



**STUDY OF THE BEHAVIOR OF THE DEBT COMPANY CELULOSE IRANI S.A.:
TEMPORAL STUDY 2005-2015**

**ESTUDO DO COMPORTAMENTO DO ENDIVIDAMENTO DA EMPRESA
CELULOSE IRANI S.A.: ESTUDO TEMPORAL 2005-2015**

**ESTUDIO DEL COMPORTAMIENTO DEL ENDEUDAMIENTO DE LA EMPRESA
CELULOSE IRANI S.A.: ESTUDIO TEMPORAL 2005-2015**

DOI: <http://dx.doi.org/10.18028/2238-5320/rgfc.v7n2p141-155>

Marcco Aurélio Drigo

Pós-graduado em Auditoria, Controladoria e Finanças pela Faculdade Pitágoras-Uberlândia-MG
Técnico Bancário Novo na Caixa Econômica Federal – Agência Itumbiara-GO
Endereço: Rua Laura Pacheco,96 – CEP 75503-320 – Itumbiara – GO
Email: marcco.drigo02@gmail.com

Edilberto Batista Mendes Neto

Mestre em Finanças pela Universidade Federal de Uberlândia (UFU)
Contador no Hospital da Universidade Federal de Uberlândia – MG
Professor Universitário na Universidade Federal de Uberlândia e Universidade Presidente
Antônio Carlos (UNIPAC)
Endereço: Av.de Misael Rodrigues de Castro,300 – CEP 38408-184 – Uberlândia - MG
Email: edilneto@gmail.com

ABSTRACT

This article proposes to analyze the debt behavior of the company Cellulose Irani S.A., belonging to the paper and pulp segment of the listed companies listed on BM &F Bovespa. This analysis was delimited for the period 2005 - 2015 and was based on the study of the indicators of participation of third parties, the level of indebtedness, composition of indebtedness, financial leverage and profitability. The general objective was to identify the main indicators of indebtedness and its behavior in the period 2005 - 2015 in the company Cellulose Irani S.A. Specifically, it proposes to calculate the classical debt indicators of the analysis of balance sheets; identify possible behaviors in such indicators and their influence on the financial structure of the company; to correlate total debt volume and net income to assess dependency among such financial aggregates. The relevance of debt management and how it impacts the survival of the company is at the heart of this article. The indebtedness study contributes to a more effective management of the organization, aiming at the reduction of financial risk and the continuity of operations. The methodology used involved the collection of the data directly from the publications on the BM & F Bovespa website, tabulating them and calculating the indicators, their presentation by means of charts and their subsequent analysis. In addition, such a study serves as a model for application in other companies, and even as a suggestion the application of such analyzes in specific segments.

Recebido em 27.11.2016. Revisado por pares em 25.12.2016. Reformulações em 20.02.2017.

Recomendado para publicação em 08.03.2017. Publicado em 31.07.2017



licensed under a Creative Commons Attribution 3.0 United States License

The main contribution of this article is to identify the management situation based on financial indicators, an issue that takes center stage in the modern organizational strategy. In general terms, it was observed that the company studied presented a certain irregularity in the values of the indicators, showing a certain level of improvement in the last periods, as well as a positive correlation between the total level of indebtedness (current and long-term liabilities) and the net profit, as well as a positive leverage, since third-party capital is positively contributing to the formation of return on capital invested, but with a significant increase in financial risk.

KEY WORDS: Indebtedness. Analysis of balance sheets. Financial Leverage. Financial management.

RESUMO

Este artigo se propõe a analisar o comportamento do endividamento da empresa Celulose Irani S.A., pertencente ao segmento de papel e celulose das companhias abertas listadas na BM&F Bovespa. Tal análise foi delimitada para o período 2005 – 2015 e teve como fundamentos o estudo dos indicadores de participação de capitais de terceiros, o nível de endividamento, composição do endividamento, alavancagem financeira e rentabilidade. O objetivo geral foi de identificar os principais indicadores de endividamento e seu comportamento no período 2005 – 2015 na empresa Celulose Irani S.A. Especificamente, propõe calcular os indicadores de endividamento clássicos da análise de balanços; identificar possíveis comportamentos em tais indicadores e sua influência na estrutura financeira da empresa; correlacionar o volume de endividamento total e o lucro líquido para avaliar dependência entre tais agregados financeiros. A relevância do gerenciamento das dívidas e de que forma isso impacta a questão da sobrevivência da empresa é o cerne central deste artigo. O estudo sobre o endividamento contribui para uma gestão mais efetiva da organização, tendo como direcionamento a redução do risco financeiro e continuidade das operações. A metodologia utilizada envolveu a coleta dos dados diretamente das publicações no site da BM&F Bovespa, tabulando os mesmos e efetuando o cálculo dos indicadores, sua apresentação por meio de gráficos e sua posterior análise. Além disso tal estudo serve como modelo para aplicação em outras empresas, e até mesmo como sugestão a aplicação de tais análises em segmentos específicos. A contribuição principal do presente artigo é de identificar a situação do gerenciamento com base em indicadores financeiros, questão que toma centralidade na estratégia organizacional moderna. Em termos gerais, observou-se que a empresa estudada apresentou certa irregularidade nos valores dos indicadores, apresentando certo nível de melhora nos últimos períodos, bem como uma correlação positiva entre o nível total de endividamento (passivo circulante e exigível a longo prazo) e o lucro líquido, além de denotar alavancagem positiva, já que os capitais de terceiros estão contribuindo positivamente para a formação do retorno sobre o capital investido, no entanto com tendência de elevação significativa do risco financeiro.

PALAVRAS – CHAVE: Endividamento. Análise de balanços. Alavancagem Financeira. Gestão financeira.

