

FUNDAÇÃO GETULIO VARGAS  
ESCOLA DE ADMINISTRAÇÃO DE EMPRESAS DE SÃO PAULO

AURELIO VITTORIO BONOLDI

**Distressed Situation and Renegotiation Plan: a Case Study**

SÃO PAULO

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Dissertação apresentada à Escola de Administração de Empresas de São Paulo da Fundação Getúlio Vargas, como requisito para obtenção do título de Mestre Profissional em Gestão Internacional.

Campo do Conhecimento:  
Economia e Finanças Internacionais

Orientador Prof. Dr. Lauro Emilio  
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## RESUMO

Este trabalho apresenta um caso real de uma empresa em situação de estresse financeiro: a PlywoodCo. O objetivo deste trabalho é de entender porque a PlywoodCo. chegou na atual situação de estresse e, baseado nisso, propor um plano de renegociação de passivos compatível com esta situação com o objetivo de tornar a PlywoodCo. em uma empresa viável. Uma introdução é feita, a fim de colocar o leitor em contato com a PlywoodCo., apresentado as suas atividades, principais produtos, posição de mercado, bem como brevemente introduzindo sua atual situação. Após a introdução, a revisão bibliográfica é apresentada, descrevendo a teoria relacionada e utilizada neste trabalho. Mais adiante, a metodologia é apresentada, seguida por mais informações a respeito das operações da PlywoodCo., informações financeiras, relacionamento com *stakeholders*, índices operacionais, demonstrações financeiras, cronograma de pagamento da dívida e depreciação. Depois, as premissas, análises e projeções não apresentadas, consistindo de duas partes: (1) uma seção de diagnóstico endereçando a atual situação da empresa; e (2) uma seção de projeção, que será dividida em duas partes: (a) projeções financeiras da PlywoodCo. na atual situação; e (b) projeções financeiras da PlywoodCo. no novo plano proposto. Finalmente, se conclui que a empresa precisará de esforços além da renegociação de passivos a fim de superar sua situação de estresse financeiro. Após a renegociação da dívida, a empresa precisará de R\$ 23 MM até o fim de 2013.

Retração: apesar de este ser um caso real, o nome da companhia não foi revelado. O trabalho foi produzido baseado em informações que refletem as operações da empresa até 31 de dezembro de 2012, enquanto as projeções estão baseadas em informações datadas até 30 de setembro de 2012.

**Palavras chave:** estresse financeiro, reestruturação financeiras, renegociação de passivos, modelagem financeira.

## ABSTRACT

This work presents a real case of a company in a distressed situation: PlywoodCo. The objective of this work is to understand why PlywoodCo. got in its current distressed situation and, based on that, propose a financial renegotiation plan compatible to that situation in order to turn PlywoodCo. into a viable company. An introduction is made, in order to put the reader in touch with PlywoodCo., presenting its activities, main products, market position as well as briefly introducing the company's current situation. Following the introduction, the literature review is displayed, describing the theory related to and applied in this work. Later, the methodology is presented, followed by further information on PlywoodCo.'s operations and financials, highlighting the company's relationship with stakeholders, operational indexes, financial statements, debt schedule and depreciation schedule. Then the assumptions, analysis and projections are presented, consisting of two parts: (1) a diagnose section addressing PlywoodCo.'s current situation; and (2) a projections section, which will be divided in two further micro parts: (a) PlywoodCo.'s financial projections in the current debt schedule it is in; and finally (b) the financial situation of PlywoodCo. under the new proposed plan. Finally, it is concluded that PlywoodCo. will need further efforts besides the debt renegotiation in order to overcome its distress situation. After renegotiating the debt, the company will need R\$ 23 MM until the end of 2013.

Disclaimer: although this is a real case, the real name of the company was not disclosed. The work is developed based on information reflecting the company's operations until December 31<sup>st</sup> of 2012, while the projections are based on information up to September 30<sup>th</sup> of 2012.

**Key words:** financial distress, corporate distress, liabilities renegotiation, turnaround, financial modeling, distressed.

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# 1 Introduction

PlywoodCo. was the only Brazilian plywood producer entirely focused on the civil construction industry in 2012, delivering in Brazil and abroad. Its products are considered to be high-end and with greater quality than its competitors. They consist of several types and several thickness of plywood covered with phenolic film, and are mainly used to shape the concrete during the construction of a building. PlywoodCo. also develops custom made cuts on the plywood to shape non –standard segments of the construction.

In order to benefit from the civil construction boom experienced in Brazil between the years of 2006 and 2010, especially in São Paulo, PlywoodCo. decided to expand its production capacity and, therefore, began to build a new production site in early 2008, with new and imported machinery. To do that, PlywoodCo. accessed several banks asking for loans, which were almost instantly approved. Most of the loans to build the new factory were obtained through the BNDES (Brazilian National Development Bank), using a credit line called FINAME, in which commercial banks are the intermediaries between BNDES and the lender, extending loans at a relatively (for Brazilian standards) low rate for the company to buy new machinery.

Approaching the end of the new plant's construction, PlywoodCo. began to experience its first problems. Several internal and external factors contributed to the situation that was gaining form: (1) the boom of civil construction that Brazil had experienced was fading lowering PlywoodCo.'s expected future revenues. Figures 10 and 11 display that the annual variation of new launches in the Brazilian homebuilders sector in 2011, and the annual variation of presales and revenues of the sector, portraying that the expected levels of launches, presales and revenues for the years to come were decreasing (J.P. Morgan, 2011). (2) There was a project problem during the new plant's construction, which meant that parts of the construction had to be rebuilt while all the money from the loans had already been spent. Summarizing, PlywoodCo. was in a situation where its revenues were not growing as planned, it did not have enough money to finish the plant, which would generate new revenues, and had a debt due in the short term that its current operation, cash flows and statements could not support.

The objective of this work is to first understand why PlywoodCo. reached its current distressed situation and propose a financial renegotiation plan that would turn PlywoodCo. into a viable company. Although the main objective is turn PlywoodCo. into a



viable company through the debt refinancing, this is pursued side by side with the company's plan to finish building its new plant.

PlywoodCo. is in distress. The renegotiation plan has to take into consideration that PlywoodCo needs time to regain its margins and profitability, and to be able to finish its new factory. It's hypothesized that PlywoodCo. can get out of its distressed situation with the help of a financial renegotiation, but will need further efforts (such as capital injection) to become a viable company in the long term.

## **2 Literature review**

The literature in corporate distress and turnaround strategies is vast and fragmented in different approaches regarding the distressed situation the companies face. Saudarsanam & Lai (2001) base their study on the effectiveness of such strategies on four different perspectives of corporate turnaround strategies: (1) managerial restructuring perspective; (2) operational restructuring perspective; (3) asset restructuring perspective; and (4) financial restructuring perspective (perspective which was used in this work to further detail what is financial distress).

In this section a review of the literature on corporate distress will be conducted, putting emphasis on the financial restructuring perspective, as that is the aim of this work.

### **2.1 Literature review on financial and corporate distress**

As previously stated, research on strategies to overcome corporate distress have been assessed from four different perspectives of restructuring practices. In this section literature on each of these four approaches will be introduced, emphasizing the literature on financial restructuring approach.

#### *Managerial restructuring perspective*

Several authors have studied and analyzed the implications of top management change during a restructuring process. There has been an overall consensus (Pearce II, 2007 as cited in Grinyer and McKiernan, 1990; Robbins and Pearce, 1992, 1993; Pearce and Robbins, 1994a, 1994b; Winn, 1993, 1997; Barket *et al.*, 2001) that a new leadership is well

seen by the market (meaning bankers, investors, employees and other stakeholders), as it is a tangible change in the company's routines in the eyes of its stakeholders (Slater, 1984).

In this subject, authors have also emphasized the role and the importance of the Chief Financial Officer in the implementation of the turnaround strategies (Periodical Reviews, 1984; Gray, 2001), who will be responsible for executing financial strategies during the whole process of company's restructuring, ranging from accessing available and payable financing, evaluation of company's profitability and plan to strengthen it, and controlling the company's cash.

Although top management shift has been seen as a first step to overcome a financial distress situation, the relationship between top management movements and a distressed company performance on the stock market has been dubious. There have been works providing conclusions on positive, neutral or negative relation to top management changes in distressed companies (Saudarsanam & Lai, 2001 as cited in Bonnier and Bruner, 1989; Khanna and Poulsen, 1995; Warner, Watts and Wruck, 1988; Weisbach, 1988), leaving the prior affirmed consensus a different light, even if this dubiousness is only identified when analyzing the stock market performance.

Regarding CEO turnover in a context of distress, Evans III, Luo and Nagarajan (2014) have compared the CEO's incentive problems of distressed firms in the 1980s with distressed firms in the 1990s, with the goal of understanding the causes and consequences of CEO turnover. From that comparison, the authors have found that the retention of highly skilled CEOs has been possible due to the increasing bargaining power of the creditor (which take an important role in that retention), which were able to provide incentives to improve the company's performance.

### *Operational restructuring perspective*

As presented by different authors (Saudarsanam & Lai, 2001; Slater, 1984; Pearce II, 2007) the operational restructuring perspective in turnaround literature is related to the objectives of restoring the company's profitability (basically either by enhancing sales or reducing costs), improving the company's margins and efficiency.

Saudarsanam & Lai (2001) state that often, the operational restructuring actions are the first to be implemented in a company in a turnaround scenario, whereas they are the fastest measures to be implemented and the fastest to provide tangible figures on the company's improving (or still, declining) situation.

The operational restructuring approach has been widely studied and proven to have an impact on the success of a turnaround process, although understood not to be the only approach that lead to that success (Saudarsanam & Lai, 2001 as cited in Finkin, 1985; Hambrick and Schechter, 1983; John, Lang and Netter, 1992; O'Neill, 1986; Pearce II and Robbins, 1993).

#### *Asset restructuring perspective*

Asset restructuring is connected to strategic decisions related to the company's operating and non-operating assets, focusing in reorganization of business units, divestments and investments (on assets per se or acquiring businesses) (Saudarsanam & Lai, 2001).

From the divestment perspective and from the portfolio standpoint, the restructuring occurs by selling the assets and business units that are not profitable to the company (meaning they are cash consumers rather than cash generators) and/or are not related to company's core activities. That way, by divesting, the company is not only saving cash, but it is also generating some through the sale (Slater, 1984).

Although spending cash on investments may not have the highest priority when in a distress situation, companies that have not fully deteriorated yet may find capital expenditures (meaning buying or building new plants and equipment, for example) and acquisitions to be contributive to future cash generators to the firm. These investments can improve efficiency, reduce costs, generate synergies, which can all lead to a medium term cash generations(Saudarsanam & Lai, 2001).

#### *Financial restructuring perspective: detailing what is financial distress*

A financial restructuring is needed when a company finds itself in a financial distress situation. Several authors have defined the concept of financial distress: according to Gentry *et al.* (1990) when a company's cash inflows are lower than the company's cash outflows is a situation of financial distress. Brigham *et al.* (1999), on the other hand, states that the situation of financial distress occurs when the company is not able to honor its obligations (or give this impression to the market).

Fallahpour (2004; 2008) considers that a company is in financial distress when it finds itself unable to pay the interests and its debt, meaning the company is unable to comply

with its debt obligations. From a different perspective, Jantadej (2006) understands that a company with three consecutive periods of losses is in financial distress.

For Trussel (2013) the condition of being financially distressed is related to the consequences of the distress situation. He states that “financial distress is a condition in which an organization is experiencing financial problems that could lead to a variety of undesirable consequences including reducing or eliminating programs, eliminating workforce, missing debt service, or, ultimately, ceasing to exist”.

In addition the definitions of financial distress, authors have also enumerated several signals that are given by companies in this situation. Kordestani, Biglari and Bakhtiari (2011 as cited in Banks, 2005) present several indications that signal to a financially distressed situation: “increase in the cost of capital, stricter requirements by creditors and suppliers to finance the company, decrease in the cash flow, increase of financial leverage, and regular change of the key employees”.

Reasons for being in a situation of financial distress have also been studied by several authors, both from external (macroeconomic disturbance, shifts on market’s demand, change on county’s legal and economic policies) and internal (high debt, capital structure, management practices) origins (Madrid-Guijarro, García-Pérez-de-Lema and van Auken, 2011 as cited in Pompe and Bilderbeek, 2005; Denis and Denis, 1995; Sheppard and Chowdhury, 2005; Segarra and Callejón, 2002).

Madrid-Guijarro, García-Pérez-de-Lema and van Auken (2011) have studied 1006 Spanish manufacturers to understand external factors (through Porter’s five competitive forces model) and internal factors (through resource base view strategic variables) associated with financial distress. Their results show that low technology firms, when in a context of high competition, have higher probability of experiencing financial distress. Also to low technology firms, high bargaining power of buyers and high rivalry were positively associated with financial distress. On the other hand, in high technology industries the external factors did not influenced the financial situation of the firm.

In line with the study of factors associated with financial distress, Kordestani, Biglari and Bakhtiari (2011) have tried to predict financial distress through the cash flow components. In their study, the authors have looked at 140 firms from the Tehran stock exchange and eight different cash flow compositions in terms of cash flow from operational activities, cash flow from investment activities and cash flow from financing activities. They argue that the following cash flow structures can predict future financial distress: (1) negative cash flow from operations, positive cash flow from investments and positive cash flow from

financing activities; (2) negative cash flow from operations, negative cash flow from investments and positive cash flow from financing activities; (3) positive cash flow from operations, negative cash flow from investments and negative cash flow from financing activities; and finally (4) negative cash flow from operations, negative cash flow from investments and negative cash flow from financing activities. The authors conclude that, in the Iranian case, cash flow composition can be useful for management to foresee a distressed situation ahead of them, as the four compositions presented above were significantly related to future financial distress.

According to Saudarsanam & Lai (2001) there has not been extensive study and focus on financial restructuring on the theme of corporate turnarounds, being one of the key elements on their study. In their work they define financial restructuring to be “the reworking of a firm’s capital structure to relieve the strain of interest and debt repayments and is separated into two strategies: equity-based and debt-based strategies”.

The most relevant information on the equity-based strategies, as proposed by the authors, are related to dividends. When in financial distress and not being able to pay its debts, it would be a very negative sign to the creditors if the owners of the company are withdrawing cash in terms of dividends in detriment of honoring the company’s obligations.

As shown by DeAngelo and DeAngelo (1990), it is common for companies in a situation of distress to cut or omit their dividend policy and distribution. The reasons for that can be either internal to the company, as its cash flows can no longer sustain a heavy and frequent dividend distribution; or external to the company, in order to strengthen the company’s side in a discussion with the firm’s creditors.

The debt-base strategies, which will be the main direction on the financial renegotiation plan proposed in this work, are related to the restructuring of a company’s debt, which is pursued in order to avoid a full or partial default of its obligations– which could be already happening or projected to happen in the short term.

The definition of debt restructuring is given by Saudarsanam & Lai (2001 as cited in Gilson, 1989, 1990) as “a transaction in which an existing debt is replaced by a new contract, with one or more of the following characteristics: (1) interest or principal reduced; (2) maturity extended; (3) debt-equity swap. The authors analyzed a pool of 166 companies from the UK on the period from 1985 to 1993 and found in their paper that non-recovery firms (companies that did not recover from distress) are usually more focused on financial restructuring (along with operational) than recovering firms. Moreover, they found evidence

that recovery firms made more use of asset strategies, which involved investments and acquisitions, in order to get out of the distress situation.

On the theme of debt restructuring, Pustylnick (2012) has studied the financial restructuring of a project (not a whole company itself), finding out that restructuring debt, in the case of a project, has more advantages than changing the project management and contractors. Although the analysis conducted by the author is done on a simple model, the author argues that “the best solutions for negative NPV problems are deferring of payments and restructuring of cash disbursements as a part of the project financial agreement” (Pustylnick, 2012).

An interesting case on financial distress and restructuring, which is similar (despite the differences in the companies’ sizes) with PlywoodCo.’s case is the Thai Petrochemical Industry case. The company, which was established in 1978, started facing problems and financial distress in mid-1997. The reasons for that were very similar of the ones PlywoodCo. encountered.

Thai Petrochemical Industry had accessed the market in order to borrow a great amount of money with the objective of building upstream units for its integrated petrochemical complex. Due to the macro-economic problems – the downturn suffered by the industry at that time due to the Asian crisis – and internal problems the company started facing financial distress. More specifically, the company was in that situation due to (1) increase in working capital needs due to the ramp up phase of these new units; and (2) petrochemical industry downturn, which led to a decrease in sales for Thai Petrochemical Industry (Vikalpa, 2013).

The literature related to financial distress in Brazil has connection with the theme of “*Recuperação Judicial*”, which is the equivalent of a chapter 11 in the United States, with few but relevant differences. The *Recuperação Judicial* law (11.101) is fairly new in the country, as it started being practiced in 2005.

The 11.101/2005 law was created to substitute the previous law (7.661/1945) as the later was not successful in guaranteeing the recovery and further sustainability of the failing company. The new law has been considered to be better than the previous one as it provide higher basis for the failing companies to overcome the distress phase and, later, recover from it.

Although the *recuperação judicial* is always been related with financial distress in Brazil, it is second step in a company’s recovery plan, after the financial renegotiation. The

filing for 11.101 law is only the first solution when the situation of a company achieves a heavily deteriorated situation, in which the debt renegotiation will not viable in the short, medium or long term (Kirschbaum, 2009; Fux, 2012; Ayoub&Cavalli, 2013).

The financial instrument of debentures was widely used in by Brazilian companies in order to renegotiate its debts. A study conducted by Rodrigues and Junior (2013) has shown that especially through the decades of 2000s, almost all debentures issued were destined to the refinance of a company's debt. Figure 3 below, with information retrieved from that study, show that until 2009 almost all debentures issued had that objective, with the percentage falling in the following years, reaching approximately 20% in 2012.

