher level of disclosure, but what drives this point are the same factors.

REFERENCES

- ALMEIDA, M. A. Estrutura de capital e divulgação voluntária de informações de responsabilidade social corporativa das empresas brasileiras, 2014. 129 f. **Dissertação (Mestrado em Administração)**, Universidade Federal de Pernambuco, Ciências Administrativas, UFPE, 2014.
- ALMEIDA, J. E. F.; ALMEIDA, J.C.G. Auditoria e *Earnings Management*: estudo empírico nas empresas abertas auditadas pelas *big four* e demais firmas de auditoria. **Revista Contabilidade & Finanças**, v.20, n.50, p. 62-74, maio/agosto 2009.
- ALSAEED, K. The Association Between Firm-Specific Characteristics and Disclosure The case of Saudi Arabia. **Managerial Auditing Journal**, v. 21, n. 5, p. 476-496, 2006.
- BALASUNDARAM, N. HR Practices of Industrial Enterprises in Bangladeshi: A Factor Analysis Approach. **The Bangladeshi Accountant Journal of the Institute of Chartered Accountants of Bangladeshi**, v. 38, n.67, p. 79-84, 2010
- BONTIS, N. Intellectual Capital Disclosure in Canadian Corporations. **Journal of Human Resource Costing & Accounting**, v. 7, n. 1, p. 9-20, 2003.
- BHAYANI, S. The Relationship Between Comprehensiveness of Corporate Disclosure and Firm Characteristics in India. **Asia – Pacific Finance an Accounting Review**, v.1, n.1, dez. 2012.
- BHUIYAN, M. H. U.; BISWAS, P. K. Corporate Governance and Reporting: an empirical study of the listed companies in Bangladesh. **Journal of Business Studies**, v. 28, n. 1, jun. 2007.
- BRANCO, M. C.; RODRIGUES, L. L. Exploring the importance of social responsibility disclosure for human resources. **Journal of Human Resource Costing & Accounting**, v. 13, n. 3, p. 186-205, 2009.
- CONCEIÇÃO, S. H. D.; DOURADO, G.; BAQUEIRO, A.; FREIRE, S.; BRITO, P. Fatores

Comparative Analysis of Factors that Affects the Disclosure of Information Related to
Human Resources (2004 - 2013)

- determinantes no disclosure em Responsabilidade Social Corporativa (RSC): um estudo qualitativo e quantitativo com empresas listadas na Bovespa. **Gest. Prod**, p. 461-472, 2011.
- CONSELHO FEDERAL DE CONTABILIDADE. **NBC T 15 - Informações de Natureza Social e Ambiental**. Disponível em:
<http://www.cfc.org.br/sisweb/sre/detalhes_sre.aspx?Codigo=2004/001003>. Acesso em: 20 jan. 2015.
- CUNHA, J. V. A.; RIBEIRO, M. S. Divulgação Voluntária de Informações de Natureza Social: um estudo nas empresas brasileiras. **Revista de Administração Eletrônica**, v.1, n. 1, jan./jun. 2008.
- DOMÍNGUEZ, M. A. A. Company Characteristics and Human Resource Disclosure in Spain. **Social Responsibility Journal**, v. 8, n. 1, p. 4-20, 2012.
- ENG, L.L.; MAK, Y. T. Corporate Governance and Voluntary Disclosure. **Journal of Accounting and Public Policy**, v. 22, p. 325 – 345, 2003.
- FERREIRA, R. N.; ARAÚJO, E. A.; ANTONIALI, L. M.; SALAZAR, G. T.; SANTOS, A. C. S. Investimentos Sociais e Riqueza Gerada: uma análise a partir do balanço social. **Pretexto**, v. 12, n. 4, p.09-32, out./dez. 2011.
- GUJARATI, D. N. **Econometria Básica**. 4ª ed. Rio de Janeiro: Elsevier, 2006.
- HOSSAIN, D. M.; KHAN, A.; YASMIN, I. The Nature of Voluntary Disclosures on Human Resource in the Annual Reports of Bangladesh Companies. **Dhaka University Journal of Business Studies**, v. 25, n. 1, 2004.
- LAN, C. A. M.; BERNARDO, D. C. R.; NAZARETH, L. G. C.; MENDONÇA, F. M. Um Estudo das Ações para Divulgar e Consolidar o Balanço Social no Brasil. **Revista Gestão Organizacional**, v. 4, n.2, jul./dez. 2011.
- MAMUN, S. A. A. Human Resource Accounting (HRA) Disclosure of Bangladesh Companies and its Association with Corporate Characteristics. **BRAC University Journal**, v. 1, n. 1, p. 35-43, 2009.
- MICAH, L. C.; OFURUM, C. O.; IHENDINIHU, J. U. Firms Financial Performance and Human Resource Accounting Disclosure in Nigeria. **International Journal of Business and Management**, v. 7, n. 14, 2012.
- OLIVEIRA, D. R. Determinantes da Divulgação Voluntária do Balanço Social no Brasil, 2012. 50 f. **Dissertação (Mestrado em Ciências Contábeis)**, Fundação Capixaba de Pesquisa em contabilidade, Economia e Finanças, FUCAPE, 2012.
- PINTO, A. L.; RIBEIRO, M. S. Balanço Social: avaliação de informações fornecidas por empresas industriais situadas no Estado de Santa Catarina. **Revista Contabilidade & Finanças – USP**, n. 36, p.21 – 34, set./dez. 2004.
- TREVISAN, F. A. Balanço Social como Instrumento de Marketing. **RAE-eletrônica**, v.01, n. 02, jul./dez. 2002. Disponível em: <<http://www.spell.org.br/documentos/download/30333>>. Acesso em: 12 fev. 2015.