RESUMEN

Este artículo tiene como objetivo analizar el comportamiento de la deuda de la compañía Irani Celulosa S.A. perteneciente al segmento de papel y celulosa de las empresas públicas en la BM & F Bovespa. Este análisis se ha definido para el período 2005-2015 y tuvo como base el estudio de

indicadores de participación de capital de terceros, el nivel de endeudamiento, la composición de la deuda, el apalancamiento financiero y la rentabilidad. El objetivo general fue identificar los principales indicadores de la deuda y su comportamiento en el período 2005-2015 la empresa Celulosa Irani SA En concreto, se propone calcular los indicadores de la deuda clásicos de análisis de balances; identificar posibles comportamientos tales indicadores y su influencia en la estructura financiera de la empresa; correlacionar el volumen total de la deuda y los ingresos netos para evaluar la dependencia de tales agregados financieros. La relevancia de la gestión de la deuda y cómo afecta a la cuestión de la supervivencia de la empresa es el núcleo central de este artículo. El estudio sobre la deuda contribuye a una gestión más eficaz de la organización, con la dirección de reducir el riesgo financiero y la continuidad de las operaciones. La metodología consistió en la recolección de datos directamente de las publicaciones sobre el sitio de la BM & F Bovespa, la tabulación de ellos y hacer el cálculo de los indicadores, su presentación a través de gráficos y su posterior análisis. Además, este estudio sirve como modelo para su aplicación en otras empresas, e incluso como una sugerencia de la aplicación de estos análisis en segmentos específicos. La principal contribución de este trabajo es identificar la situación de la gestión basada en los indicadores financieros, se trata teniendo carácter central en la estrategia organizacional moderna. En general, se observó que la empresa estudiada presentó alguna irregularidad en los valores de los indicadores, con cierto nivel de mejora en los últimos períodos, así como una correlación positiva entre el nivel total de la deuda (activos corrientes a largo plazo y pasivos) y los ingresos netos, y denotan influencia positiva, ya que la capital de terceros están contribuyendo positivamente a la formación de la rentabilidad del capital invertido, pero con el aumento significativo en la tendencia de riesgo financiero.

PALABRAS - CLAVE: El endeudamiento. Equilibrar el análisis de situación. El apalancamiento financiero. Gestión financiera.

1. INTRODUCTION

This article intends to analyze the global debt behavior of the company CELULOSE IRANI S.A, a publicly traded company participating in BMF & BOVESPA.

According to Assaf Neto (2010, p.134), companies often do not have their own financial conditions sufficient to meet the volume of resources demanded by their current or planned activity, using in such cases, third-party capital.

According to Matarazzo (2010, p.89), "it may be added that, through experience, bankrupt companies are generally heavily indebted. This is more or less obvious, since bankruptcy is nothing more than the inability to pay debts; Companies with a low percentage of indebtedness do not usually go bankrupt. It is impossible for a company with zero debt to go bankrupt! "

Thus, this study deals with the issue of indebtedness and its consequences for companies, being portrayed through theoretical reference and application of the accounting technique of balance sheet analysis to identify the behavior of debt indicators related to public companies in the paper and Pulp in the period 2010-2015. The research problem that is sought to answer is: "What has been the behavior and structure of CIA CELULOSE IRANI SA's debt?"

This study is justified by the identification of the financial perspective of corporate indebtedness, a matter of vital importance in the strategy of the company as a whole and a fundamental element in the elaboration of strategic planning. In general, as the company's main accounting problem states, it is debt, because the company is not able to manage the debt and its

respective cost. Moreover, this cost in Brazil has been significant for companies, which further complicates the issue of debt management and the effective return obtained with resources.

In general, this article aims to identify the main indicators of indebtedness and its behavior in the period 2005 - 2014 in the company Cellulose Irani S.A.

Specifically, it is intended:

- Calculate the classical debt indicators of balance sheet analysis, such a general indebtedness, the participation of third-party capital, the degree of financial leverage, the immobilization of non-current resources and the immobilization of shareholders' equity;
- Identify possible behaviors in such indicators and their influence on the structure of the company;
- Correlate the volume of total indebtedness and net income to evaluate dependence between such financial aggregates.

The following hypotheses are adopted for such study:

H1: Cellulose Irani S.A., a listed company in the pulp and paper sector of BMF & Bovespa, has increased its indebtedness levels in the period 2005 - 2014;

H2: The financial policies adopted are leading to worsening of debt indicators.

The methodology applied to this work is applied in nature; objectives was given in a descriptive way; by means of bibliographic review and documentary analysis of the financial statements of the companies evaluated; in relation to the approach of the research problem, this occurred in a quantitative way; the techniques used to prepare the study are the calculation of indices, analysis of consolidated statistics and time trend charts.

2. THEORETICAL REFERENCE

In Assaf Neto's conception (2010, p. 134), companies often do not have sufficient financial conditions sufficient to meet the volume of resources demanded for their current or planned activity, using, in such cases, third-party capital. However, even if there were self-sufficiency of capital, it would not always be interesting to allocate them fully, since their cost is usually higher than the cost of third-party resources.

For Groppelli and Nikbakht (2010, p. 190), the company must maintain a certain balance between debts and equity. A high level of debt can increase the company's risk by making investors apprehensive about their ability to repay creditors.

Gitman (2004, p.49) states that the indebtedness index of a company indicates the volume of money used to generate profits. In general, the financial analyst is more concerned with Long-term debt because they jeopardize the company with a series of payments by many years. Since is it necessary to settle obligations with creditors before distributing profits to shareholders, current and future shareholders pay close attention to the ability to pay also.

According to Assaf Neto, the structure of the requirement should provide Conditions for the company at the lowest possible cost and considering the necessary synchronization between Payments and receipts, to finance the asset applications that are not satisfied by the Themselves. Often, the idea is defended that it is in the interest of the company to be indebted whenever of its investments if it is higher than the cost of borrowed capital.