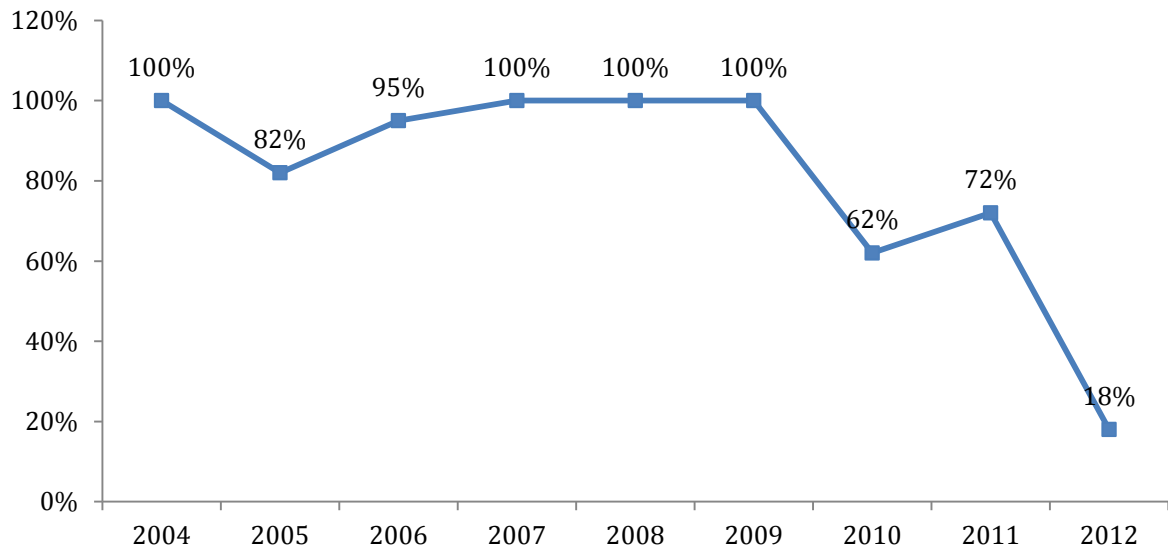


Figure 1 – Percentage of debentures emissions in Brazil destined to refinance a company's debt Rodrigues and Junior, 2013

One case to exemplify the information provided by Rodrigues and Junior in their study is the refinancing of Rodovias do Tietê debt through the issuance of a debenture. Rodovias do Tietê is a Brazilian highway concessionary company with 406 km under concession, which was trying to access the market to collect R\$ 650 million in May 2012. These funds were needed in order to fully pay the company's liabilities due in the short term (Pinheiro, 2012).

Lopes and Assis (2009) wrote a book on management of financial crisis and turnaround, in which they list five situations that would lead the person in charge of the business to conclude it is in distress. The list is: (1) drop on profits or repetitive losses; (2) accumulation of tax liabilities; (3) increase in bank debts; (4) delay of supplier's payments; (5) delay of workforce payments.

In their book, the authors also provide that, in order to get out of the distressed situation, the company must work towards two different actions: first the CEO or the entrepreneur must focus on enhancing its operational results (or EBITDA), by searching for better margins, rearranging its product mix and cutting costs. Second, the person in charge must seek a liabilities renegotiation, with the purpose of stopping the struggle with financial problems on the day-to-day activities, and permitting the focus on the company's operations.

Corporate financial distress has yet to be further studied in the Brazilian context, as there are very few studies on financial and liabilities renegotiation outside the *recuperação judicial* context in Brazil.

### 3 Methodology

The methodology used in this work is of a single case study. A case study is defined “as a form of research, (...) defined by interest in individual cases, not by the methods of inquiry used” (Stake, R., 1998 as cited by Johansson, R., 2003). The case to be studied has to have three features, according to Johansson (2003): (1) “has to be a complex functioning unit”; (2) “has to be investigated in its natural context with a multitude of methods”; and (3) has to be contemporary.

Johansson (2003) also puts that “the essence of a case study methodology is triangulation”, which is a term the author uses as a short for “the combination of different levels of techniques, methods, strategies, or theories” in order to develop the given case study methodology. In the case of this work, this multitude will be understood as tools.

Moreover, in his paper, the author proposes a discussion on the generalization and reasoning of a case study, in the terms of its methodology. Taking the four different procedures presented by the author (hypothesis testing, theory generating, naturalistic generalization and synthesizing a case), the procedure to be used in this work is of synthesizing a case.

Johansson (2003) described this procedure as a synthesizing of a case “from facts in the case and a principle (theory)”. The mode of reasoning in this perspective is abductive, meaning that the mode of reasoning is originated from a “very curious circumstance, which would be explained by the supposition that it was a case of a certain general rule, and thereupon adopt that supposition (...)”. The results from synthesizing a case come from the (re)construction of the case and the generalization is made based on facts and theory.



As part of the methodology, and as previously stated, there were four tools that were part of this work, used in order to achieve what was proposed in the objective section; that is, first understand why PlywoodCo. reached in its current distressed situation, then propose a financial renegotiation plan compatible to that situation in order to turn PlywoodCo. into a viable company.

The first tool that was used in this work was of financial restructuring and turnaround, most specifically the theory presented by Lopes and Assis (2006) in order to diagnose if PlywoodCo. is currently in a distressed situation. The five situations described by the authors as signs of financial distress served as base to determine whether PlywoodCo. is in distress or not.

The second tool that was used was of financial statement analysis. This was necessary in order to help understand and diagnose if PlywoodCo. is really distressed, giving support to the analysis proposed by Lopes and Assis (2006), as described in the paragraph above, and later to understand how the company got in the current distressed situation.

The third tool that was used was of financial statements modeling. This tool was highly relevant in order to project the company's viability in the short and long term with and without the liabilities restructuring. The main objective here was to project the company's operational activities and investments needs in order to understand PlywoodCo.'s payment capacity, and to understand if the company will be able to support its financial renegotiation through its operational cash flows or it will need further efforts (as detailed in the fifth section of this work) to do so.

The fourth tool that was used were the conversations and interactions with the company's main executives and employees. This tool was relevant to support all other tools as well as better understand the company's operations, as more detailed information about the company's day-to-day and relationship with the market (meaning relationship with banks, suppliers, clients and other stakeholders) was collected from them.

The participants of the analysis consist of the company itself and its key employees. Regarding the company, it was necessary to understand its financial situation to date and project the expected future financial situation for the following years. Not only its financial situation, but also the company's production situation to date is relevant to the analysis, in order to project future production and capacity expansions. The justification of choosing the company itself, through its financial statements and production history, as a participant to the analysis is that this information provides not only the company's history and

the outputs of the management's financial and operational decisions, but also is the base of the forecasts in the valuation modeling.

Regarding the key employees, they consist of: (a) the main partner and CEO of PlywoodCo.; (b) PlywoodCo.'s CFO; (c) PlywoodCo.'s commercial director; (d) PlywoodCo.'s Production Planning and Control manager. Their input was essential to the work because they live the company on a daily basis, and not only know some of the details related to each of their areas, but they know better about the product they sell, the market they are in, the new markets they could enter, their competition and other important information, essential to better understanding the company's history and to project its future. The justification for choosing these employees as participants is that they were the decision makers of the company, meaning that no relevant decision (decisions important enough to lead the company's trajectory) was taken by other employees led the company to its current situation.

Further participants to the analysis were PlywoodCo.'s suppliers, bankers and clients. These participants weren't easy to be accessed, and just a few were interviewed. Their contributions to the work were of giving an external view of the company, that is, how people from outside see PlywoodCo. and its current situation.

The company's main partner and CEO provided information on the company's relationship with its stakeholder (mainly banks, suppliers and clients), pointing out how this communication with these various stakeholders had evolved during previous years and how was it now. Moreover, the CEO provided information on the projected market the company could be able to reach in terms of sales, helping on the producing of the sales forecasts and projections presented on this work. Due to its size and rapid growth, PlywoodCo.'s CEO was the main sales force of the company, as they had not developed a formal sales team. Therefore, as the main contact with clients since PlywoodCo.'s beginnings, the company's CEO had acquired knowledge and a very experienced view of the market. It is important to highlight, however, that the sales projections might be affected by the CEO's overestimations, but the numbers projected were part of PlywoodCo.'s sales targets, being demanded from the company's unstructured sales force (including the company's CEO).

PlywoodCo.'s CFO did not actually filled the role of a CFO, performing a role closer to a company's treasurer. Therefore, the CFO was able to provide more detailed information regarding the overdue liabilities and short term liabilities with banks and suppliers, as well as give a different view (mainly from the CEO) of the company's relationship with these creditors. Moreover, the CFO was responsible for providing

PlywoodCo.'s financial information to date, such as the balance sheets, income statements, cash flow statements and detailed information on the company's debt schedule and depreciation schedule.

PlywoodCo.'s commercial director provided a more detailed view of the company's relationship with smaller clients, as the big homebuilders were addressed by the company's main partner and CEO. Also, the commercial director was responsible for the relationship with the log producers, one of the main raw materials used by the company in terms of participation on costs. He was responsible for providing the information of the costs difference between Mafra and União da Vitória plants.

The Production Planning and Control manager was responsible for providing almost all production indexes of the company. These were essential on the development of the company's projections. The production indexes were mainly used in order to properly calculate the company costs.

Finally, the banks, suppliers and clients were relevant to the analysis as they provided a different perspective of the company's relationship with the market, telling their side of the story. On the banks side, moreover, they provided the assumptions for the possibilities regarding the refinancing of PlywoodCo.'s debt. It is important to highlight, in a usual process of debt restructuring, when asking for a debt refinancing, the natural way is that the debtor (PlywoodCo.) proposes a refinancing schedule compatible with its payment capacity to the banks. In this case, due to the poor relationship with the company (as it is detailed further in this work), the banks provided what would be an acceptable schedule, leaving to the company with the burden of trying to reach the payment capacity needed to fully pay its debt in that given schedule.

## **4 The company: PlywoodCo.**

### **4.1 Restructuring plan design**

In order to fulfill the objective of the thesis and, therefore, propose a plan to help PlywoodCo. renegotiate its liabilities and end its distress situation, it is important to propose a plan not only good for the company itself, but also its creditors. Therefore, the plan should focus and be designed in a way it does not only in protect PlywoodCo.'s assets and reduce its debts costs, but also protect the creditors interests (Krueger, 2002). As previously stated, this would be the natural process of a debt renegotiation. PlywoodCo.'s case is different from the usual.

The work will be divided in two macro parts beginning with (1) a diagnose section addressing PlywoodCo.'s current situation; followed by (2) a projections section, which will be divided in two further micro parts: (a) projections of PlywoodCo.'s financial projections in the current debt schedule it is in; and finally (b) the financial situation of PlywoodCo. under the new proposed plan.

In the diagnose section, first an analysis of the company's "financial history" and "operational history" was conducted, understanding chronologically the financial and operational outputs of the decisions made by the managers, also understanding the consequences and impacts of these decisions on the company's current distressed situation. In this section was also highlighted why the company needed the debt to sustain its negative flows (caused by poor operational results or by investments). Also important, it was distinguished the difference between the company's symptoms and causes of its situation. Symptoms are signs or clues of what could or could not be right with the company, while causes have a direct connection with management actions (Slatter & Lovett, 1999).

In the projection of the current situation section, based on the financial history, operational history, historic data, financial statements of the company as well as the inputs from the conversations with the company's main team, a financial model was made, in order to understand the company's payment capacity. It will be presented in the work the outputs of this financial model based on the company's current debt schedule (meaning its current debt outflows), suppliers due outflows, taxes financing outflows, working capital needed and production capacity. Based on it, and as a result it was able to present the company's capital needs to support the negative cash outflows. In a natural process of financial renegotiation, this analysis would be the support to the financial renegotiation proposition, as in the renegotiation with the banks and suppliers we cannot ask for more than the company needs, otherwise they won't see the real necessity of stretching the due dates of payables, changing the payments dates, giving the company grace periods or even a goodwill, and probably will not do it; also, this renegotiation can only be supported by a model that shows that the current situation is not viable to the company and will result in a "Recuperação Judicial" (equivalent to a Chapter 11 in USA), or bankruptcy.

In the financial model after the renegotiation plan proposition, it will be presented the company's situation by paying its debts in a new proposed schedule. It is important to match the company's cash generation to a new plan of payments with banks, suppliers and other liabilities. It is important to propose the same plan to all the banks, as they contact each other, and should feel they are treated the same. Also, the suppliers should be treated equally,

for the same reasons. It is also important to show that the company is able to sustain this new situation and, therefore, is able to honor its liabilities.

## 4.2 PlywoodCo.'s Operations

As previously stated, PlywoodCo. is a plywood producer located in Brazil. The company has currently three operational units, as displayed and detailed on figure 2 below. The process of producing the plywood (the company's workflow), from the wood log to sales, as well as which factory is responsible for each stage of production, is represented in figure 3 below. It is possible to see the two final products sold by PlywoodCo.: (1) Plywood covered with phenolic film (plywood) and (2) Concrete forms and/or pre-cut concrete forms covered with phenolic film (forming systems). The difference between product 1 and product 2 is that in the first the shapes and sizes are standard, while in the later PlywoodCo. cuts the plywood as requested by its clients.

1. **União da Vitória (PR):** Production of plywood boards;  
 Installed Capacity: aprox. 4,500m<sup>3</sup>/mth  
 Current Production: 3,500m<sup>3</sup>/mth
2. **Mafra (SC):** Production of plywood boards;  
 Installed Capacity: aprox. 7,500m<sup>3</sup>/mth  
 (after ~R\$ 6MM investment)  
 Current Production: only sheets
3. **Barueri (SP):** Pre-fabricated forming system  
 Installed capacity: 60,000 m<sup>2</sup>/mth of forming systems  
 (in March/2013 the company initiated the production in its new Barueri plant, joining two older plants in a new location)

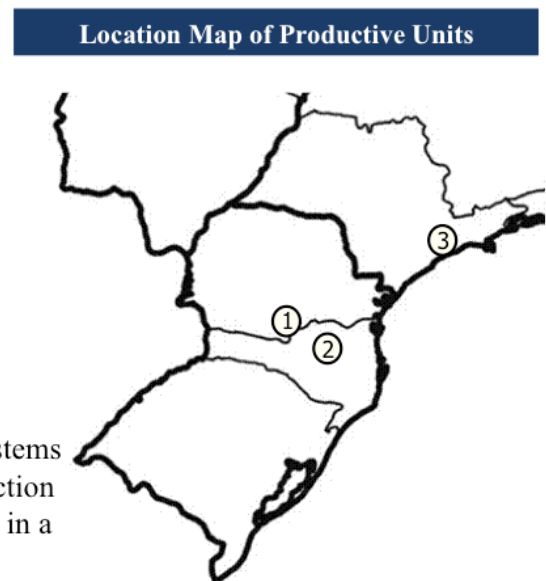


Figure 2 – Map and detail of PlywoodCo. Productive units  
 Elaborated by the author

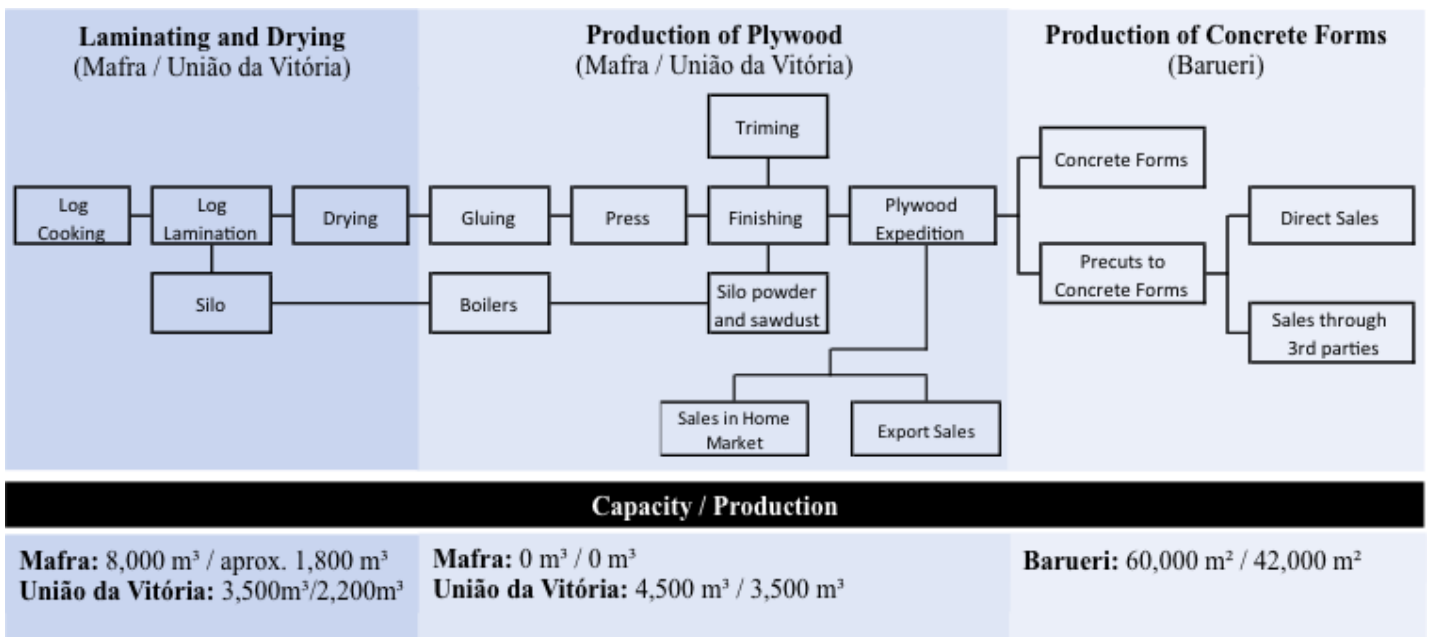


Figure 3–PlywoodCo.’s workflow  
Elaborated by the author

PlywoodCo.’s workflow starts at the laminating and drying section. First, the raw log is cooked, in order to peel its skin off and make the laminating process possible, which is the second stage of the workflow. In this stage the log is cut in very thin peals of wood, which will be further pressed together to form the laminate. After this stage, the laminated sheets of wood are put to dry at an oven.

After that the plywood production stage begins. The first step is to glue the sheets of wood together in order to form the laminate. In this stage, several thicknesses of laminates are fabricated, which depends on the amount of sheets of wood that are glued together. Following the gluing phase, the laminates are pressed and, later, receive the finishing, which includes applying the phenolic film and trimming the laminate board.

At this point in the workflow, one of the company’s products is finished: the plywood covered with phenolic film, which will be partially directed to sales in the domestic and external markets. The other part will be directed to the second product of the company, as a raw material. With the plywood, the company produces its concrete forms and precut concrete forms, which are basically the plywood covered with phenolic film but cut to fit a client’s specific (not standard) needs. The sale of this product can be done by internal sales team and third parties.

For the laminating and drying stage, PlywoodCo. has the capacity of laminating 8,000 m<sup>3</sup> of log per month in its unit in Mafra, but is only using 1,800 m<sup>3</sup> of its capacity (23%). In União da Vitória, the capacity is of 3,500 m<sup>3</sup>, and usage is of 2,200 m<sup>3</sup> (63%) – it is

important to highlight that, although Mafra is a less productive plant in comparison to União da Vitória, it's being used for laminating due to raw material availability. Log prices are lower as log producers are abundant in the region.

For the production of plywood stage, União da Vitória has a capacity of producing 4,500 m<sup>3</sup> of plywood, but is currently producing 3,500 m<sup>3</sup> per month. In Mafra, due to its unfinished building, is not possible to produce any plywood. Finally, for the concrete forms stage of production, PlywoodCo.'s Barueri plant has the capacity of producing 60,000 m<sup>2</sup> of concrete forms, but is only producing 42,000 m<sup>2</sup> per month.

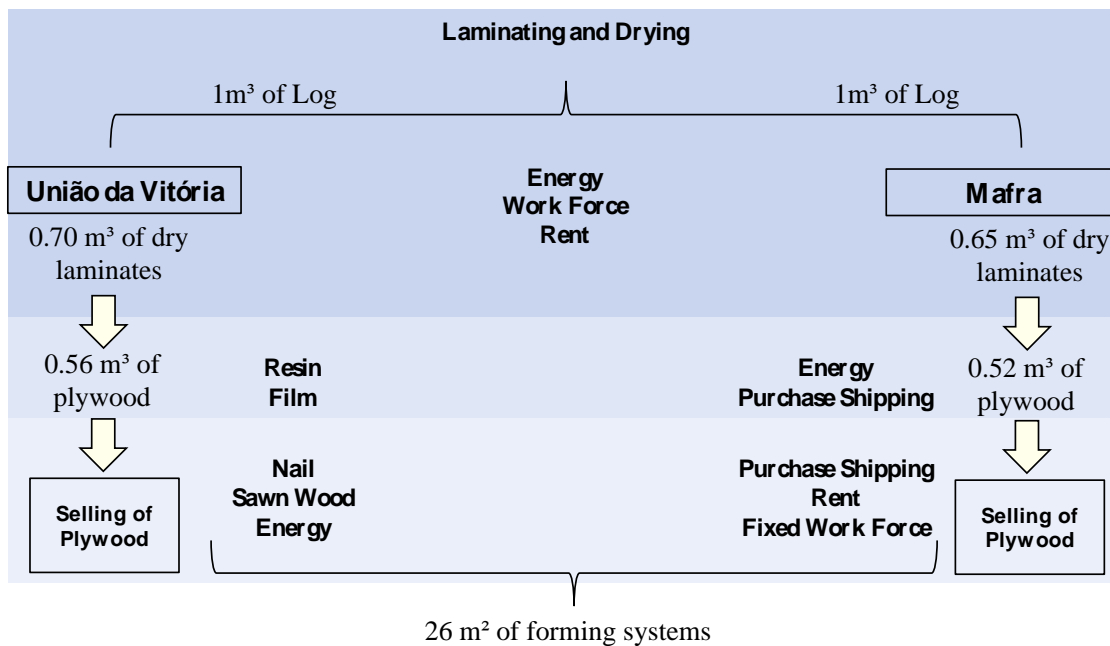


Figure 4–PlywoodCo.'s production indexes  
Elaborated by the author/PlywoodCo.

Figure 4 above describes in detail the laminating and drying phase, comparing both factories: Mafra and União da Vitória. The understanding of this detailed information will be relevant for producing a more detailed financial model for the company.

Going by the path through União da Vitória, we can see that 1m<sup>3</sup> of log will become 0.70 m<sup>3</sup> of dry laminates – this happens because 0.30 m<sup>3</sup> of log is lost due to bark removal and perfectly rounding the log. When those 0.70 m<sup>3</sup> of laminates are cut, glued and pressed together, they become 0.56 m<sup>3</sup> of plywood – at this point resin and film are added to the plywood.

Now going by the path through Mafra, we will understand why this is a less productive facility when compared to União da Vitória. Differently from União, in Mafra 1 m<sup>3</sup> of log will become 0.65 m<sup>3</sup> of dry laminates (7% less than União). The next stage numbers are based on estimates, as Mafra has never produced plywood. By the company's estimative,

the 0.65 m<sup>3</sup> of dry laminates will become 0.52 m<sup>3</sup> of plywood - the conversion rate is the same as in União da Vitória, being 80%.

As highlighted in the workflow explanation above and detailed in the previous sections of this work, one of the problems PlywoodCo. was facing was that its Mafra's factory needed more resources than previously predicted to be completed. As of the end of 2012, the Mafra factory could only produce laminates. The additional investment needed for the factory's completion is of approximately R\$ 6 MM. Without that investment, the plant is only producing dry laminates, not being able to produce any plywood.

### **4.3 PlywoodCo.'s relationship with its stakeholders**

PlywoodCo.'s relationship with the banks as a client was highly damaged, especially with the banks with higher risk (with higher sums of money lent to the company). The reason were two: first the banks had already noticed that PlywoodCo. was not performing well and had delayed some of its payments due in the last months; and secondly (and most importantly) the company, in the figure of its main partner, had made several promises to the banks that were not fulfilled, damaging his reputation.

The banks did not want to negotiate with PlywoodCo.'s main partner anymore, which made the renegotiation of the company's debt harder, as the banks were reluctant to provide extensions (more than two years) in the company's debt payment schedule.

The main reasons for the behavior (the promises that were broken) were that: (1) when applying for the debt to build the new factory, PlywoodCo.'s main partner's thesis took into account the sale of a personal asset valued at R\$ 5 million at the time, which would be injected in the company. Later, the company informed that (due to reasons badly explained and non-transparent to the banks) the asset's value was actually R\$ 3 million and that it was not for sale anymore. (2) Besides that, the banks had been requesting PlywoodCo. information regarding the dividends paid for more than one year, information which was never made available. This unavailability made the banks believe that the partner's remuneration had been higher than it should have, draining resources from the company which led to delayed debt payments and also the request for a renegotiation of its debt.

Besides the damaged relationship with the banks, there was also the problem of the company's size, both in revenues and debt terms. The classification of the company's size indicates who will be the bank's representative within the bank hierarchy that would conduct the talks and negotiations with PlywoodCo., meaning who in the bank's hierarchy would



have PlywoodCo. as a client. The company was classified as a SME (small and medium), so its interlocutors inside the banks were people at lower positions which had less decision power and less oriented to solve the company's problem (being more preoccupied in saving his or her job).

The size of the debt indicates which area in the bank would be involved in the company's negotiation – the restructuring area of the bank, which takes care of big restructurings and is more used to structure deals of this nature on the daily basis; or the credit area, which is not used to such deals. The size of the PlywoodCo.'s debt being restructured was not big enough to be directed to the restructuring area of the banks, and the negotiations would have to be done with personnel from the credit area, less oriented in solving the company's problem.

On the suppliers side the situation was better but not good either. The company had already delayed some of the payments due to key suppliers, who were already reducing the payment terms, increasing the cash squeeze. Besides that, the company had seen its Serasa filings increase (these filings occur when a company delays a payment and does not renegotiate or pay it, becoming a debtor) which is an indicator of the beginning of a company's insolvency.

In the same way as the banks, PlywoodCo.'s main partner had made several promises to the company's key suppliers involving "paying these debts from his own pocket". These promises were also not fulfilled, leaving the company's and the partner's image eroded with suppliers as well.

As detailed above, PlywoodCo.'s financial renegotiation plan will not be an easy one as it will suffer the influence from the company's relationship with its stakeholders, more specifically its suppliers and banks.

These relationships will impact the renegotiation terms such as size of the grace period, the interest and monetary correction applied, as well as the amortization schedule. As cited above, the company would have a hard time negotiating a schedule longer than two years.

#### **4.4 PlywoodCo. financial statements and other information**

Below are presented the financial statements of PlywoodCo. along with other information, specifically yearly balance sheets from 2009 until September of 2012 (which will be the opening balance sheet of the projections, as it was the last balance sheet available at the time the work was done); yearly income statements from 2009 until 2012; depreciation and debt schedules; and other important information.

Before presenting the previously described information, a revision on financial statement analysis and financial statements modeling is made, as both are tools which will be used in this work in order to model PlywoodCo.'s situation. It will be further described, in the section 6 of this work, when did the financial distress occurred, justifying the period of financial statements considered in the analysis.

##### **4.4.1 Revision on financial statements analysis and modeling**

The following literature review is presented in this work as it will be the base of PlywoodCo.'s financial statements analysis, problem's diagnosis and the projections of the company's cash generation. As previously seen in the literature on restructuring and turnaround, the projection of the company's cash generation is primordial in understanding the PlywoodCo.'s payment capacities, that is, understanding if PlywoodCo. will be able to fully pay its debts if they are renegotiated.

##### *Financial statements analysis*

In Brazil the Lei das Sociedades por Ações (Brazilian Corporate Law – free translation) is the law that regulates companies with capital stock and that trade or would want to trade in the future in the stock market. This law specifies the elaboration and publication of several financial statements. Although PlywoodCo. is not subject to this law, as it is a limited partnership, it had to use the same financial statements standards in order to access the debt market. The financial statements used to analyze PlywoodCo.'s financial history were: (1) balance sheets, (2) income statements, (3) cash flow statements and (4) accumulated earnings and losses statement.

The balance sheets are usually referred figuratively as a picture of the company's position at a point in time. That is because it reflects the company's assets, receivables,

liabilities, payables, debts and equity, at a given point in time (usually the end of a year or end of a trimester).

Income statements are a summary of the company's activities during a period of time (which is also usually one year or a trimester) which results in profits or losses, that is, the company's revenues, costs, general expenses, financial expenses and tax expenses

Cash flow statements explain and demonstrate the amounts of cash that enter and leave the company during a given period (usually being one year or a trimester), dividing it in three main categories: (a) operational activities (working capital), (b) investing activities and (c) debt activities. Through the cash flow statement is possible to understand how the company used the resources generated from its operations and also the use of resources coming from creditors and shareholders.

The accumulated earnings and losses statement shows how the net profits generated by the company is split: the part that goes to the payment of dividends to the partners and the part that is retained in the company for further investments. It is important to understand the objective of each of the statements, as the analysis of them will lead you to the company's financial history and financial outcomes of the management decisions (Marion, 2009).

The analysis of each of the statement has particularities to be considered and, the reader and analyst must do the work in a critical way. Different conclusions may arrive by different practices or methodologies implemented when elaborating a statement. When analyzing a balance sheet, income statement, cash flow or earning and losses statement, the exercising of fair judgment is necessary as it is necessary to deeply understand the reality of the company, in order to draw conclusions from the statements that are compatible with the company's real scenario (Fridson & Alvarez, 2011).

### *Financial statements modeling*

In addition to the financial statements previously described, some other information will be needed in order to produce PlywoodCo.'s financial model. Specifically, it is recommended that a model is derived from six major components: (1) balance sheets; (2) income statements; (3) cash flow statements; (4) working capital; (5) depreciation schedule; and finally (5) debt schedule.

Through the modeling and the projections of these financial statements, it will be possible to understand and reach the amount of cash a given company will be able to generate

operating terms, given a set of assumptions, through the years. The operating cash generation is important for determining the company's payment capacity (when refinancing its liabilities) and its value (through the discounted cash flow method of valuation).

An important and high impact part of financial statements modeling is finding and determining the right set of assumptions, as future trends are often hard to predict. Usually, when developing projection for a company, an analyst spends a good amount of time understanding and researching the company itself, as well as the market it is in and the macroeconomic environment, in order to adopt assumptions that are as close to future reality as possible (Pignataro, 2013).

#### 4.4.2 PlywoodCo.'s financial and other information

##### *Balance sheet*

	in BRL	Dec-09	Dec-10	Dec-11	Sep-12
<b>Assets</b>					
<b>Current</b>					
Cash		38,481	75,142	177,739	127,693
<b>Short Term Assets</b>					
Receivables		4,793,021	6,292,968	4,001,276	2,029,288
Inventory		3,031,113	3,289,901	5,490,113	6,450,521
Taxes to recover		214,584	185,936	161,643	135,725
Other		1,658,066	1,432,419	1,764,012	2,252,600
<b>Total Current Assets</b>		<b>9,735,265</b>	<b>11,276,366</b>	<b>11,594,782</b>	<b>10,995,826</b>
<b>Non-current</b>					
<b>Long Term Assets</b>					
Finame to perform		-	3,821,410	3,273,760	2,182,506
<b>Total Non-current Assets</b>		<b>-</b>	<b>3,821,410</b>	<b>3,273,760</b>	<b>2,182,506</b>
<b>Fixed Assets</b>					
<b>Investments</b>					
Stock investments		503,810	503,810	503,810	-
<b>Fixed Assets</b>					
Tools		3,005	3,005	-	-
Machinery		6,919,545	27,469,962	35,726,258	36,315,955
Office equipment		231,641	303,750	412,817	718,525
Cars and trucks		15,874	15,874	133,874	251,874
Other fixed assets		343,597	343,597	358,297	196,636
Real State		16,636	16,637	196,636	410,797
(-) Depreciation (Acum.)		-459,875	-549,327	-1,684,802	-2,482,721
<b>Total Fixed Assets</b>		<b>7,574,233</b>	<b>28,107,307</b>	<b>35,646,889</b>	<b>35,411,065</b>
<b>Total Assets</b>		<b>17,309,498</b>	<b>43,205,084</b>	<b>50,515,432</b>	<b>48,589,397</b>

*(Continues on the next page)*

**Liabilities****Current****Short Term Obligations**

Suppliers	389,525	416,960	395,380	650,723
Social and Tax obligations	83,187	166,086	177,396	447,124
Debt w/ Financial institutions	5,444,565	6,490,579	10,788,171	10,567,404
Imports Financing	392,577	570,060	929,038	1,720,169
Salaries to pay	98,71	97,851	288,620	248,733
Provisions	142,877	182,844	281,099	255,764
<b>Total Current Liabilities</b>	<b>6,551,446</b>	<b>7,924,380</b>	<b>12,859,705</b>	<b>13,889,917</b>

**Non-Current Liabilities****Long Term Obligations**

Social and Tax obligations	945,567	896,300	2,308,636	2,157,332
Debt w/ Financial institutions	637,628	1,221,899	1,358,508	-
Finame and Other Debts	-	22,520,161	22,323,504	20,567,534
<b>Total Non-current Liabilities</b>	<b>1,583,195</b>	<b>24,638,360</b>	<b>25,990,648</b>	<b>22,724,866</b>

<b>Total Liabilities</b>	<b>8,134,641</b>	<b>32,562,741</b>	<b>38,850,353</b>	<b>36,614,783</b>
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**Equity**

Capital	1,000,000	1,000,000	2,000,000	2,000,000
<b>Profits and Losses</b>	<b>8,174,856</b>	<b>9,642,341</b>	<b>9,665,079</b>	<b>9,974,614</b>
Acum. Profits	7,289,016	7,174,856	8,642,341	9,665,079
(-) Profits distribution	-600,000	-	-	-
Current year's result	1,485,840	2,467,485	1,022,738	309,535
<b>Total Equity</b>	<b>9,174,856</b>	<b>10,642,341</b>	<b>11,665,079</b>	<b>11,974,614</b>

<b>Total Liabilities + Equity</b>	<b>17,309,497</b>	<b>43,205,082</b>	<b>50,515,432</b>	<b>48,589,397</b>
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Table2 - PlywoodCo. Balance Sheet

Source: PlywoodCo.