In order to evaluate how debt has been given, companies seek the analysis of balance sheets as a tool to support and control their planning. In the accounting and financial literature, there are several indicators that relate the structure of the company's indebtedness, relating items of assets, liabilities and income statement for the year.

One of these indicators to assess Structure of the company is the participation of third party capital that is demonstrated by Matarazzo (2010) as being how much the company took from third party capitals for each 100 of Capital invested and is interpreted as the smaller the better. Its formula is as follows:

$$\text{(Third-party funds)} / \text{(Shareholders' Equity)} * 100$$

According to Matarazzo (2010), the next step, after Know the degree of Participation of Third Parties, is to know the composition of these debts. It's one thing to have short-term debt that needs to be paid off with the resources you have today, more those generated in the short term (and we know the difficulties in generating resources in the short term).

It is another thing to have long-term debt, because the company has the time to generate resources (Usually profit plus depreciation) to pay these debts. The formula for such an index is:

$$\text{(Current Liabilities)} / \text{(Third Party Capital)} * 100$$

Another important indicator in which the structure is evaluated of the company's capital is financial dependence, which according to Assaf Neto (2010, p. Company's dependence on its total liabilities, that is, on the amount invested in Its assets, what the participation of the resources of third parties. The higher the index, the company's financial dependence on the use of the third party capital. Its formula is as follows:

$$\text{(Third-party funds)} / \text{(Total Assets)} * 100$$

According to Assaf Neto, a supplement of this indicator is financial independence (total assets and liabilities) and indicates the level of Independence of third-party capital. The higher the Independence, the greater the guarantee offered by the company and its creditors for the greater use of themselves.

On the other hand, the ratio of fixed assets to fixed assets is determined by the ratio Permanent liability (the long-term liabilities) of the company, that is, the percentage of these Resources that is financing the permanent assets. If the index shows a result higher than 1.0 (00%), indicates that shareholders' equity and long-term liabilities are not sufficient to Investment in permanent assets.

In this situation, it is concluded that current liabilities (Short-term debt) is financing part of the permanent investments, which Sign of financial imbalance AND calculated according to the following formula:

$$\text{Immobilization of Permanent Capital Stockholders' Equity Long-Term} = \frac{\text{(Permanent Assets)}}{\text{(Shareholders' Equity + Long-Term Liabilities)}}$$

According to Matarazzo, the indicator of net asset Applied in the Permanent Assets for each 100 of Equity and the lower this index, best. Its formula is:

$$\text{(Permanent Assets)} / \text{(Shareholders' Equity)} * 100$$

According to the author, the applications of resources of the Shareholders' Equity are mutually exclusive of Permanent Assets and Current Assets. How much the company invests in the Permanent Asset, less own resources will be left for the Asset and, consequently, the greater the dependence on third-party capital for the Financing of current assets. The ideal in financial terms is the company dispose of Equity Liquidity sufficient to cover Permanent Assets and still have a parcel -CCP Capital Current Own sufficient to finance Current Assets.

Finally, to evaluate the efficiency of the management of the indebtedness of companies in the paper and pulp sector, Of the degree of financial leverage (GAF), which is given by Assaf Neto using the following formula:

$$\text{GAF} = \text{RSPL} / \text{ROI}$$

The essence of the study of financial leverage is to demonstrate how the differential between return and Cost of resources borrowed from third parties affects the return on equity. GAF is greater than 1, denotes that third-party capital is positively influencing return of the company's equity, due to the increase in net assets. Of course, for how many and The GAF, the better it will be, therefore, the lower cost of third-party resources will act with a Lever on their returns.

On the other hand, a lower GAF reflects an unfavorable situation in terms of leverage for the company. A cost of financing is identified through higher than the return that these resources can generate on company assets.

The formulas Used for the calculation of the RSPL (Return on Shareholders' Equity) and following, according to the ROI (Return on Investment) for the formulation of the GAF are presented by Assaf Neto (2010, p. 208):

$$\text{ROI} = \text{(Net Operating Profit)} / \text{Investment}$$

$$\text{RSPL} = \text{(Net Income)} / \text{(Stockholders' Equity (-) Net Profit)}$$

The application of the indicators to a company in the paper and pulp sector was decided Through the research of data of the sector. According to Bracelpa (Brazilian pulp and paper Paper) in the year 2012 Brazil was the 4th place in the world in the production of pulp and 9 place in the production of paper, with a total area of forests planted in the order of 6,973 thousand hectares, Therefore, 0.8% of the total area of the country.

The sector has also presented high levels of productivity, basically justified by the appropriate climate and soil factors, research and development, privately organized and highly skilled workforce. Technological advances such as Genetics, biotechnology, high-quality raw materials, socio-environmental planning, forests management and rotation of planted areas also influence the sector's good performance.

Still According to the data of the association, the Brazilian production of pulp and paper were of the order of 15.1 million tons of pulp and 10.4 million tons of paper. These Refer to the year 2013.

The sector also promotes and encourages economic and social development in Regions far away from large urban centers, investing in projects and initiatives in areas such as education, health, environmental education programs, employment and income generation and partnerships.

3. METHODOLOGY USED

The delimitation of the scientific methodology used for the Exploration of a given research problem is of fundamental importance for the researcher. a Research plan provides the basic guidelines for undertaking a project.

About the nature of this study, it can be classified as being of an applied nature, aiming to generate Knowledge for practical application directed to the solution of specific problems. Castro (977) states that applied research is the cornerstone of a research effort Not a substitute or an alternative.

The safe conduct of an applied research lies in the clarity of its objectives regarding the objectives of the study, it is clearly identified as of descriptive nature, since according to Triviños (1987) the descriptive studies require the researcher a series of information on what one wishes to research, although such studies are not Simply by collecting, sorting and classifying the data. One can even establish relationships Between the variables.

This research was delineated through bibliographic research, and books and articles on the financial administration area, more specific about debt. Gil (1999), affirms that the bibliographic research is developed from material already elaborated, scientific articles. We also used research consisting mainly of documentary books, Accounting statements, which have not yet been Treatment Gil (2002) says that this research uses materials that are not analytical.