*Income statements*

	in BRL	2009	2010	2011	2012
<b>Operating Revenues</b>		<b>29,312,016</b>	<b>36,828,015</b>	<b>43,581,382</b>	<b>51,455,142</b>
National Sales		27,114,292	34,319,870	38,385,892	42,594,773
Exports		2,197,724	2,508,144	5,195,490	8,860,369
<b>Sales Deduction</b>		<b>5,064,079</b>	<b>6,367,982</b>	<b>7,245,395</b>	<b>8,874,048</b>
Sales Taxes		5,064,079	6,367,982	7,245,395	8,874,048
<b>Net Revenues</b>		<b>24,247,937</b>	<b>30,460,033</b>	<b>36,335,987</b>	<b>42,581,094</b>
<b>Costs of Goods Sold</b>		<b>21,111,034</b>	<b>25,615,932</b>	<b>30,384,276</b>	<b>35,254,249</b>
Initial Inventory		2,678,104	3,031,113	3,289,901	4,290,113
Raw Materials		16,694,425	20,975,103	25,914,516	27,019,831

*(Continues on the next page)*

Final Inventory	-3,031,113	-3,289,901	-5,490,113	-3,894,056
Costs of Production	4,769,618	4,899,618	5,624,994	6,702,886
Depreciation	-	-	1,044,977	1,135,475
<b>Operational Results</b>	<b>3,136,903</b>	<b>4,844,101</b>	<b>5,951,712</b>	<b>7,326,844</b>
Financial Revenues	51,250	60,613	2,857	-
Other Revenues	75,812	82,130	-	-
Sales Expenses	-	-	-456,709	-3,039,345
Administrative Expenses	-609,418	-603,318	-874,043	-2,242,256
Financial Expenses	-653,548	-1,133,548	-2,428,690	-3,610,375
Depreciation	-	-	-90,499	-90,499
<b>Net Operational Results</b>	<b>2,000,999</b>	<b>3,249,978</b>	<b>2,104,627</b>	<b>-1,565,132</b>
Taxes – CSLL	210,688	370,655	387,780	827,895
Taxes – IRPJ	304,471	411,838	694,110	460,024
<b>Results</b>	<b>1,485,840</b>	<b>2,467,485</b>	<b>1,022,738</b>	<b>-2,853,051</b>

Table 3 - PlywoodCo. Income Statement  
Source: PlywoodCo.

### *Depreciation schedule*

PlywoodCo. main fixed assets sum approximately R\$ 38 million in five main categories, which are (1) machinery and equipment; (2) office equipment and data processing; (3) vehicles; (4) properties; and (5) other properties. Table 4 details the investments per category.

<b>Main Fixed Assets</b>	
Machinery and equipment	36.315.955
Office equipment and data processing	718.525
Vehicles	251.874
Properties	196.636
Other properties	410.797
<i>Total</i>	<i>37.893.786</i>

Table 4 – Fixed Assets detailing  
Source: PlywoodCo.

According to Brazilian accounting standards, each of these categories has a different depreciation schedule. As these assets are partially depreciated, an approximate depreciation schedule was applied to them, as follows: (1) for machinery and equipment the depreciation rate is of 10% per year; (2) for office equipment and data processing, the depreciation rate is of 10% per year; (3) for vehicles, the depreciation rate is of 20% per year; (4) for properties, the depreciation rate is of 4% per year; and (5) for other properties, the depreciation rate is of 10% per year.

In terms of capital expenditures (CAPEX), apart from R\$ 6 million directed to the conclusion of the Mafra factory (scheduled to be done R\$ 1 million per month from January 2013 to June 2013), it is expected that the company invests 50% of its depreciation until the end of 2013 and 100% of its depreciation thereafter.

### Debt schedule

Table 5 details PlywoodCo.'s debt on the end of September 2012. As seen, the main debt the company has is Finame, which is usually a long term debt destined to buy machinery and equipment, with relatively low interest rates and using the machinery and equipment as collateral.

All other debts (with the exception of Leasing) are short term and mainly destined to be used on the company's operations. The highest interest rates are charged on the Overdraft loans, which are basically credit lines a company has with a given financial institution that can be used as the company needs (up to the pre-established limit). According to PlywoodCo., the amortization schedule for these debts are mainly due in the short term, in 2013, as on the graph below. This debt schedule is incompatible with PlywoodCo.'s capacity to generate cash.

Type of Bank Debt	Amount (BRL)
Finame	18.251.410
Overdraft loan	4.400.000
Working Capital	7.004.815
ACC / FINIMP	2.131.028
Leasing	1.065.747
<b>Total</b>	<b>32.853.000</b>

Table 5 – Debt detailing – sept/2012

Source: PlywoodCo.

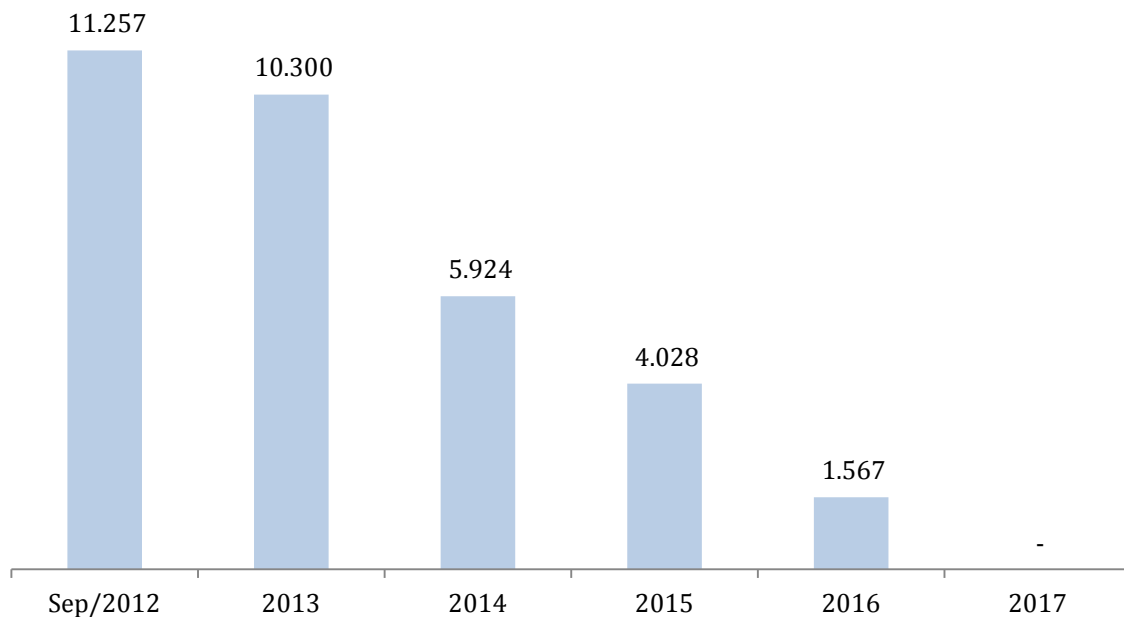


Figure5–PlywoodCo.'s debt schedule  
Elaborated by the author

### 4.4.3 Other important information

Below are presented other important information regarding PlywoodCo. (1) the evolution of revenues mix between domestic sales and exports; (2) the evolution of prices in

the domestic and external markets for both products (Plywood covered with phenolic film and Concrete forms and/or pre-cut concrete forms covered with phenolic film);

### *Evolution of revenues mix*

In the first quarter of 2010 the exports represented 14% of the plywood sold by PlywoodCo. By the end of the first quarter of 2012, this value reached 59%, while in the last two quarters of 2012 the value represented 40% of total sales. In each quarter, the participation of exports has been growing, with the exception of the second quarter of 2012, as seen on the figure below.

In the projections on the financial model, the revenues of exports represent 40% of total sales of plywood forms.

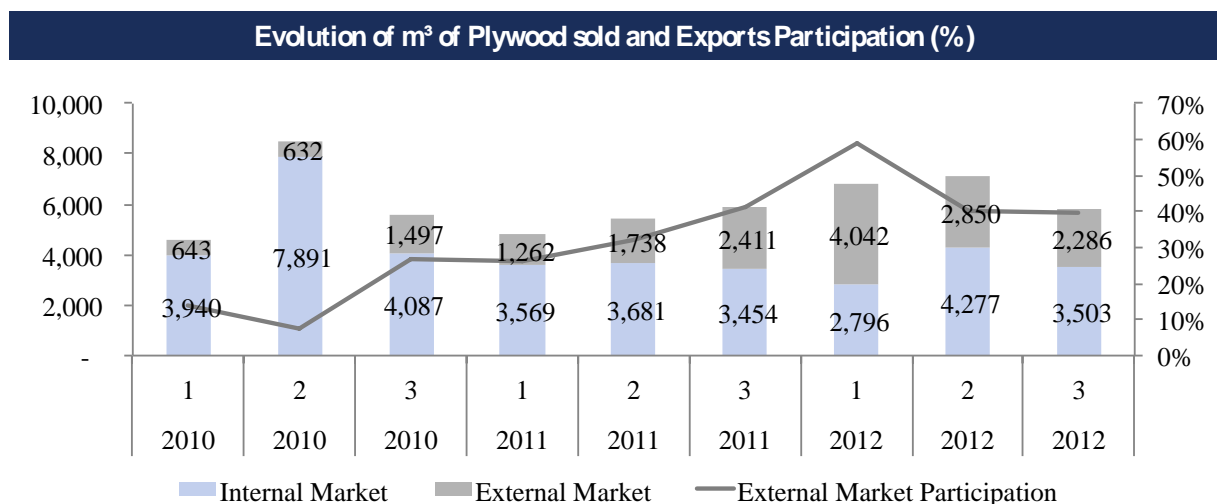


Figure 6 – Evolution of Plywood sold in each market  
Elaborated by the author

### *Evolution of prices*

The plywood prices in the external market have been more volatile than in the internal market, as seen in Figure 7 below. It is possible to observe a slight upward trend in prices in the domestic market, which led to prices reaching an average of R\$ 1.254 per m<sup>3</sup> by the third quarter of 2012.

The average price in the external market in the last quarter of 2012 was lower because of low sales mix in August. With the exception of that month, the average is US\$ 493



per m<sup>3</sup>. In the projections, the average price used in the domestic market is R\$ 1.285,00 per m<sup>3</sup> and in the external market is US\$ 548,00 per m<sup>3</sup>.

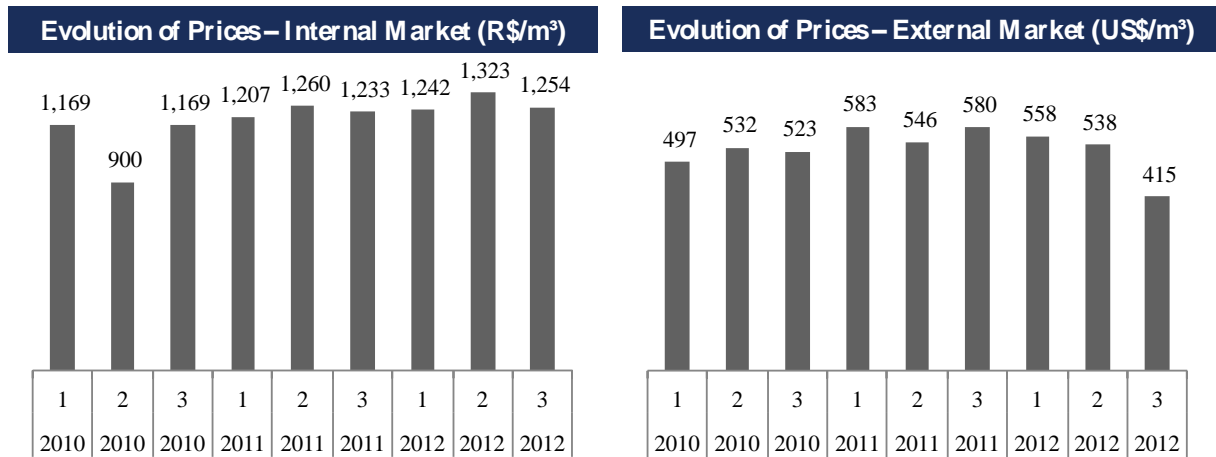


Figure 7 – Evolution of plywood prices  
Elaborated by the author

Regarding the prices of forming systems, they have been volatile during the quarters, with higher prices at the end of the year, as shown in figure 8 below. In the projections, the average price used for forming systems is R\$ 50,00 per m<sup>2</sup>.

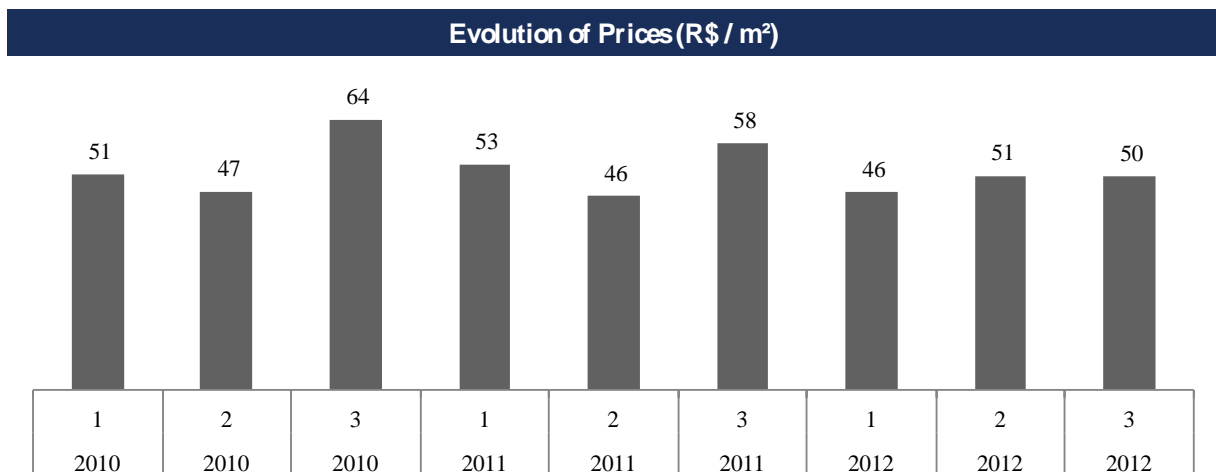


Figure 8 – Evolution of forming system prices  
Elaborated by the author

#### 4.5 The Origin of PlywoodCo.'s current situation origin

PlywoodCo. was experiencing a cash flow squeeze: the company was generating R\$ 3,2 MM in EBITDA (as of 2012) while its debt (plus interest) due in the short term was of approximately R\$ 24 MM (as of 2013). It was not possible for PlywoodCo. to fully pay its

debts without refinancing them . But first it is necessary to understand how the company arrived at this position.

As cited before, the company was facing a decrease in current sales and the expectations of future sales was also decreasing, as the boom in civil construction experienced in the previous years was fading; while facing a project problem in the new plant's construction, needing more cash to finish the new factory. As the company financed the capacity growth through debt was also facing the pressure to service the debt and its amortization.

PlywoodCo.'s assumptions when developing its plan to build the new factory were (1) the civil construction sector was growing and would continue to do so, as seen by the sector's GDP variation of 26% YoY from 2007 to 2010 (IBGE, 2010), as shown in the figure 9 below, as well as on the launches and presales, as shown on figure 10 and 11; and (2) increase on the formality of the sector, driven by the amount of IPOs in the sector (as seen on figure 12 below), which would make harder for the sector's players to be supplied by smaller and informal companies.

To capture part of this growth and developing market, PlywoodCo. traced an expansion plan, which involved building a new plant in Mafra starting in 2009, initially investing approximately R\$ 36 MM, all financed through debt.

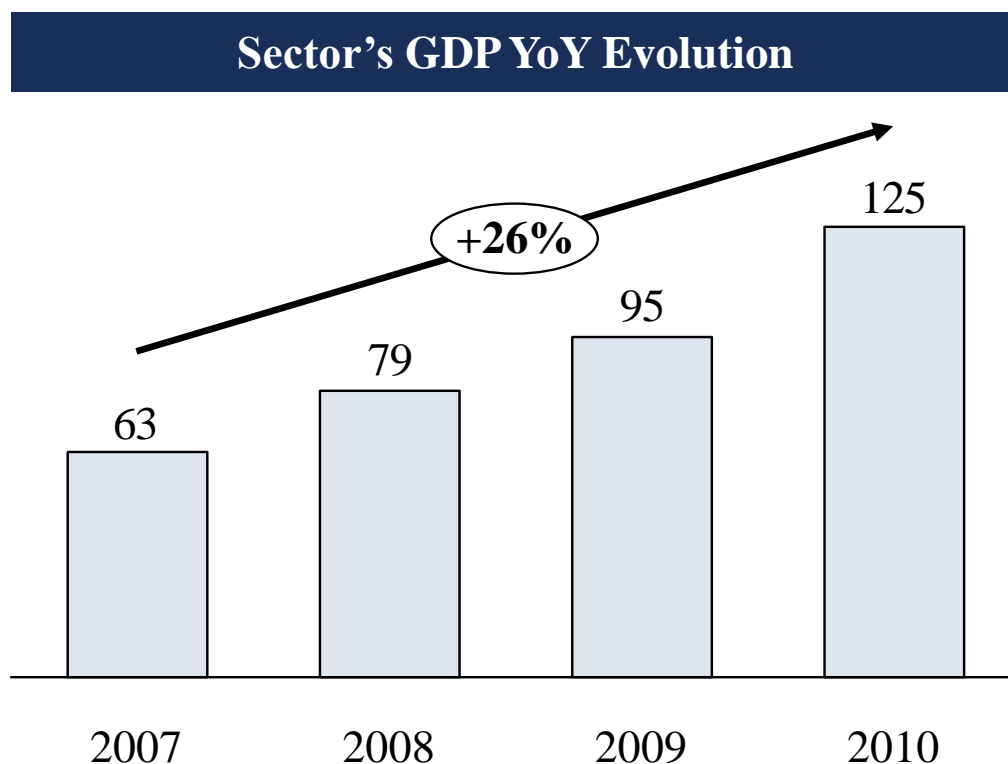


Figure 9 – Sector's GDP YoY evolution

Source: IBGE, 2010

### Annual variation on launches – Brazilian homebuilders

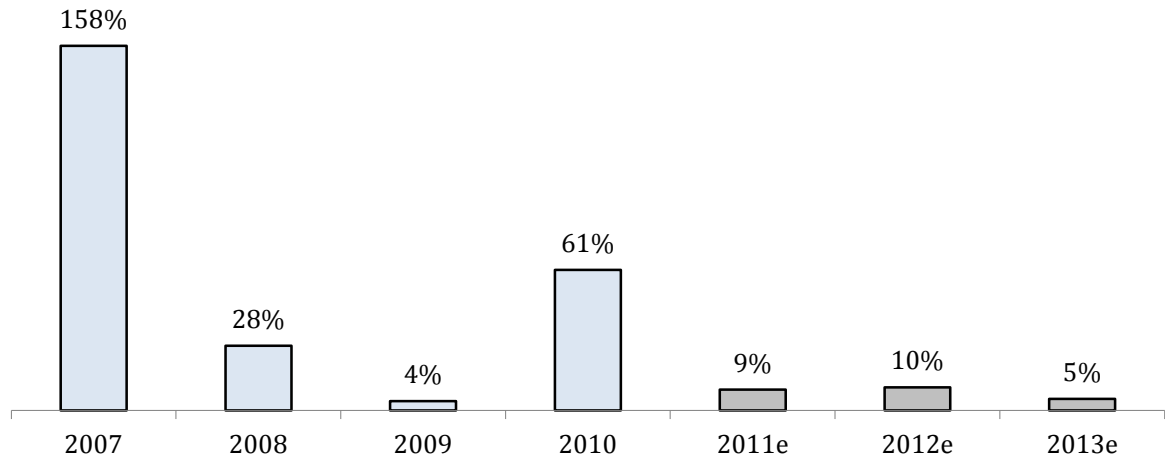


Figure 10 - Annual variation on launches  
J.P. Morgan, 2012

### Annual variation presales and revenues –Brazilian homebuilders

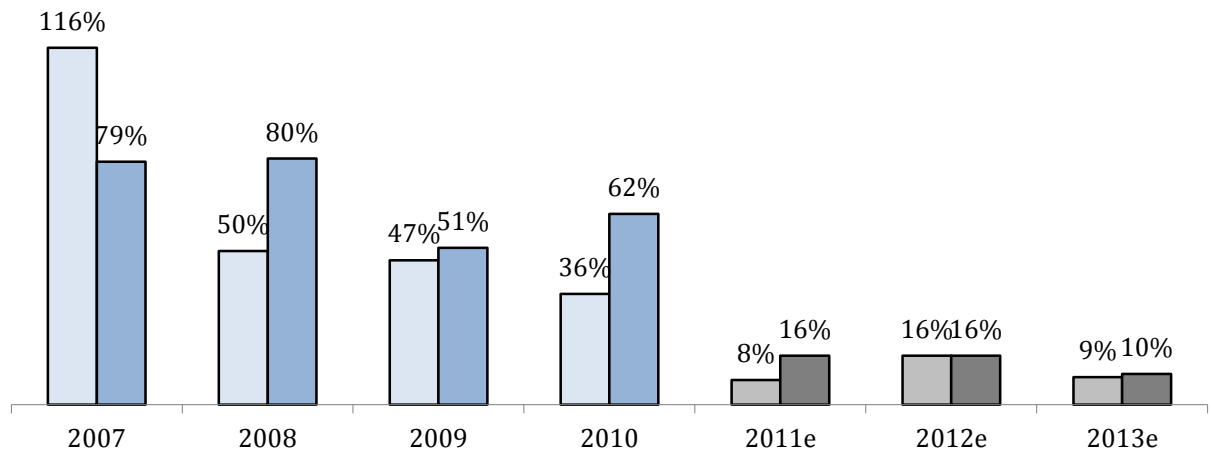


Figure 11 - Annual variation presales and revenues  
J.P. Morgan, 2012

But, as seen by the numbers presented on figures 10 and 11, the sector did not continue to grow at the same pace as it was growing before the decision to build the new plant. With that, the company was facing an expected decrease in its sales for the coming years. In addition to that, the initial R\$ 36 MM were not enough to finish the factory due to some project's errors; and an extra R\$ 6 MM was needed to finish the plant in Mafra.

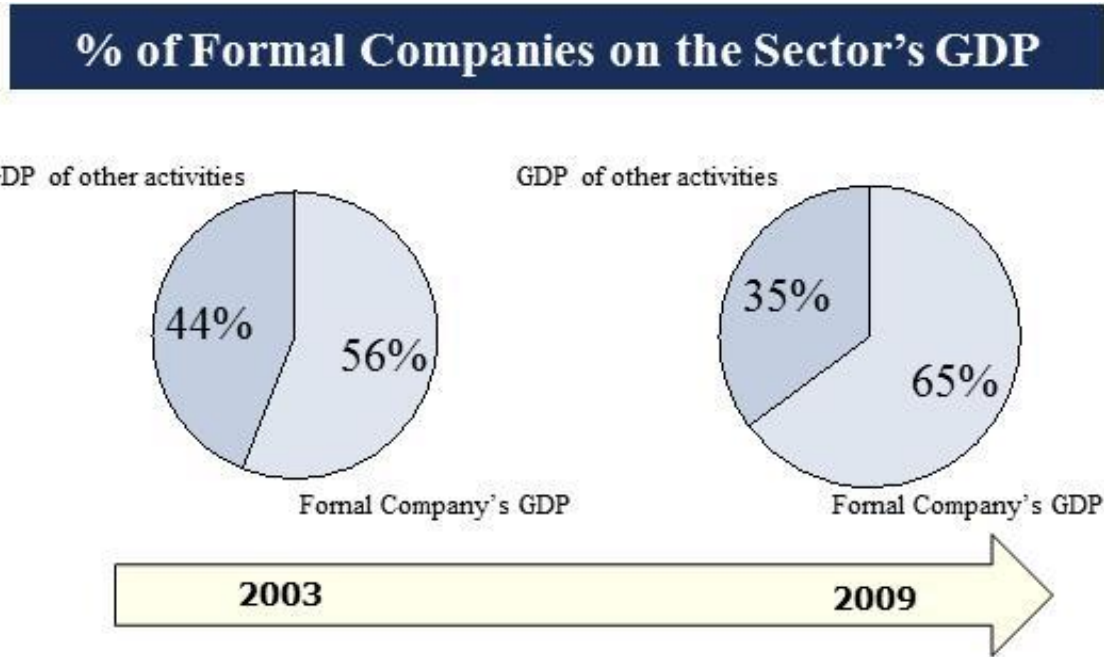


Figure 12 –Evolution of participation of formal companies in the sector's GDP  
Elaborated by the author

Analyzing PlywoodCo.'s situation through the perspective presented by Lopes and Assis (2009) and their five situations leading to financial distress, we can see why PlywoodCo. was struggling. Taking the first situation, drop on profits or consistent losses, we can see on the figure 13 that the company presented decreasing profits and losses: by 60% from 2010 to 2011 and by 470% from 2011 to 2012 (annualized). As presented by the authors, this is a sign of a possible financial distress.

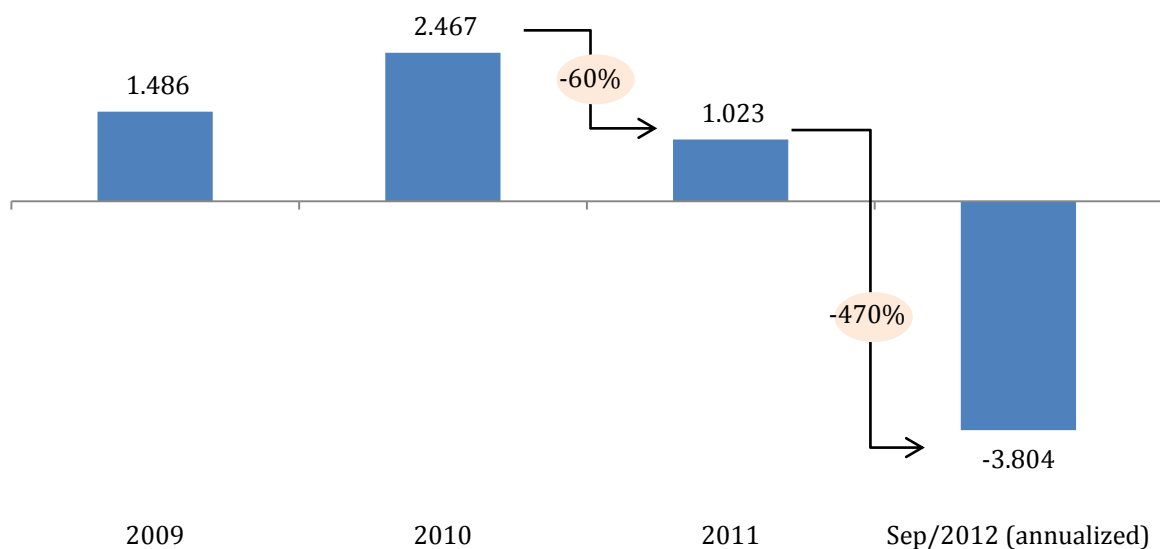


Figure 13 –PlywoodCo.'s results evolution  
Elaborated by the author

Taking the second situation, increasing tax liabilities, along with the fifth situation, delay on workforce payment, we can see through the balance sheet account “social and tax obligations” (short term and long term) that the company increased its tax and labor liabilities by 153% from 2009 to Sept/2012, while its net revenues grew 76% on the same period. Again, this is a sign of a possible financial distress.

Moreover, during the talks with the CEO and CFO of the company, one of their major concerns was the monthly pressure to pay the workforce, which had been already experiencing delays that ranged from 1 to 10 days.

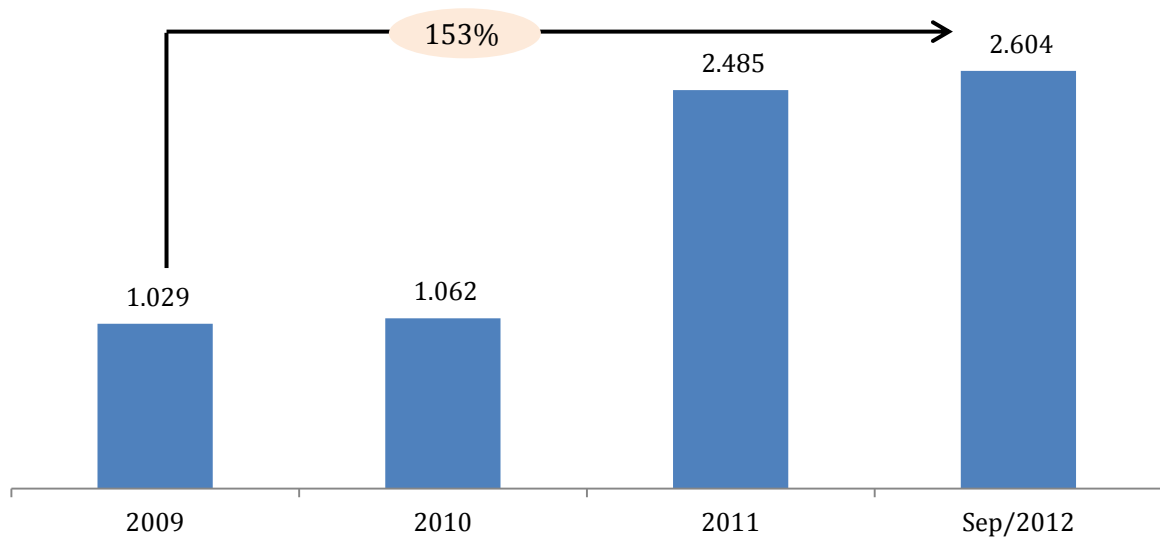


Figure 14 –PlywoodCo.’s social and tax obligations evolution  
Elaborated by the author

Taking now the third situation, increase of the bank’s debt, we can see from figure 15 the company’s debt has increased as of 2010, due to the debt taken to build the new factory. It is important to highlight that the company could not access the market to get new loans as it was highly leveraged after that, mainly in 2010 and 2011, with Net Debt / EBITDA above standards.

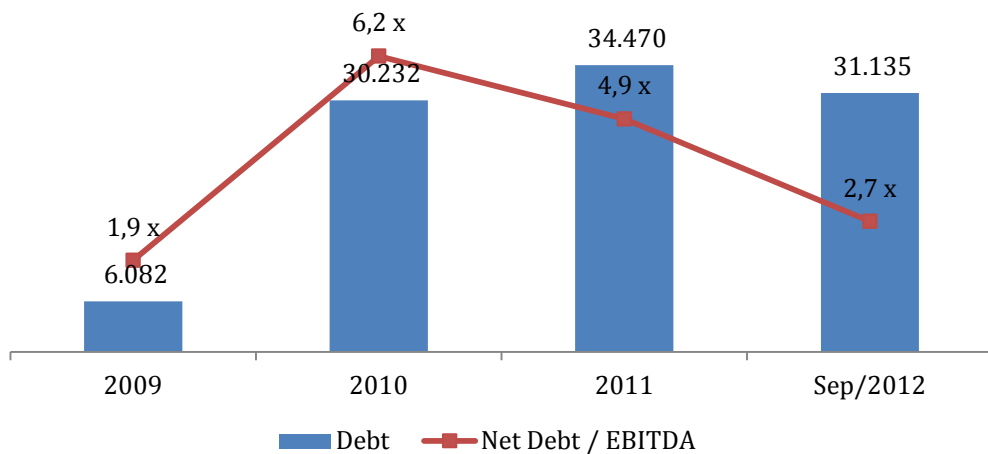


Figure 15 –PlywoodCo.'s bank debt evolution  
Elaborated by the author

Finally, taking the forth situation of delay on suppliers payments, we can see on figure 16 that the company has managed its suppliers well from 2009 to 2011, with stable liabilities. But, from 2011 to September 2012 the liabilities rose from R\$ 395 thousand to R\$ 650 thousand, an increase of 65%.

Moreover, during talks with the company's controller and CFO it was presented that the company, during the year of 2012, was delaying its payments to the suppliers, as the cash squeeze was becoming more and more heavy on the company.

Summarizing, from the five situations presented by Lopes and Assis (2006), PlywoodCo. has presented four of them. While the increase in bank debt was limited to 2010, we could see that the reason was related to difficulties in accessing the market due to high leverage and not because it was unnecessary.

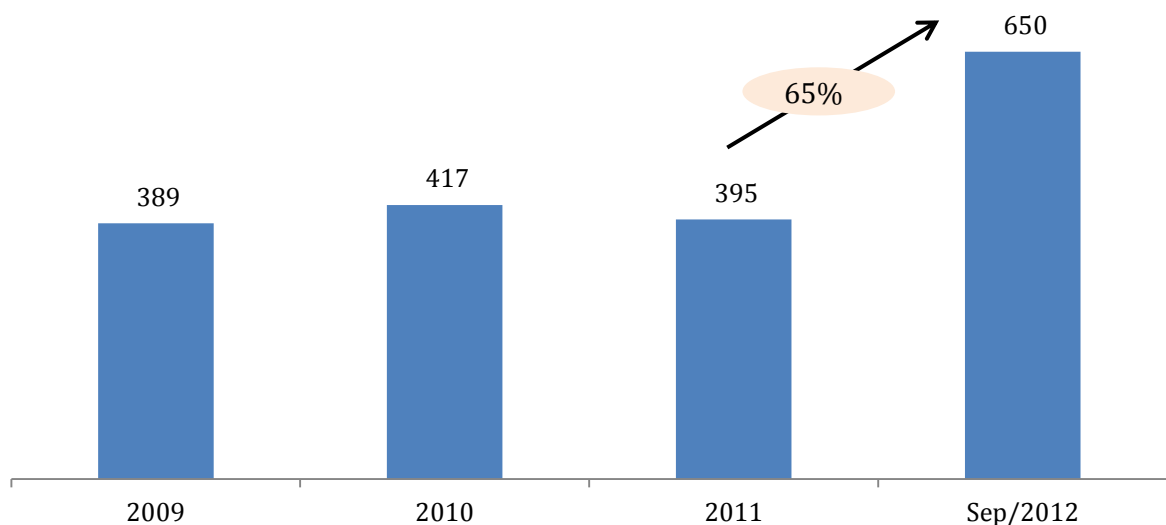


Figure 16 –PlywoodCo.'s supplier liabilities  
Elaborated by the author

## 5 PlywoodCo.'s projections

In this section the PlywoodCo.'s projections will be presented, divided in three sub-sections: first the main assumptions will be described and detailed; followed by the cash generation and cash position of the company in its current debt schedule; and finally the company's cash generation and cash position with the proposed debt schedule (debt renegotiation).

It is important to highlight that different cash generation scenarios will not be presented (such as a optimistic, neutral and pessimistic scenarios), as one would normally see in projections.

The reason behind that is, not only in the case of PlywoodCo. but also in probably all companies experiencing financial distress, the company can only afford to project an optimistic scenario, as a neutral or pessimistic one would lead the company to file for a *Recuperação Judicial* (Judicial Recovery) or going bankrupt.

The option of pursuing a *Recuperação Judicial* is, based on the author's brief experience in restructuring companies, a highly expensive measure, especially for PlywoodCo. The fixed costs with lawyers and consulting firms are of some millions of Reais, and pursuing this option would not generate enough cash for PlywoodCo. to finish its Mafra factory and, therefore, generate enough EBITDA to pay its debt (with banks, suppliers and workers) in a reasonable term.

In the cases that the author has participated there has never been the need to present different scenarios in the perspective of optimistic, neutral or pessimistic; but rather different scenarios in terms of company's and operations' related assumptions, such as: (i) building a new plant or not; (ii) buying better machinery or not; (iii) being able to increase working capital efficiency or not; (iv) landing a game changing contract with a major client or not; and so forth.