Received further an analytical treatment and has as limitations the non-representativeness and subjectivity of the documents, but on the other hand is advantageous for not requiring contact with the research subjects, low cost by requiring only time availability, as well as being a rich and stable source of data.

The research problem is of a quantitative nature, since it is based on numerical analyzes and statistics. Oliveira (2002) explains that quantitative, as the term himself indicates, quantify opinions, data, forms of information collection, as well as use of resources and statistical techniques from the simplest, such as percentage, average, fashion, mean and standard deviation, to those of more complex use, such as correlation coefficient, regression, etc., usually used in defense of theses.

Finally, the analysis of the results Through the collection of data directly from the balance sheets and Results of the selected company in the period 2005 2014, of the paper segment and Obtained by the BM and F Bovespa website (<http://www.bmfbovespa.com.br>) and tabulated by means of spreadsheet.

4. DISCUSSION AND ANALYSIS OF RESULTS

The first indicator to be analyzed is The participation of third-party capital, which is participation of third party capital, which is summarized in the following chart:

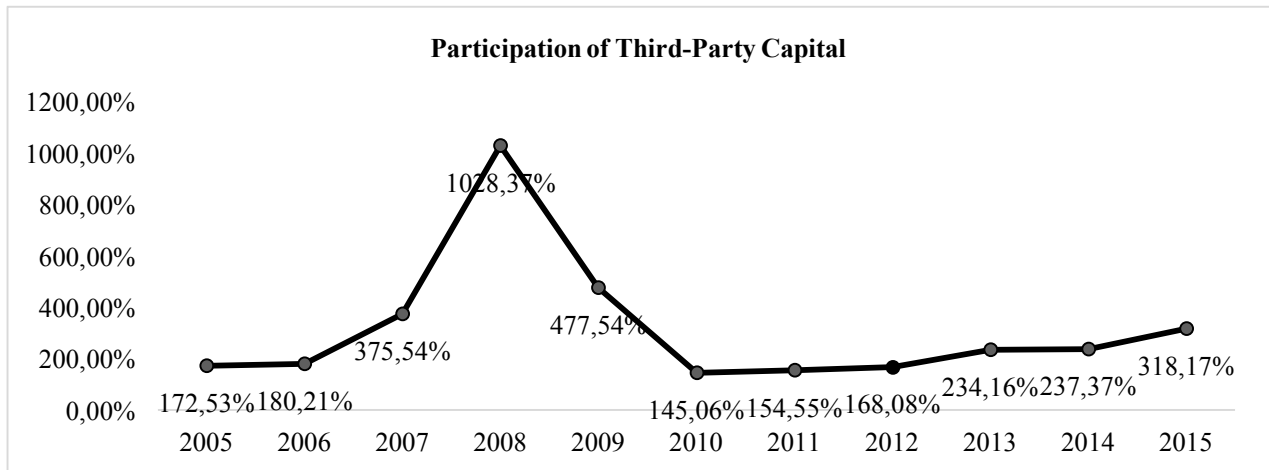


Chart 1 – Participation of Third – Party Capital

As it can be seen from the analysis in Chart 1, it can be stated that the indebtedness (Circulating and circulating) presented quite heterogeneous behavior already passive, not in 2005 and 2006, it increased by about 5 percentage points.

In 2007, due to considerable increases in liabilities, this indicator reached 375.54%. In 2008, Reached the highest analyzed ratio (28.37%), due to two main factors: the liabilities increased and equity declined in 2009, the indicator presented a value of 477.54%, A strategy based on the reduction of liabilities with amortization of part of the debt and Equity.

In 2010, there was an increase in total debt, however, more than proportionally in shareholders' equity. In the following years (2011-2014) there were successive increases of the participation of third-party capital, since the increase of third-party capital were more than proportional to increases in the company's equity.

In general terms, it can be that this indicator has not been adequately developed since even Periods, there was an improvement in indebtedness, in all years this index was higher than 100%, which indicates that it is committing itself to creditors, thus worsening its dependence on the 3rd.

The second indicator to be analyzed is the general indebtedness, considered in this study as the total of the asset that is being used with third party resources (current and non-current liabilities):

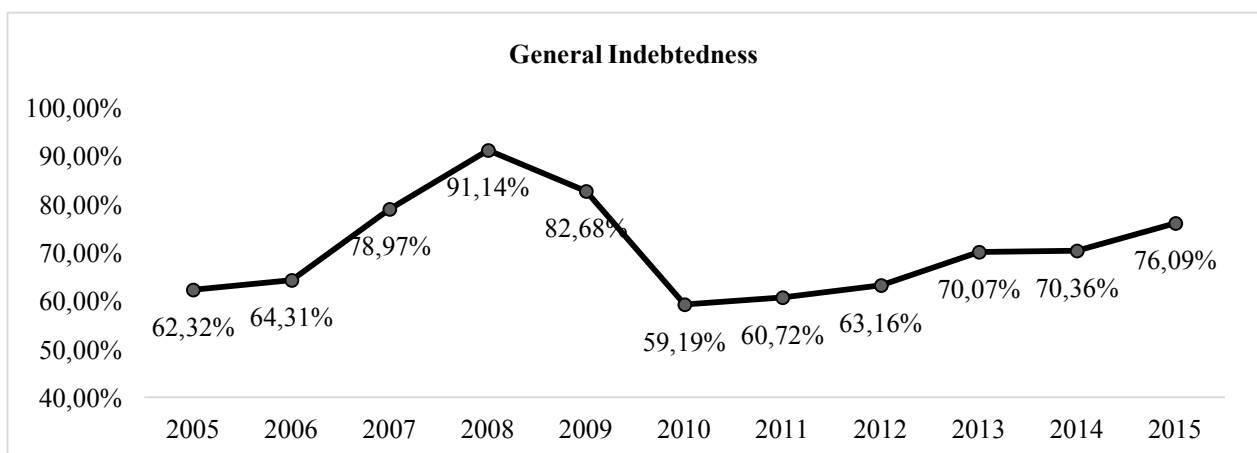


Chart 2 – General Indebtedness

Through the analysis of the chart, it can be considered that there were successive increases in the general indebtedness of the company in the period 2005-2008, going from 62.32% to 91.14% in 2008.