In the case of PlywoodCo. there aren't perspectives as the ones described above. The company is not in a position in which it is able to expand its market share or increase working capital efficiency or any other measure that can bring a different view on its operating capacity to generate cash.

On the contrary: the company's only chance of survival and perspective of generating cash is totally dependent on finishing an investment on its Mafra plant and machinery totaling R\$ 6 million – if this investment is not fulfilled, the company will not be able to generate enough cash to pay its debts.

## 5.1 Main assumptions

PlywoodCo. projections are very detailed and, therefore, they are based on more than usual assumptions. The assumptions are all based on the information previously presented in this work, as well as on several conversations and interactions conducted with PlywoodCo. team. These conversations and interactions were the source for the understanding of the company's workflow (as presented in figure 5) as well as the company's production indexes (as presented in figure 6). These information were later translated into the financial model, as it is possible to see on table 3 below (technical indexes).

Due to its large quantity, an attempt to summarize them was made, and the main assumptions are presented in the following tables. The model is constructed in real terms, or not subjected to the effect of inflation on prices and cost. All annual price increases on a yearly basis are due to effects other than inflation. The only assumption made on the projections regarding macroeconomic indexes is of *CDI (Certificado de Depósito Interbancário)*, as it is the interest correction of the loans with banks.

The remaining CAPEX on the new plant, to make it fully operational, are projected to be concluded in the first semester of 2013. After the completion of those investments, PlywoodCo. will be able to increase the forming systems production from 55,000 m<sup>2</sup> to 70,000 m<sup>2</sup> in 2014 and 2015. In the case of plywood production, they will grow from 4,000 m<sup>3</sup> to 9,000 m<sup>3</sup> in 2015. The assumption is that PlywoodCo will operate at full capacity. All the selling prices are assumed flat over the years.

The technical indexes presented in table 3 below were all gathered from conversations with the production team of PlywoodCo., as well as from informal and managerial reports provided by them. These indexes provide a more accurate calculation of the conversion of raw material into final product and, therefore, a more accurate calculation of PlywoodCo.'s costs.

Regarding the company's costs of goods sold, it was important to calculate them in detail as presented on table 4 below in order to capture the benefits of producing in the new Mafra plant. As previously stated, although the Mafra plant has a worse conversion index, the new plant has a better cost structure than União da Vitória, given its proximity to log producers.



Production and Average Prices	2013	2013	2013	2013	2014	2015	2016	2017	2018
	Trim1	Trim2	Trim3	Trim4					
<b>Forming Systems (m<sup>2</sup>)</b>									
Monthly production	100,000	105,000	105,000	110,000	120,000	130,000	140,000	150,000	160,000
Prices	R\$50.00	R\$50.00	R\$50.00	R\$50.00	R\$50.00	R\$50.00	R\$50.00	R\$50.00	R\$50.00
Raise	0%	0%	0%	0%	0%	0%	0%	0%	0%
Conversion Factor	1.840	1.840	1.840	1.840	1.840	1.840	1.840	1.840	1.840
<b>Plywood (m<sup>3</sup>)</b>									
Total monthly production (União de Mafra)	4,000	4,000	4,000	6,000	7,000	9,000	1,500	1,500	1,500
Domestic Prices	R\$1,285.00	R\$1,285.00	R\$1,285.00	R\$1,285.00	R\$1,285.00	R\$1,285.00	R\$1,285.00	R\$1,285.00	R\$1,285.00
Raise	0%	0%	0%	0%	0%	0%	0%	0%	0%
Export Prices	USD548.00	USD548.00	USD548.00	USD548.00	USD548.00	USD548.00	USD548.00	USD548.00	USD548.00
Raise	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sales Mix									
Internal Market	60%	60%	60%	60%	60%	60%	60%	60%	60%
External Market	40%	40%	40%	40%	40%	40%	40%	40%	40%
<b>BRL/USD</b>	R\$2.05	R\$2.05	R\$2.05	R\$2.05	R\$2.05	R\$2.05	R\$2.05	R\$2.05	R\$2.05

Table2 – Production and average prices assumptions

Elaborated by the author

Technical Indexes	2013	2013	2013	2013	2014	2015	2016	2017	2018
	Trim1	Trim2	Trim3	Trim4					
<b>Plywood União de Vitória</b>									
Conversion factor (m <sup>3</sup> lamite → m <sup>3</sup> log)	70%	70%	70%	70%	70%	70%	70%	70%	70%
Conversion factor (kg design → m <sup>3</sup> plywood)	73.35	73.35	73.35	73.35	73.35	73.35	73.35	73.35	73.35
Conversion factor (m <sup>2</sup> phenolic film → m <sup>3</sup> plywood)	90.25	90.25	90.25	90.25	90.25	90.25	90.25	90.25	90.25
<b>Plywood MAFRA</b>									
Conversion factor (m <sup>3</sup> lamite → m <sup>3</sup> log)	60%	60%	60%	60%	60%	60%	60%	60%	60%
Conversion factor (kg design → m <sup>3</sup> plywood)	73.35	73.35	73.35	73.35	73.35	73.35	73.35	73.35	73.35
Conversion factor (m <sup>2</sup> phenolic film → m <sup>3</sup> plywood)	90.25	90.25	90.25	90.25	90.25	90.25	90.25	90.25	90.25
<b>Forming Systems</b>									
Conversion factor (Nail → m <sup>2</sup> forming system)	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039
Conversion factor (m <sup>3</sup> lumber → m <sup>2</sup> forming system)	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015

Table3 – Technical indexes

Elaborated by the author

The sales assumptions, as previously stated, were gathered with PlywoodCo.'s sales team and, mainly, with the company's main partner and CEO. The almost 50% increase in sales is justified by two main reasons: (1) PlywoodCo.'s product is a substitute of the product that most of the clients and future clients use. Therefore, although the homebuilders market was not growing as fast as during the previous years, PlywoodCo.'s sales team and CEO believed they could gain a bigger portion of the market as their product was better than the competition's; (2) with the operations of the new plant, the company would be able to reach a bigger market, as its capacity would more than double.

	2013	2013	2013	2013	2014	2015	2016	2017	2018
Costs	Trim1	Trim2	Trim3	Trim4					
<b>Plywood União da Vitória</b>									
Log (R\$/m <sup>3</sup> log)	R\$138.11	R\$138.11	R\$138.11	R\$138.11	R\$138.11	R\$138.11	R\$138.11	R\$138.11	R\$138.11
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Resign (R\$/kg)	R\$2.54	R\$2.54	R\$2.54	R\$2.54	R\$2.54	R\$2.54	R\$2.54	R\$2.54	R\$2.54
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Phenolic Film (R\$/m <sup>2</sup> phenolic film)	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Energy (R\$/m <sup>3</sup> plywood)	R\$56.40	R\$56.40	R\$56.40	R\$56.40	R\$56.40	R\$67.68	R\$67.68	R\$67.68	R\$67.68
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	20%	0%	0%	0%
Freight Log Buying (R\$/m <sup>3</sup> log)	R\$32.59	R\$32.59	R\$32.59	R\$32.59	R\$32.59	R\$32.59	R\$32.59	R\$32.59	R\$32.59
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Freight to transfer laminates from Mafra (R\$/m <sup>3</sup> log)	R\$17.16	R\$17.16	R\$17.16	R\$17.16	R\$17.16	R\$17.16	R\$17.16	R\$17.16	R\$17.16
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Freight Other Buying (R\$/m <sup>3</sup> plywood)	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Others (R\$/m <sup>3</sup> plywood)	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Labour	R\$148.42	R\$148.42	R\$148.42	R\$148.42	R\$148.42	R\$163.26	R\$163.26	R\$163.26	R\$163.26
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	10%	0%	0%	0%
<b>Compensados MAFRA</b>									
Log (R\$/m <sup>3</sup> log)	R\$123.00	R\$123.00	R\$123.00	R\$123.00	R\$123.00	R\$123.00	R\$123.00	R\$123.00	R\$123.00
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Resign (R\$/kg)	R\$2.55	R\$2.55	R\$2.55	R\$2.55	R\$2.55	R\$2.55	R\$2.55	R\$2.55	R\$2.55
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Phenolic Film (R\$/m <sup>2</sup> phenolic film)	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36	R\$0.36
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Energy (R\$/m <sup>3</sup> plywood)	R\$0.00	R\$0.00	R\$0.00	R\$20.00	R\$20.00	R\$28.00	R\$28.00	R\$42.00	R\$73.50
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	40.000%	0%	50%	75%
Freight Log Buying (R\$/m <sup>3</sup> log)	R\$6.18	R\$6.18	R\$6.18	R\$6.18	R\$6.18	R\$6.18	R\$6.18	R\$6.18	R\$6.18
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Freight Other Buying (R\$/m <sup>3</sup> plywood)	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23	R\$4.23
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Others (R\$/m <sup>3</sup> plywood)	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57	R\$33.57
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Labour (R\$/m <sup>3</sup> plywood)	R\$131.93	R\$131.93	R\$131.93	R\$115.44	R\$115.44	R\$131.93	R\$131.93	R\$131.93	R\$131.93
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Forming Systems</b>									
Nails	R\$9.00	R\$9.00	R\$9.00	R\$9.00	R\$9.00	R\$9.00	R\$9.00	R\$9.00	R\$9.00
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Lumber Cost per m <sup>3</sup>	R\$424.23	R\$424.23	R\$424.23	R\$424.23	R\$424.23	R\$424.23	R\$424.23	R\$424.23	R\$424.23
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Energy (R\$/m <sup>2</sup> forming system)	R\$0.15	R\$0.15	R\$0.15	R\$0.15	R\$0.15	R\$0.15	R\$0.15	R\$0.15	R\$0.15
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Freight Log Buying (R\$/m <sup>2</sup> forming system)	R\$0.73	R\$0.73	R\$0.73	R\$0.73	R\$0.73	R\$0.73	R\$0.73	R\$0.73	R\$0.73
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Monthly Rent	R\$60,015	R\$60,015	R\$60,015	R\$60,015	R\$60,015	R\$60,015	R\$60,015	R\$60,015	R\$60,015
Inflation/YoY Increase	51.0%	51%	51%	51%	0%	0%	0%	0%	0%
Other (R\$/m <sup>2</sup> forming system)	R\$0.17	R\$0.17	R\$0.17	R\$0.17	R\$0.17	R\$0.17	R\$0.17	R\$0.17	R\$0.17
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
Labour (R\$/m <sup>2</sup> forming system)	R\$7.65	R\$7.65	R\$7.65	R\$7.65	R\$7.65	R\$7.65	R\$7.65	R\$7.65	R\$7.65
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%
<b>Rent</b>									
União da Vitória	R\$100,000	R\$100,000	R\$100,000	R\$100,000	R\$100,000	R\$100,000	R\$100,000	R\$100,000	R\$100,000
Inflation/YoY Increase	R\$0	R\$0	R\$0	R\$0	R\$0	R\$0	R\$0	R\$0	R\$0
Mafra	R\$50,000	R\$50,000	R\$50,000	R\$100,000	R\$100,000	R\$100,000	R\$100,000	R\$100,000	R\$100,000
Inflation/YoY Increase	0.0%	0%	0%	0%	0%	0%	0%	0%	0%

Table 4– Costs assumptions

Elaborated by the author

	2013	2013	2013	2013	2014	2015	2016	2017	2018
General and Administrative Expenses	Trim1	Trim2	Trim3	Trim4					
Freight over Sales (Plywood Internal) R\$/m <sup>3</sup> plywood Inflation/YoY Increase	R\$12.68 0.0%	R\$12.68 0%	R\$12.68 0%	R\$12.68 0%	R\$12.68 0%	R\$12.68 0%	R\$12.68 0%	R\$12.68 0%	R\$12.68 0%
Freight over Sales (Plywood External) R\$/m <sup>3</sup> plywood Inflation/YoY Increase	R\$24.90 0.0%	R\$24.90 0%	R\$24.90 0%	R\$24.90 0%	R\$24.90 0%	R\$24.90 0%	R\$24.90 0%	R\$24.90 0%	R\$24.90 0%
Freight over Sales (Forming System) R\$/m <sup>2</sup> forming system Inflation/YoY Increase	R\$2.00 0.0%	R\$2.00 0%	R\$2.00 0%	R\$2.00 0%	R\$2.00 0%	R\$2.00 0%	R\$2.00 0%	R\$2.00 0%	R\$2.00 0%
Sales Commissions (%) Plywood Internal	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Sales Commissions (%) Plywood External	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Sales Commissions (%) Forming Systems	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
Trips costs Inflation/YoY Increase	R\$7,121 0.0%	R\$8,545 20%	R\$8,545 20%	R\$8,901 25%	R\$13,352 50%	R\$15,355 15%	R\$16,891 10%	R\$16,891 0%	R\$16,891 0%
Phone and Internet Inflation/YoY Increase	R\$12,462 0.0%	R\$14,954 20%	R\$14,954 20%	R\$14,954 20%	R\$17,945 20%	R\$20,637 15%	R\$22,701 10%	R\$22,701 0%	R\$22,701 0%
Administrative Labour Inflation/YoY Increase	R\$167,507 5.0%	R\$167,507 5%	R\$175,483 10%	R\$191,436 20%	R\$239,295 25%	R\$275,189 15%	R\$302,708 10%	R\$302,708 0%	R\$302,708 0%
Security Inflation/YoY Increase	R\$23,144 0.0%	R\$23,144 0%	R\$23,144 0%	R\$24,301 5%	R\$26,731 10%	R\$30,741 15%	R\$33,815 10%	R\$33,815 0%	R\$33,815 0%
Consultancy Inflation/YoY Increase	R\$51,364 0.0%	R\$51,364 0%	R\$51,364 0%	R\$51,364 0%	R\$61,636 20%	R\$67,800 10%	R\$71,190 5%	R\$71,190 0%	R\$71,190 0%
Other Administrative Expenses Inflation/YoY Increase	R\$3,560.59 0.0%	R\$3,560.59 0%	R\$3,560.59 0%	R\$3,560.59 0%	R\$4,984.83 40%	R\$5,732.55 15%	R\$6,162.49 8%	R\$6,162.49 0%	R\$6,162.49 0%

Table 5 – General and administrative expenses assumptions

Elaborated by the author

	2013	2013	2013	2013	2014	2015	2016	2017	2018
Other Premises	Trim1	Trim2	Trim3	Trim4					
Monthly Production of Laminates União da Vitória	1,200	2,200	2,200	3,200	3,500	3,500	5,826	5,826	5,826
Plywood monthly production (m <sup>3</sup> ) - before ratio 1.33/12	3,500	3,500	3,500	4,000	4,000	4,000	4,000	4,000	4,000
Capital Increase									
Investments	3,000	3,000				4,500			

Table 6 – Other assumptions

Elaborated by the author

## 5.2 Summary of the projections: with current debt schedule

A summary of the projections with the current debt schedule is presented in table 7 below. It is expected that PlywoodCo. would be able to generate revenues of R\$ 66 MM in 2013, a number 50% higher than the previous year, due to 6 months of operations of the new factory in Mafra, increasing the company's production, and market participation gain. It is expected that the company's EBITDA reaches R\$ 12 MM, an 18% margin. Due to the full operation of new plant in 2014, it is expected that the revenues reach the level of R\$ 100 MM, and the EBITDA approximately R\$ 20 MM, enhancing the margin due to gains of scale. The figures below show PlywoodCo.'s gross sales and EBITDA expected evolution.

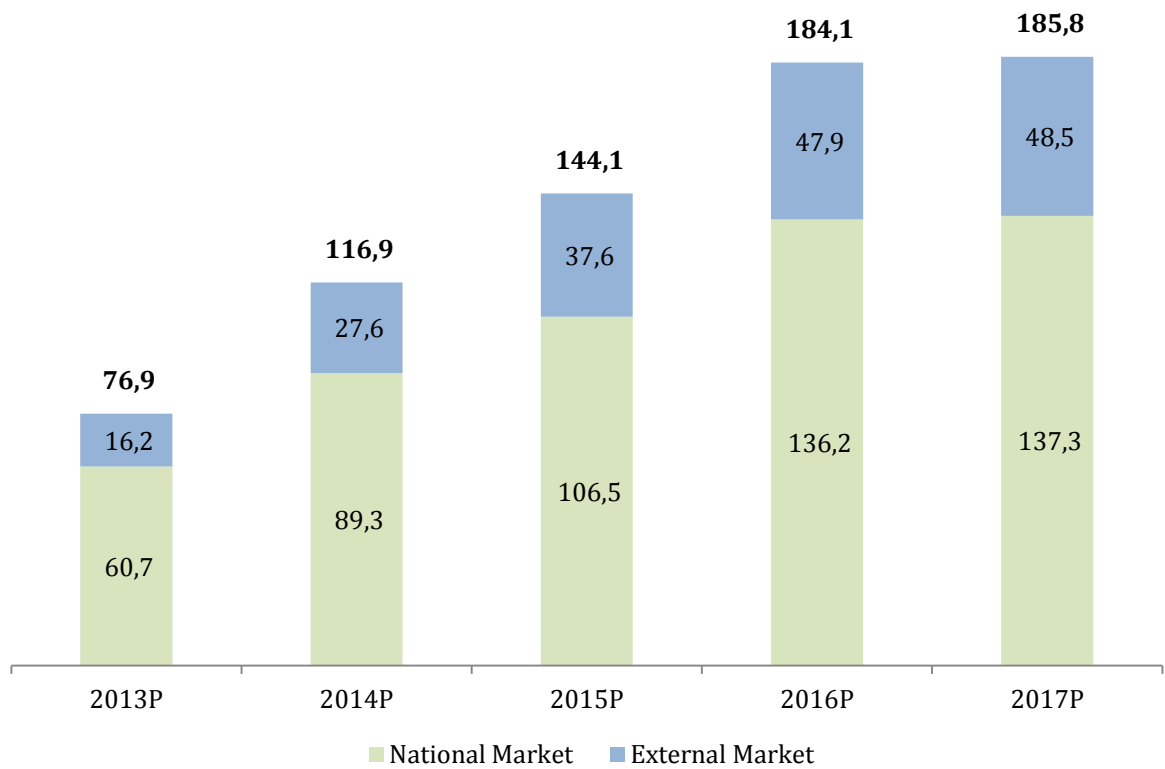


Figure 17 –PlywoodCo.'s gross sales projection  
Elaborated by the author

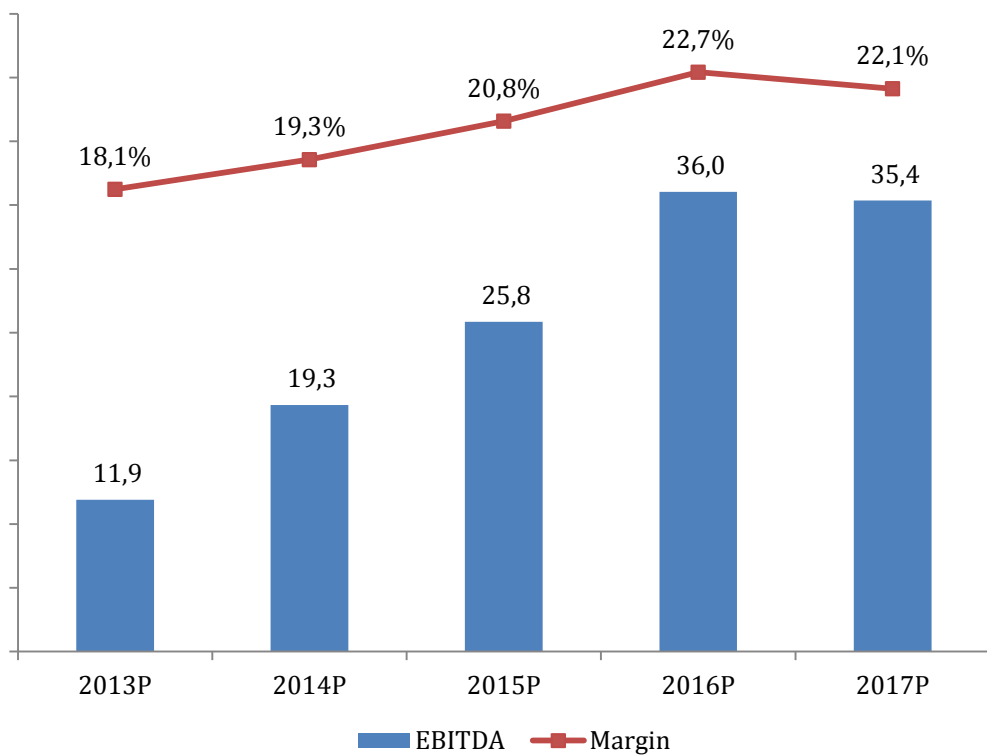


Figure 18 –PlywoodCo.'s EBITDA and EBITDA margin projection  
Elaborated by the author

As seen on table 7 below, during the end of 2012 and 2013, PlywoodCo.'s payment capacity resulting from the operations (operating cash flow) would be negative, meaning the company would need further cash (coming from banks or capital injection) to finance its operations. The main investments are concentrated in the R\$ 6.0 MM needed to finish Mafra factory and R\$ 13.4 MM to finance PlywoodCo.'s working capital.

Apart from that, in the current debt schedule the company has to pay R\$ 9,5 MM from October 2012 to December 2012, and R\$ 10,3 MM in 2013, and another R\$ 4,7 MM in interests. In this situation, taking the company's payment capacity and debt due, the company would need another R\$ 34.8 MM in financing until the end of 2013 to honor its liabilities.

	2012	2013P	2013P	2013P	2013P	2013P	2014P	2015P	2016P	2017P
	Out-Dez	1 trim	2 trim	3 trim	4 trim	Total	Annual	Annual	Annual	Annual
<b>Cash Flow R\$ '000</b>										
Net Revenues	8.642	14.644	15.205	15.259	20.615	65.723	100.283	124.311	158.714	160.253
EBITDA	1.188	2.059	2.666	2.658	4.528	11.910	19.339	25.849	36.046	35.359
<i>EBITDA Margin</i>	<i>13,7%</i>	<i>14,1%</i>	<i>17,5%</i>	<i>17,4%</i>	<i>22,0%</i>	<i>18,1%</i>	<i>19,3%</i>	<i>20,8%</i>	<i>22,7%</i>	<i>22,1%</i>
(-) IR & CSLL	(73)	(292)	(417)	(398)	(985)	(2.091)	(4.443)	(6.470)	(9.784)	(9.987)
(-) Investments	(106)	(3.174)	(3.214)	(241)	(245)	(6.873)	(2.070)	(7.006)	(3.037)	(3.309)
(-) Working Capital&Others	(808)	(4.736)	(2.017)	2	(6.666)	(13.417)	(3.988)	(6.923)	(9.343)	(123)
<b>Payment Capacity</b>	<b>201</b>	<b>(6.143)</b>	<b>(2.982)</b>	<b>2.021</b>	<b>(3.367)</b>	<b>(10.471)</b>	<b>8.838</b>	<b>5.450</b>	<b>13.882</b>	<b>21.939</b>
(-) Financial Exp./Rev.	(756)	(899)	(976)	(970)	(1.055)	(3.900)	(3.806)	(3.738)	(3.359)	(1.785)
(-) Debt Payment	(9.593)	(2.705)	(1.837)	(2.146)	(3.613)	(10.300)	(5.924)	(4.028)	(1.567)	-
(-) Debt Revolver	10.147	9.746	5.794	1.095	8.035	24.670	893	2.316	(8.956)	(20.154)
<b>Firms Cash Flow</b>	<b>(0)</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>
Cash Position	(0)	0	0	(0)	0	0	0	(0)	0	(0)
Debt	34.803	41.844	45.802	44.751	49.173	49.173	44.141	42.429	31.906	11.752
<b>Net Debt</b>	<b>34.803</b>	<b>41.844</b>	<b>45.802</b>	<b>44.751</b>	<b>49.173</b>	<b>49.173</b>	<b>44.141</b>	<b>42.429</b>	<b>31.906</b>	<b>11.752</b>
<b>Debt Index</b>										
Net Debt / EBITDA *	29,29x	5,08x	4,30x	4,21x	2,71x	4,13x	2,28x	1,64x	0,89x	0,33x

\*When quarterly, the EBITDA is annualized

Table7 – PlywoodCo. projections without refinancing debt  
Elaborated by the author

### 5.3 Summary of the projections: refinancing debt

Figure 19 below details the new and proposed debt schedule for PlywoodCo. In it, each type of credit and creditors were treated differently, given the collateral they had and their importance for PlywoodCo. This difference of treatment was addressed with and agreed to by all creditors.

It is extremely relevant to highlight that the PlywoodCo. could not aim at a very long renegotiation schedule due to, as previously stated, two situations the company was facing: first the company's size is a problem, both in revenues term and size of debt as

mentioned before. The size of the company's revenues indicates who will be the bank's representative within the bank hierarchy, and PlywoodCo. deals with lower ranking personnel which, in turn, have less decision power and are less oriented to solve the company's problem. Also, as the size of the company's debt was not high enough to impose a major risk to the banks involved, the negotiation happened at the credit area level, again with less decision making power that the restructuring area of the bank.

Secondly, the relationship of PlywoodCo. with the main banks had eroded due to delay in payments and constant unaccomplished promises by the company, as previously detailed. According to the company's CFO and CEO, PlywoodCo.'s creditors did not want to talk to the company's entrepreneur anymore, as they are questioning his honesty.

As previously stated, PlywoodCo.'s refinancing negotiations is different than the usual one, as the banks gave what they would accept as a renegotiation, and not the other way around. This means, basically, the debt refinancing assumptions were given by the banks, as they were not based on the company's payment capacity.

Taking all this issues in consideration, the proposed refinancing was the following: (1) for FINAME contracts, there would be 6 months of grace period starting in January 2013 and, after that, 50 months of payments, with an interest rate of 5.4% per year; (2) for overdraft loans and working capital loans there would be 6 months of grace period starting on January 2013 and 18 months of payment, with an interest rate of CDI plus an additional 4.0% to 10.0% per year; (3) ACC/FINIMP and Leasing contracts were kept with the same schedule as before.

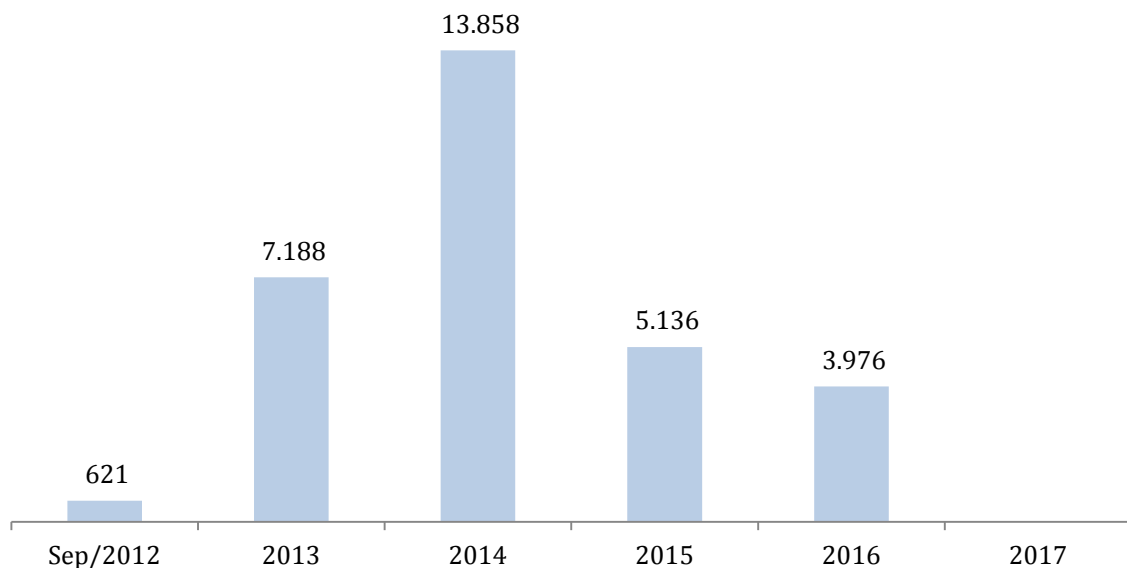


Figure19–PlywoodCo.'s new debt schedule  
Elaborated by the author

PlywoodCo.'s cash flow generated from the operations would be on the same level as before, with a negative payment capacity, leading to a negative R\$ 10 MM by the end of 2013 as no change was made to the assumptions up until this point of the projections.

With the new debt schedule however, the company would only need to pay R\$ 7,2 MM in debts and R\$ 5,7 MM in interests by the end 2013 (against a payment of R\$ 20 MM of principal and R\$ 4,7 MM in interests in the previous schedule). In this scenario, the additional cash injection needed for the company is of R\$ 23 MM by the end of 2013, instead of the R\$34,8m of the first scenario.

There are three possibilities for PlywoodCo. raise money to pay honor its liabilities. The first one is through cash generation from operations which, as seen in the projections, is not enough to fully pay the company's debt in the current scenario. The company is projected to generate R\$ 12 MM EBITDA in the 2013 with a approximately R\$ 20 MM operational need (from working capital and other uses), portraying a negative payment capacity.

A second option would be raising money by selling assets. PlywoodCo. did not have assets to be sold and the option of selling either Mafra or União da Vitória's plant would make the company's operational cash generation reach lower levels than the ones projected (which are not enough). Although the company did not have assets, PlywoodCo.'s main partner and CEO had shown interest in selling an asset and injecting the proceeds from that sale in PlywoodCo. This option is no longer a possibility, as the company's CEO has decided not to sell that asset anymore.

The third possible way PlywoodCo. can raise money is through capital injection. This can occur by the partners injecting more money in the company (as would be the case if the company's CEO sold his asset) or by selling participation on the company. The company's main partner did not have the funds (approximately R\$ 23 MM) to inject in the company, making the capital injection from a third party, along with a sale of a participation on PlywoodCo., a viable option given the scenario the company is in.

Although the situation continues to be challenging, the postponement of the debts amortization and lower interests gives the company greater chances to positively reach the funds needed throughout the period and improve the relationship with the banks and suppliers. Table 8 displays the company's projections after the debt refinancing.

	2012	2013P	2013P	2013P	2013P	2013P	2014P	2015P	2016P	2017P
	<i>Out-Dez</i>	<i>1 trim</i>	<i>2 trim</i>	<i>3 trim</i>	<i>4 trim</i>	<i>Total</i>	<i>Annual</i>	<i>Annual</i>	<i>Annual</i>	<i>Annual</i>
<b>Cash Flow R\$ '000</b>										
Net Revenues	8.642	14.644	15.205	15.259	20.615	65.723	100.283	124.311	158.714	160.253
EBITDA	1.188	2.059	2.666	2.658	4.528	11.910	19.339	25.849	36.046	35.359
<b>EBITDA Margin</b>	<b>13,7%</b>	<b>14,1%</b>	<b>17,5%</b>	<b>17,4%</b>	<b>22,0%</b>	<b>18,1%</b>	<b>19,3%</b>	<b>20,8%</b>	<b>22,7%</b>	<b>22,1%</b>
(-) IR & CSLL	(100)	(245)	(327)	(302)	(866)	(1.740)	(4.195)	(6.473)	(9.777)	(9.955)
(-) Investments	(106)	(3.174)	(3.214)	(241)	(245)	(6.873)	(2.070)	(7.006)	(3.037)	(3.309)
(-) Working Capital&Others	(787)	(4.775)	(2.031)	1	(6.675)	(13.479)	(3.954)	(6.917)	(9.345)	(124)
<b>Payment Capacity</b>	<b>195</b>	<b>(6.135)</b>	<b>(2.905)</b>	<b>2.115</b>	<b>(3.257)</b>	<b>(10.182)</b>	<b>9.120</b>	<b>5.452</b>	<b>13.887</b>	<b>21.971</b>
(-) Financial Exp./Rev.	(673)	(1.146)	(1.248)	(1.258)	(1.415)	(5.067)	(4.558)	(3.726)	(3.381)	(1.883)
(-) Debt Payment	-	(245)	(42)	(3.002)	(3.898)	(7.188)	(13.858)	(5.136)	(3.976)	(2.269)
(-) Debt Revolver	478	7.526	4.196	2.145	8.569	22.437	9.296	3.410	(6.530)	(17.819)
<b>Firms Cash Flow</b>	<b>(0)</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>
Cash Position	-	-	(0)	0	0	0	(0)	0	(0)	-
Debt	34.719	42.000	46.153	45.296	49.968	49.968	45.406	43.681	33.174	13.086
<b>Net Debt</b>	<b>34.719</b>	<b>42.000</b>	<b>46.153</b>	<b>45.296</b>	<b>49.968</b>	<b>49.968</b>	<b>45.406</b>	<b>43.681</b>	<b>33.174</b>	<b>13.086</b>
<b>Debt Index</b>										
Net Debt / EBITDA *	29,22x	5,10x	4,33x	4,26x	2,76x	4,20x	2,35x	1,69x	0,92x	0,37x

\* When quarterly, the EBITDA is annualized

Table8 – PlywoodCo. projections with debt refinancing  
Elaborated by the author



## 6 Conclusion

PlywoodCo. is currently in a unhealthy financial situation, experiencing a cash squeeze, being unable to support its operations, build the new factory and honor its liabilities. Without implementing changes to the financial scenario, the company will have to access the market for another R\$ 34 MM in financing in the next 2 years. With an unhealthy balance sheet this is something perceived as almost impossible.

PlywoodCo. can find a solution to that problem through a renegotiation plan with its creditors, as proposed in the previous section, in order to limit the short term need of cash (R\$ 23 MM), improve its balance sheet by having the majority of its bank liabilities due in the long term.

As shown in table 8, the PlywoodCo. will need time to turn its situation around and, moreover, will need help of its creditors to be able to pay them in full. This can only be done if its operations can generate enough EBITDA and by having sufficient credit to finance , r its working capital and investment needs.

Another solution that could be pursued by PlywoodCo. would be a capital injection, through the entrance of an investor, or by the current partners; in addition to the debt refinancing. The company and the shareholders should seek an investor willing to inject around R\$ 23 MM in the company at a fair price. The longer the debt schedule is restructured the more time PlywoodCo. will have to find and structure that capital injection.