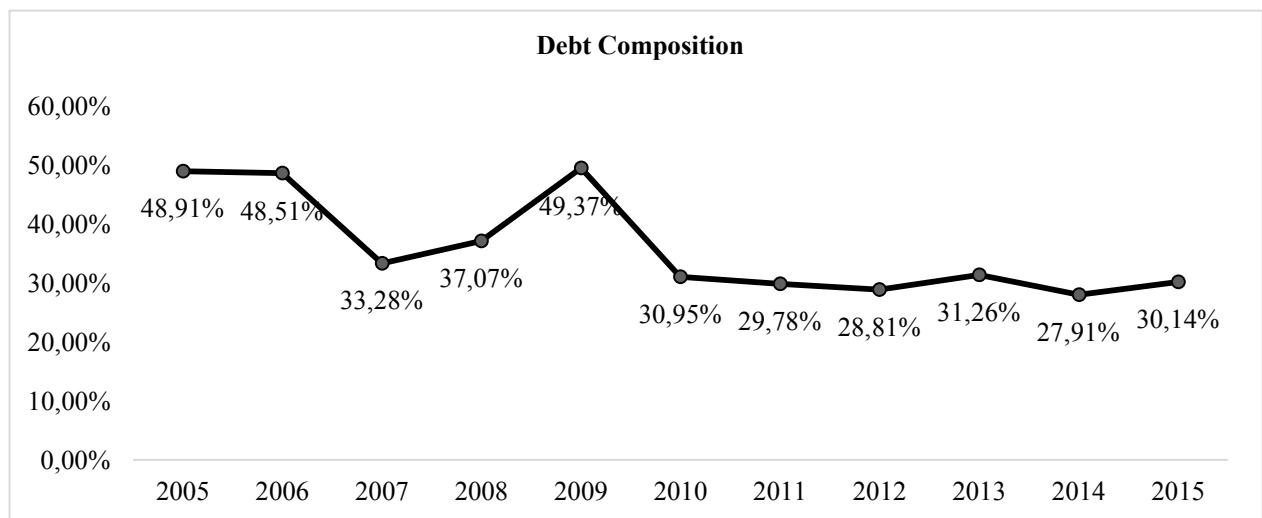
In general, it is understood that the asset is being financed by a Resources, which compromises the company's financial dependence and degree of freedom, since it is more subject to liquidity risks in the payment of its commitments.

As analyzed by the theoretical reference it cannot be said that such behavior of this indicator is being so Poor, since the profitability could be higher than the cost of such debt, as will be Analyzed in the topic of the degree of financial leverage.

In the period 2009 2011, the indicator successes fall, from 82.68% to 60.72%, due to increases in shareholders' equity more than liabilities, the company in this period was more with Shareholders' equity.

Finally, in the final analysis period (2012-2014), there was again substantial increases in general indebtedness, from 63.16% in 2012 to 70.36% in 2014, denoting again the massive use of third-party capital in financing the activity business.

On the other hand, the debt composition index presented quite varied behavior, as shown in the chart below:

**Chart 3** – Debt composition

As it can be seen from Chart 03, you can That from 2005 to 2007, there were two successive declines in the value of the debt Short term compared to total indebtedness, from 2005 to 2006, a small in 2007, this drop was around 15 percentage points, due to Much less proportional of the current liabilities when compared to the evolution of non-current liabilities.

Between 2008 and 2009, there were again increases in the index, since there was an increase in the Total current liabilities. Finally, in the years 2010-2012, again there were falls of such index, and in 2011 it rose again by 3 percentage points. In 2014 the value was the lowest of the Data analyzed (27.91%).

Despite the successive falls in the relative weight of short-term indebtedness in terms of total debt, in 2015 there was a further increase of 2.21 percentage points in relation to the previous year, we can observe a random behavior in the values of this financial index.

The chart below non-current shows the behavior of the asset immobilization indicator Which shows the use of long-term liabilities in the financing of investments in assets.

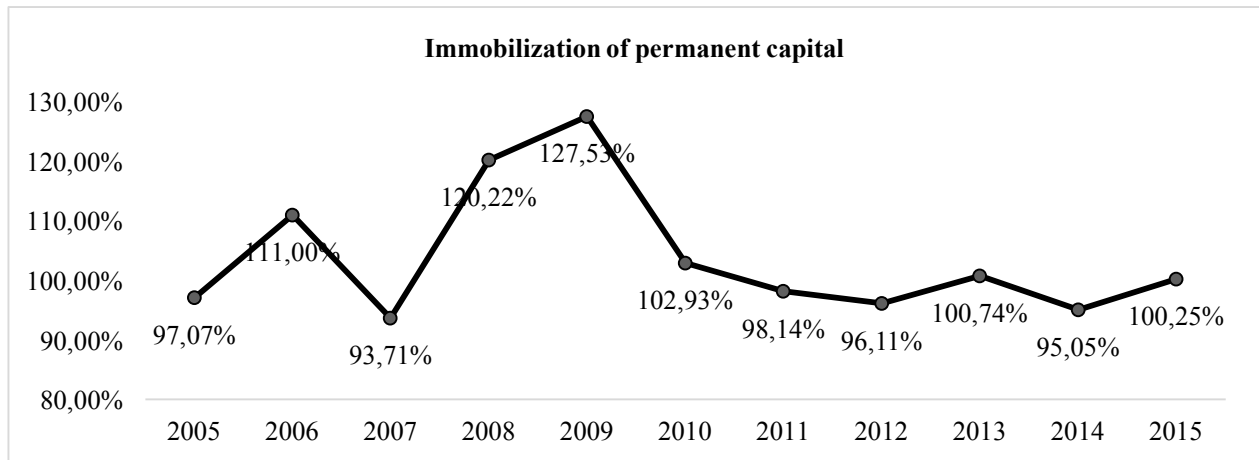


Chart 4 - Immobilization of permanent capital

According to the analysis, this indicator presents values expressively Negative, since the higher it is, the more it means the company's commitment to immobilize the (Long-term liabilities and shareholders' equity) in investments in current assets.

As theory suggests, the ideal would be to keep a share of these capitals Permanent assets to finance short-term activities (current assets). In 4 years the value of such indicator was above 100%, which indicates that in addition to using the total resources to finance non-current assets, the company also used Short-term (current liabilities) for such investments, which Certain financial imbalance.

In 2006, the value was 111.00%, being 120.22% in 2008 and 127.53% In 2009 (highest value in the analyzed period), and 100.74% in 2013.

Even in the years when the indicator was Below 100%, in all these periods this value was higher than 90%, indicating that a small Part of the permanent capital are collaborating in the financing of current assets.

The next indicator analyzed is the return on investment. In this study, the net operating income formula divided by total assets was used. Thus, it can be seen from figure 5 that the behavior of such indicator occurred erratically, that is, with high dispersion among the analyzed years:

Chart 5 – Return on Investment

Analyzing the indicator, it is observed that, In the years 2005 to 2007, there were successive increases in profitability, caused by the increase More than proportional of the net operating profit in relation to the evolution of the total assets.

Already in 2008 As there was the only net operating loss for the period, this indicator was negative (-14.47%). In 2009, this situation reversed, presenting 13.59% profitability, again suffering reductions in the period 2012-2013, there was a slight increase in 6.23% to 6.68%, coming back to fall in 2014, when this profitability was 3.37%.

In the year 2015, the return on investment was close to 0, indicating that the profit was very low compared to the consolidated investment.

Chart 6 shows the behavior of the profitability indicator on shareholders' equity, indicating the generation of profits in the use of equity.

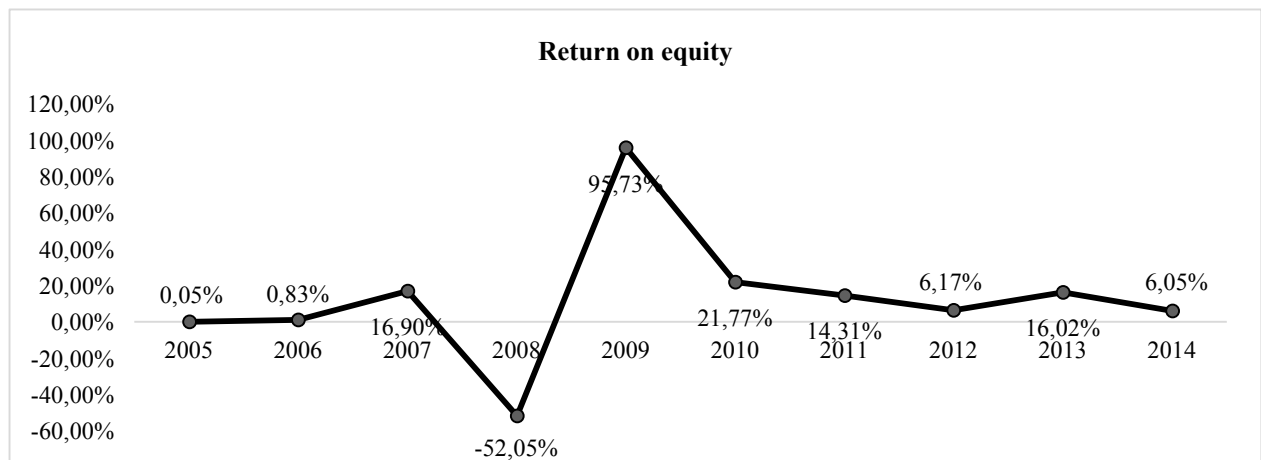
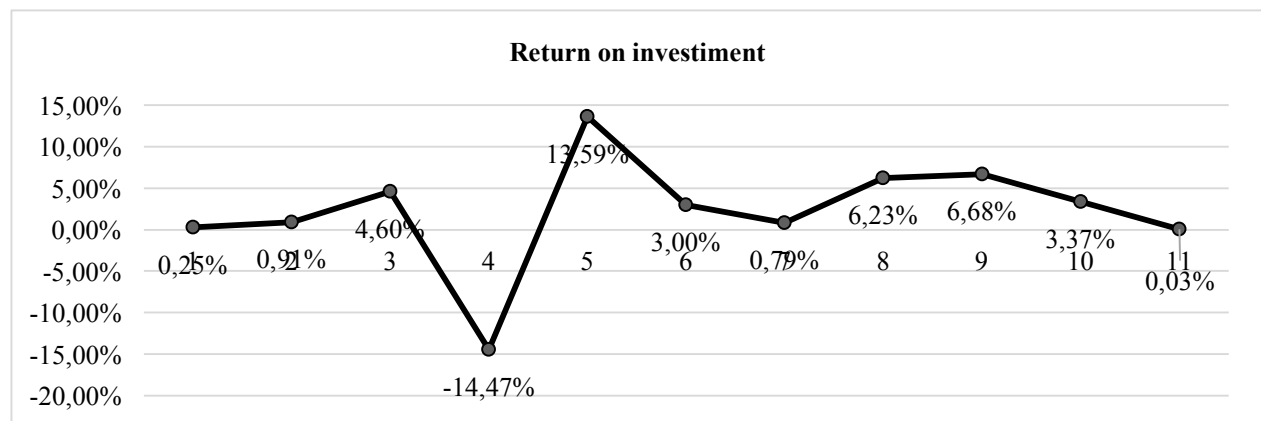


Chart 6 - Return on equity

As verified, in 2005 and 2006 the company presented values close to zero, being 0.05% and 0.83%, respectively. In 2007, there was a significant increase - to 16.90%, as there was a decrease in shareholders' equity, but an increase in net income.