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## 8 Appendixes

### 8.1 PlywoodCo. projected balance sheets: 2012-2013

<b>Assets</b>					
	<b>2012</b>	<b>2013</b>	<b>2013</b>	<b>2013</b>	<b>2013</b>
	<i>Nov-Dez</i>	<i>Trim-1</i>	<i>Trim-2</i>	<i>Trim-3</i>	<i>Trim-4</i>
<b>Current</b>					
<b>Cash</b>	-	-	(0) 0	0	
<b>Clients (net)</b>	4.931.779	8.962.268	10.869.397	10.869.397	15.411.356
<b>Inventory</b>	6.066.936	6.714.751	6.836.560	6.836.560	8.560.802
<b>Taxestorecover</b>	177.575	205.317	209.027	209.027	296.372
<b>OtherCredits</b>	2.415.025	2.792.310	2.842.765	2.842.765	4.030.662
<b>Total CurrentAssets</b>	<b>13.591.315</b>	<b>18.674.645</b>	<b>20.757.750</b>	<b>20.757.750</b>	<b>28.299.192</b>
<b>Non-current</b>					
<b>Finame toerecover</b>	2.182.506	2.182.506	2.182.506	2.182.506	2.182.506
<b>Permanent</b>	-	-	-	-	-
<b>Fixedassets</b>	35.199.437	38.025.784	40.812.217	40.570.749	40.326.167
<b>MachineryandEquipment</b>	36.498.673	39.650.237	42.841.359	43.060.020	43.281.426
<b>Office equipment</b>	730.626	739.836	749.161	758.604	768.167
<b>Vehicles</b>	260.448	267.069	273.858	280.821	287.960
<b>Properties</b>	197.952	198.945	199.943	200.946	201.954
<b>Other</b>	417.715	422.980	428.312	433.711	439.178
<b>(-) Acum. Depreciation</b>	(2.905.977)	(3.253.283)	(3.680.418)	(4.163.354)	(4.652.518)
<b>Total Assets</b>	<b>50.973.258</b>	<b>58.882.935</b>	<b>63.752.473</b>	<b>63.511.005</b>	<b>70.807.865</b>
<b>Liabilities</b>					
	<b>2012</b>	<b>2013</b>	<b>2013</b>	<b>2013</b>	<b>2013</b>
	<i>Nov-Dez</i>	<i>Trim-1</i>	<i>Trim-2</i>	<i>Trim-3</i>	<i>Trim-4</i>
<b>Current</b>					
<b>Operational</b>					
<b>Suppliers</b>	674.786	722.715	735.775	735.775	1.043.230
<b>Workersobligations</b>	309.886	330.754	342.222	344.614	428.599
<b>Taxobligations</b>	724.259	881.521	923.398	926.589	1.184.109
<b>Banks –Imports</b>	-	-	-	-	-
<b>Baks - Working Capital</b>	7.187.697	10.820.705	14.033.324	14.356.922	13.857.892
<b>Taxprovisions</b>	37.567	120.229	106.156	101.870	319.636
<b>Total Operational</b>	<b>8.934.195</b>	<b>12.875.924</b>	<b>16.140.874</b>	<b>16.465.771</b>	<b>16.833.467</b>
<b>Non-current</b>					
<b>Longtermobligations</b>					
<b>FINAME</b>	25.160.166	21.281.710	18.026.604	14.700.746	11.302.274
<b>Social andTaxobligations</b>	2.157.332	2.157.332	2.157.332	2.157.332	2.157.332
<i>(Continues on the next page)</i>					

Otherloans	2.371.472	9.897.224	14.093.482	16.238.813	24.808.223
<b>Total longtermobligations</b>	<b>29.688.970</b>	<b>33.336.266</b>	<b>34.277.419</b>	<b>33.096.891</b>	<b>38.267.829</b>
<b>Equity</b>					
<b>Capital</b>	2.000.000	2.000.000	2.000.000	2.000.000	2.000.000
<b>Capital reserves</b>	-	-	-	-	-
<b>Acum. Earnings</b>	10.273.821	10.426.644	11.118.651	11.741.515	13.057.610
<b>Termresults</b>	76.273	244.101	215.529	206.828	648.959
<b>Total equity</b>	<b>12.350.093</b>	<b>12.670.745</b>	<b>13.334.180</b>	<b>13.948.343</b>	<b>15.706.568</b>

## 8.2 PlywoodCo. projected balance sheets: 2013-2017

<b>Assets</b>					
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
	<i>Anual</i>	<i>Anual</i>	<i>Anual</i>	<i>Anual</i>	<i>Anual</i>
<b>Current</b>					
<b>Cash</b>	0	(0) 0		(0)	-
<b>Clients (net)</b>	15.411.356	17.963.897	22.309.677	28.517.813	28.538.194
<b>Inventory</b>	8.560.802	9.760.763	11.982.664	14.689.494	14.779.739
<b>Taxstorecover</b>	296.372	345.460	429.032	548.419	548.811
<b>OtherCredits</b>	4.030.662	4.698.250	5.834.839	7.458.505	7.463.835
<b>Total CurrentAssets</b>	<b>28.299.192</b>	<b>32.768.369</b>	<b>40.556.211</b>	<b>51.214.232</b>	<b>51.330.580</b>
<b>Non-current</b>					
<b>Finame toerecover</b>	2.182.506	2.182.506	2.182.506	2.182.506	2.182.506
<b>Permanent</b>	-	-	-	-	-
<b>Fixedassets</b>	40.326.167	40.326.167	44.826.167	44.826.167	44.826.167
<b>MachineryandEquipment</b>	43.281.426	45.151.628	51.929.753	54.705.549	57.772.006
<b>Office equipment</b>	768.167	849.311	939.027	1.038.221	1.147.892
<b>Vehicles</b>	287.960	352.308	431.036	527.357	588.587
<b>Properties</b>	201.954	210.210	218.804	227.749	237.059
<b>Other</b>	439.178	485.570	536.863	593.574	656.275
<b>(-) Acum. Depreciation</b>	(4.652.518)	(6.722.861)	(9.229.316)	(12.266.281)	(15.575.652)
<b>Total Assets</b>	<b>70.807.865</b>	<b>75.277.041</b>	<b>87.564.884</b>	<b>98.222.905</b>	<b>98.339.253</b>

<b>Liabilities</b>					
	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
	<i>Anual</i>	<i>Anual</i>	<i>Anual</i>	<i>Anual</i>	<i>Anual</i>
<b>Current</b>					
<b>Operational</b>					
<b>Suppliers</b>	1.043.230	1.216.018	1.510.193	1.930.437	1.931.816
<b>Workersobligations</b>	428.599	498.590	614.926	762.475	762.475
<b>Taxobligations</b>	1.184.109	1.400.304	1.690.203	2.140.027	2.126.524
<b>Banks –Imports</b>	-	-	-	-	-
<i>(Continues on the next page)</i>					

<b>Banks - Working Capital</b>	13.857.892	5.136.018	3.976.420	2.269.318	-
<b>Taxprovisions</b>	319.636	375.469	545.542	841.394	845.695
<b>Total Operational</b>	16.833.467	8.626.400	8.337.285	7.943.650	5.666.510
<b>Non-current</b>					
<b>Longtermobligations</b>					
<b>FINAME</b>	11.302.274	6.166.256	2.189.836	(79.482)	(79.482)
<b>Social andTaxobligations</b>	2.157.332	2.157.332	2.157.332	2.157.332	2.157.332
<b>Otherloans</b>	24.808.223	34.104.093	37.514.373	30.984.361	13.165.835
<b>Total longtermobligations</b>	38.267.829	42.427.682	41.861.541	33.062.212	15.243.686
<b>Equity</b>					
<b>Capital</b>	2.000.000	2.000.000	2.000.000	2.000.000	2.000.000
<b>Capital reserves</b>	-	-	-	-	-
<b>Acum. Earnings</b>	13.057.610	21.460.643	34.258.442	53.508.758	73.712.041
<b>Termresults</b>	648.959	762.317	1.107.616	1.708.285	1.717.016
<b>Total equity</b>	15.706.568	24.222.960	37.366.058	57.217.043	77.429.057

### 8.3 PlywoodCo. projectedincomestatemnts: 2012-2013

	<b>2012</b>	<b>2013</b>	<b>2013</b>	<b>2013</b>	<b>2013</b>	<b>2013</b>
	<i>Nov-Dez</i>	<i>Trim-1</i>	<i>Trim-2</i>	<i>Trim-3</i>	<i>Trim-4</i>	<i>Anual</i>
<b>Gross OperatingRevenues</b>	<b>9.992.151</b>	<b>17.135.869</b>	<b>17.853.325</b>	<b>17.916.361</b>	<b>23.986.231</b>	<b>76.891.786</b>
<b>National Market</b>	7.430.333	13.587.757	14.317.197	14.357.021	18.468.013	60.729.987
<b>External Market</b>	2.561.818	3.548.112	3.536.129	3.559.340	5.518.218	16.161.799
<b>Deductionofsales</b>	<i>14%</i>	<i>15%</i>	<i>15%</i>	<i>15%</i>	<i>14%</i>	<i>15%</i>
<b>Taxes over sales</b>	1.350.148	2.491.751	2.648.577	2.657.399	3.371.275	11.169.002
<b>Net revenues</b>	<b>8.642.002</b>	<b>14.644.118</b>	<b>15.204.749</b>	<b>15.258.962</b>	<b>20.614.956</b>	<b>65.722.784</b>
<b>Costsofproductssold</b>	<b>6.799.040</b>	<b>10.945.124</b>	<b>11.426.511</b>	<b>11.518.581</b>	<b>14.762.489</b>	<b>48.652.704</b>
<b>Plywood</b>	3.883.076	6.332.222	6.310.836	6.352.260	9.449.985	28.445.302
<b>Forming systems</b>	3.109.946	5.079.664	5.569.225	5.567.349	5.938.215	22.154.452
<b>(-) Taxcredits</b>	(406.522)	(814.068)	(880.685)	(883.964)	(1.114.875)	(3.693.591)
<b>Depreciation</b>	212.541	347.306	427.135	482.936	489.164	1.746.541
<b>Gross operatingprofit</b>	<b>1.842.962</b>	<b>3.698.994</b>	<b>3.778.238</b>	<b>3.740.381</b>	<b>5.852.467</b>	<b>17.070.080</b>
<b>General &amp; Adm. Expenses</b>	867.381	1.987.679	1.539.734	1.565.493	1.813.565	6.906.470
<b>Operatingprofit</b>	975.581	1.711.315	2.238.504	2.174.888	4.038.902	10.163.610

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Financial expenses	672.572	1.145.514	1.248.303	1.258.226	1.414.685	5.066.728
Financial revenues	-	-	-	-	-	-
Operating profit before taxes	303.009	565.802	990.201	916.662	2.624.217	5.096.881
Taxes	99.993	245.150	326.766	302.498	865.992	1.740.406
Net Income (Loss)	<b>203.016</b>	<b>320.652</b>	<b>663.435</b>	<b>614.163</b>	<b>1.758.225</b>	<b>3.356.475</b>
EBITDA	<b>1.188.122</b>	<b>2.058.621</b>	<b>2.665.639</b>	<b>2.657.824</b>	<b>4.528.066</b>	<b>11.910.151</b>
Margin	13,75%	14,06%	17,53%	17,42%	21,96%	18,12%

#### 8.4 PlywoodCo. projected income statements: 2013-2017

	2013	2014	2015	2016	2017
	<i>Anual</i>	<i>Anual</i>	<i>Anual</i>	<i>Anual</i>	<i>Anual</i>
<b>Gross Operating Revenues</b>	<b>76.891.786</b>	<b>116.904.768</b>	<b>144.108.084</b>	<b>184.083.213</b>	<b>185.775.633</b>
National Market	60.729.987	89.323.393	106.509.926	136.184.075	137.253.313
External Market	16.161.799	27.581.375	37.598.159	47.899.138	48.522.320
Deduction of sales	15%	14%	14%	14%	14%
Taxes over sales	11.169.002	16.622.008	19.796.672	25.369.079	25.522.698
<b>Net revenues</b>	<b>65.722.784</b>	<b>100.282.760</b>	<b>124.311.412</b>	<b>158.714.134</b>	<b>160.252.935</b>
<b>Costs of products sold</b>	<b>48.652.704</b>	<b>69.736.573</b>	<b>85.579.452</b>	<b>107.423.706</b>	<b>109.847.980</b>
Plywood	28.445.302	46.086.195	62.710.126	78.672.076	80.681.535
Forming systems	22.154.452	27.262.292	27.235.793	34.561.282	34.760.218
(-) Tax credits	(3.693.591)	(5.682.259)	(6.872.922)	(8.846.618)	(8.903.143)
Depreciation	1.746.541	2.070.343	2.506.455	3.036.965	3.309.371
<b>Gross operating profit</b>	<b>17.070.080</b>	<b>30.546.187</b>	<b>38.731.959</b>	<b>51.290.429</b>	<b>50.404.955</b>
<b>General &amp; Adm. Expenses</b>	6.906.470	13.277.457	15.389.103	18.281.396	18.355.086
<b>Operating profit</b>	10.163.610	17.268.730	23.342.856	33.009.033	32.049.869
Financial expenses	5.066.728	4.557.698	3.726.291	3.380.698	1.882.683
Financial revenues	-	-	-	-	-
<b>Operating profit before taxes</b>	5.096.881	12.711.032	19.616.565	29.628.335	30.167.186

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Taxes	1.740.406	4.194.641	6.473.466	9.777.351	9.955.171
Net Income (Loss)	<b>3.356.475</b>	<b>8.516.391</b>	<b>13.143.098</b>	<b>19.850.985</b>	<b>20.212.014</b>
EBITDA	<b>11.910.151</b>	<b>19.339.074</b>	<b>25.849.311</b>	<b>36.045.998</b>	<b>35.359.240</b>
Margin	18,12%	19,28%	20,79%	22,71%	22,06%

### 8.5 PlywoodCo.projected cash flow statement: 2012-2013

Cash Flow	2012	2013	2013	2013	2013	2013
	<i>Nov-Dez</i>	<i>Trim-1</i>	<i>Trim-2</i>	<i>Trim-3</i>	<i>Trim-4</i>	<i>Annual</i>
<b>Operatingactivities</b>						
Net Income (Loss)	203.016	320.652	663.435	614.163	1.758.225	3.356.475
Depreciation	212.541	347.306	427.135	482.936	489.164	1.746.541
Working Capital	-	-	-	-	-	-
Receivables	(786.270)	(4.030.489)	(1.907.130)	-	(4.541.958)	(10.479.577)
Inventory	-	(647.815)	(121.810)	-	(1.724.242)	(2.493.866)
Othercredits	(13.553)	(405.026)	(54.166)	-	(1.275.242)	(1.734.434)
Suppliers	3.527	47.929	13.059	-	307.456	368.444
Taxes	-	20.867	11.468	2.393	83.985	118.713
Otherobligations	9.010	239.924	27.805	(1.095)	475.286	741.920
<b>Cash Flow from Op. Activities</b>	<b>(371.729)</b>	<b>(4.106.651)</b>	<b>(940.204)</b>	<b>1.098.397</b>	<b>(4.427.326)</b>	<b>(8.375.784)</b>
<b>InvestmentActivities</b>						
Investments						
Acquisitionofassets	(106.270)	(3.173.653)	(3.213.568)	(241.468)	(244.582)	(6.873.271)
<b>Cash Flow from Inv. Activities</b>	<b>(106.270)</b>	<b>(3.173.653)</b>	<b>(3.213.568)</b>	<b>(241.468)</b>	<b>(244.582)</b>	<b>(6.873.271)</b>
<b>Financingactivities</b>						
Raiseon capital	-	-	-	-	-	-
Dividendsdistribution	-	-	-	-	-	-
Loans	-	(245.448)	(42.487)	(3.002.260)	(3.897.502)	(7.187.697)
Revolver	477.999	7.525.752	4.196.258	2.145.331	8.569.410	22.436.751
<b>Cash Flow from Fin. Activities</b>	<b>477.999</b>	<b>7.280.304</b>	<b>4.153.772</b>	<b>(856.929)</b>	<b>4.671.908</b>	<b>15.249.055</b>
Cash beginning	-	-	(0) 0	0	0	0
Cash end	-	-	-	(0) 0	0	0
<b>Cash flow from the period</b>	<b>-</b>	<b>-</b>	<b>(0) 0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## 8.6 PlywoodCo.projected cash flow statement: 2013-2017

Cash Flow					
	2013	2014	2015	2016	2017
<b>Operatingactivities</b>	<i>Annual</i>	<i>Annual</i>	<i>Annual</i>	<i>Annual</i>	<i>Annual</i>
Net Income (Loss)	3.356.475	8.516.391	13.143.098	19.850.985	20.212.014
Depreciation	1.746.541	2.070.343	2.506.455	3.036.965	3.309.371
Working Capital	-	-	-	-	-
Receivables	(10.479.577)	(2.552.541)	(4.345.780)	(6.208.137)	(20.380)
Inventory	(2.493.866)	(1.199.961)	(2.221.901)	(2.706.830)	(90.245)
Othercredits	(1.734.434)	(716.675)	(1.220.161)	(1.743.054)	(5.722)
Suppliers	368.444	172.787	294.176	420.243	1.380
Taxes	118.713	69.991	116.336	147.549	-
Otherobligations	741.920	272.028	459.971	745.676	(9.202)
<b>Cash Flow from Op. Activities</b>	<b>(8.375.784)</b>	<b>6.632.365</b>	<b>8.732.194</b>	<b>13.543.396</b>	<b>23.397.215</b>
<b>InvestmentActivities</b>					
Investments					
Acquisitionofassets	(6.873.271)	(2.070.343)	(7.006.455)	(3.036.965)	(3.309.371)
<b>Cash Flow from Inv. Activities</b>	<b>(6.873.271)</b>	<b>(2.070.343)</b>	<b>(7.006.455)</b>	<b>(3.036.965)</b>	<b>(3.309.371)</b>
<b>Financingactivities</b>					
Raiseon capital	-	-	-	-	-
Dividendsdistribution	-	-	-	-	-
Loans	(7.187.697)	(13.857.892)	(5.136.018)	(3.976.420)	(2.269.318)
Revolver	22.436.751	9.295.870	3.410.279	(6.530.011)	(17.818.526)
<b>Cash Flow from Fin. Activities</b>	<b>15.249.055</b>	<b>(4.562.021)</b>	<b>(1.725.739)</b>	<b>(10.506.432)</b>	<b>(20.087.844)</b>
Cash begining	0	(0) 0		(0) 0	
Cash end	0	0	(0) 0		(0)
<b>Cash flow from the period</b>	<b>0</b>	<b>(0) 0</b>		<b>(0)</b>	-