In 2008, the only year of net loss occurred, with -52.05% being the indicator. In 2009, the highest value of analysis occurred, of 95.73%, since there was a high net profit compared to the value of the existing net worth.

In 2010, as there was an increase in shareholders' equity and a lower percentage increase in net income, the profitability of LP decreased to 21.77%. This situation also occurred in 2011 and 2012. In 2013, the profit grew more than proportional to the value of the PL, and 2014 had the opposite situation, since with decrease of the profit and increase of the PL, there was a fall in the value of the index.

Chart 7 represents, in turn, the last descriptive analysis of this study. This is financial leverage, which indicates how the use of third-party capital contributes to the generation of profit and the value of LP.

Theoretically, the greater the financial leverage, the more the third-party capital is contributing to the positive results, but also the risk is also increasing. The company should then seek an indicator that expresses the appropriate choice between risk and return.

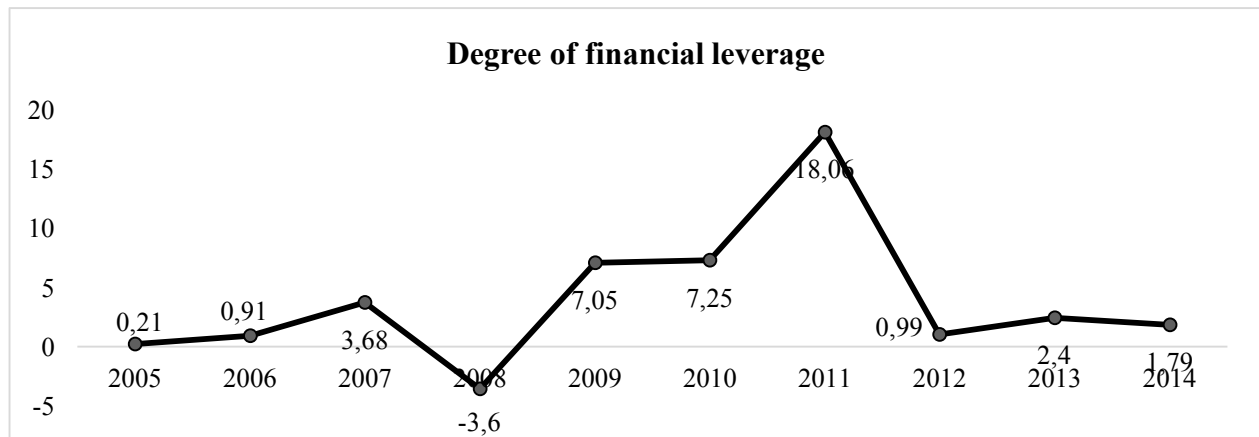


Chart 7 – Degree of Financial Leverage

According to the analysis made, it can be seen that in 2005 and 2006, the profitability of the PL was lower than the return on investment, indicating that the use of third-party capital did not contribute positively to the generation of profits. Similarly, it can be said that the cost of such third - party funding was lower than the return obtained from the application of such resources

In 2007, the return on shareholders' equity was 3.68 times higher than the return on investment. In this case, the use of third-party resources was beneficial to the company and also shows that the cost of third-party capital was lower than the profitability obtained, but at the same time it can be considered that the company's insolvency risk may be increasing, since The gross amount of debt increased.

In 2008, there was the only year with a negative financial leverage ratio of -3.6, given that both the return on shareholders' equity and the return on investment were negative. In the following periods, this table reversed, since these indicators returned to positive values. It can be said that in these years there was a greater risk of insolvency, since the values of current liabilities and long-term liabilities increased.

From 2009 to 2010, there were successes increases in the degree of financial leverage, from -3.6 in 2008 to 7.05 in 2009, 7.25 in 2010 and 18.06 in 2011. It should be noted that in 2011 there

was the highest index of leverage, and it is inferred that this year, consequently, the highest generation of results from the use of third-party capital, with a systemic increase in the risk of insolvency occurred.

Finally, in the period 2012 to 2014, the leverage situation was reduced, in 2012 it was lower, but close to 1, in the amount of 0.99, which indicates that the cost of capital used by third parties was very close to Value of the profitability obtained. In 2013, again it was higher than 1, in the amount of 2.4 and in 2014 was 1.79.

Finally, chart 8 shows the correlation and the linear regression analysis of the comparison between the dependent variable (net profit value) and the independent variable (debt value).

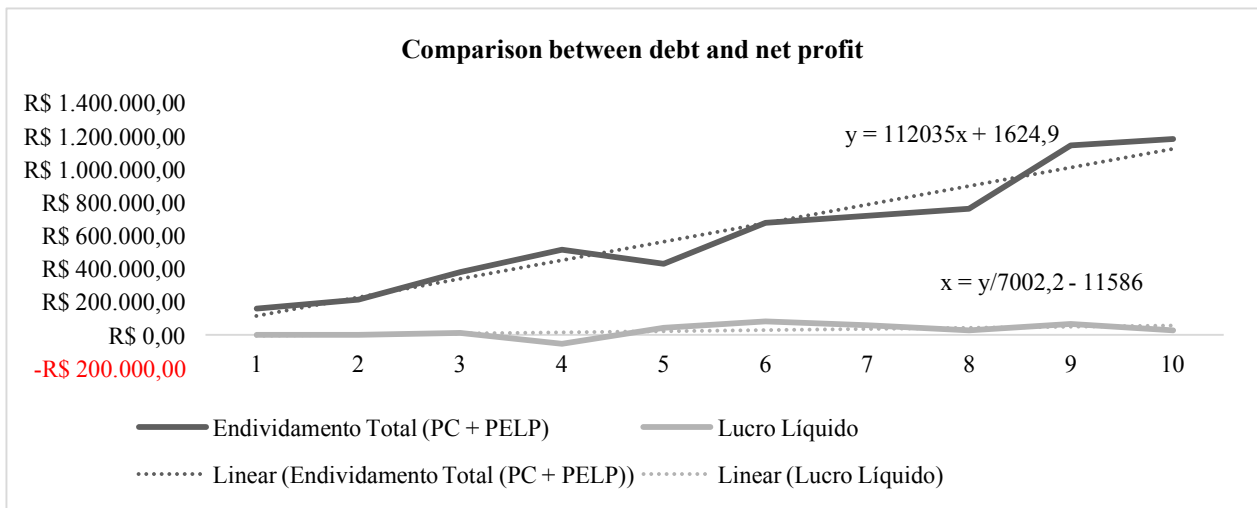


Chart 8 – Comparison between debt and net profit

Such an analysis is useful both for analyzing variations at different levels of indebtedness and their influence on the value of net income and for making profit forecasts at a certain future level of indebtedness.

This analysis allows us to infer that, as the total indebtedness, that is, the resources of the current liabilities and the long-term liabilities, the higher the net profit tends to be, as expressed in the equation: $x = y / 7002.2 - 11586$.

The coefficient is positive indicating, in this specific case of the CIA IRANIS.A., A positive but small relationship, that the trend observed in the analyzed period is that the higher the indebtedness contracted, the better the absolute situation of net income, Without, of course, considering the behavior of relative profitability indicators.

Basically, this relationship is justified by the positive leverage observed in most periods, and in only one accounting period such indicator was negative. In 2008, for example, financial leverage was more than 18 times (RSPL is about 18 times the value of the return on investment), denoting the contribution of the use of debts in the generation of profits, and consequently a weigh average cost of capital lower than the return on investment of the assets.

Such an analysis is very useful in comparing 2 variables that are intrinsically related and in what way they are related - directly or inversely proportional - as well as allowing for future periods to make financial projections at certain levels of indebtedness and net income.

5. FINAL CONSIDERATIONS

The present study was based on the theoretical financial reference referring to the issue of corporate indebtedness. He presented the question of justification to indebtedness and ways of analyzing how the evolution of indebtedness is taking place, as shown by the analysis of balance sheets and their traditional indices, such as the participation of third-party capital, indebtedness, composition of indebtedness, leverage and profitability, for example.

When dealing with the accounting data, in the period 2005 - 2015, COMPANY IRANIS.A. It was observed that the indebtedness indicators, notably the participation of third-party capital and general indebtedness, presented quite varied values during the periods analyzed.

In terms of the participation of third-party capital, when compared to the level of equity capital applied, it was observed that in all the years analyzed these values were higher than 100%, indicating massive use of third-party capital compared to the use of equity. Highlight should be given to the year 2008, in which the highest value (1028.37%) was observed. Although in 2010 the share of third-party capital in the capital structure declined to 145.06%, in all subsequent years there was a deterioration in the indicator.

On the other hand, the percentage of assets that are being financed by third party resources (general debt) increased in the 2005-2008 period. In 2008, it reached the highest value in the list analyzed (91.14%). However, during the 2009-2010 period, there were successive declines in the share of liabilities in the financing of total assets, denoting greater use of resources in shareholders' equity. But still, the period of 2011 - 2014 showed an increase in the debt situation.

Another highlight is the composition of indebtedness: between 2005 and 2007, short-term debt (current liabilities) fell in relation to total debt, from 48.91% in 2005 to 48.51% in 2006 and to 33.28% in 2007. Like other indicators, there was a worsening of the composition of indebtedness in 2008 and 2009, and improved again in the period 2010 - 2014. In 2014, there was the best debt composition in terms of value of 27.91%.

2005, 2006, and 2012). In comparing the profitability of equity and the return on investment, the question of the degree of financial leverage was analyzed, which was presented less than once in 4 years (2005, 2006, 2008 and 2012). In the other years, it can be said that the use of debts was beneficial to the question of the generation of profits with such resources of third parties. In the triennium 2009-2011, the highest levels of financial leverage occurred: 7.05, 7.25 and 18.06 times, respectively.

Finally, when comparing the values of net income and total indebtedness in the analyzed period, there was an intrinsically positive relationship between these two variables, showing, for the specific case of Cellulose Irani SA, that the use of third party resources, despite Increase the financial risk of the company, has contributed positively to the generation of profits and shareholder remuneration.

It is recommended for future studies and analyzes the application of such analyzes and indicators to other sectors of the Brazilian economy and other periods of analysis and even the comparison between the performance of different companies.

REFERENCES

CASTRO, Cláudio de Moura. **The practice of research**. São Paulo: McGraw-Hill, 1997.

GIL, Antônio Carlos. **Methods and techniques of social research**. 5. ed. São Paulo: Atlas, 1999

GITMAN, Lawrence J. **Principles of administration Financial management**. 7.ed. São Paulo: Harbra, 2002.

GROPELLI, A.A.; NIKBAKHT, Ehsan. **Finance management**. 3.ed. São Paulo: Saraiva, 2010.

MATARAZZO, Dante Carmine. **Financial analysis of balance sheets**. 8.ed. São Paulo: Atlas, 2010.

OLIVEIRA, Silvio Luiz de. **Treaty of methodology: Research projects, TGI, CBT, monographs, dissertations and theses**. 2. ed. Sao Paulo: Pioneira Thomson Learning, 2002.

TRIVIÑOS, Augusto N.S. **Introduction to research in social sciences: The qualitative research in education**. São Paulo: Atlas, 1987