BANKRUPTCY AND EXIT MECHANISMS IN COLOMBIA

By

Igor Esteban Zuccardi Huertas

THESIS

Submitted to
KDI School of Public Policy and Management
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ABSTRACT

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Recent literature has paid attention to the economic effects of bankruptcy laws. Even though the literature states that these laws should be adjusted to each country's individual economic characteristics, in general they should be based on some economic criteria to decide whether a firm has to be either restructured or liquidated. They should give transparent and consistent rules for negotiation that balance creditors' and debtors' rights, and they should try to make the processes easier and less time-consuming in order to maintain the economic value of ailing firms.

This thesis evaluates Law 550, the Colombian bankruptcy law passed in 1999. With information from 50 firms with restructuring agreements and 10 companies in liquidation, I analyze their bargaining processes to show the law's principal strengths and weaknesses. I found that Law 550 has improved the Colombian bankruptcy system by making the restructuring process more flexible and less time-consuming. In addition, it improved firms' management quality through the Code of Corporate Conduct for Businesses (*Codigo de conducta empresarial*).

However, its shortcomings are that it does not contemplate any explicit ex-post

efficiency condition, and it has been a restructuring-oriented law: it does not give any explicit priority to order of payments; it reduces the minimum level needed to approve a restructuring plan; and gives veto power to minority groups interested in reaching a restructuring agreement. In addition, it is a debtor-oriented law, eliminating sanctions on owners and managers responsible for the firm's bankruptcy.

Law 550 is a temporary solution that must be changed at the end of 2004. Consequently, a new bankruptcy law for Colombia should focus on improving the ex-ante and ex-post efficiency of bankruptcy procedures.

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2004

Dedicated toIn memory of my father

Miguel Arcangel Zuccardi,

and

Maria Victoria, Lucia and Viviana Huertas.

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INTRODUCTION

In capitalist economies, competition among firms drives the economy to a long-run equilibrium, in which only the most efficient firms share the market. In this process, the inefficient firms must exit the market because they are unable to pay the return on resources used and go bankrupt. Consequently, the best option for society is to liquidate these companies and use their capital, land and labor for more efficient activities.

However, in some circumstances, some efficient firms are unable to pay the return on their resources. Bad debt-schedule planning, a recessive business cycle or an unexpected shock to the industry, among other causes, can result in firms with good financial prospects being unable to pay their debts in a certain moment. In these cases, the cost to society to dismantle these firms is very high because the return on their resources that they can achieve in the future is larger than their opportunity cost. In other words, the price of these firms as a whole is bigger than the sum of the price of their parts.

When a society faces these two different circumstances, it needs a legal system and an institutional structure that show how to proceed in such situations. For those cases, a bankruptcy law becomes a legal tool that helps society find solutions to situations of insolvency, resolve conflicts among debtors and creditors, enforce private contracts and look for the best allocation of economic resources.

Ideally, a bankruptcy mechanism should encourage the reorganization of firms whose liquidation value (value of their parts) is smaller than their value as a going concern (value of the firms as a whole), and the liquidation of companies for which

the opposite is true. In addition, in case of reorganization, this mechanism should encourage rapid resolution of financial distress, because the longer a firm stays in bankruptcy, the greater the loss of value and the more difficult it becomes to rehabilitate the company and pay off its creditors. On the other hand, in case of liquidation, a speedy and organized dismantlement of the firm is socially desirable because the firm's resources have opportunity costs that increase over time.

Nevertheless, according to Aghion et al (1992), the actual bankruptcy mechanisms have shortcomings that leave them far from ideal. For example, these procedures involve significant legal and administrative costs and can take up a great deal of time. In addition, since shareholders and creditors own a small fraction of the equity and debts, they are unable to devote the socially efficient level of resources toward figuring out which plan is best for the company. Moreover, particularly with the bankruptcy procedure in the USA (Chapter 11) but similar to other countries, these mechanisms place considerable discretion in the hands of the judge, who may misuse it. Finally, because of the private interest of each part during the bargaining process, the firm may emerge with an inappropriate financial structure.[1]

Like other countries, Colombia had two bankruptcy procedures until 1999. The first, the *concordato*, was basically a financial reorganization procedure designed to reach a conciliatory agreement between a company experiencing financial difficulties and its creditors, with the purpose of rehabilitating the debtor's business. The second, the *quiebra*, was simply a liquidation procedure in which the bankrupted firm's assets were sold and the proceeds distributed to creditors. As in other countries, these procedures were considered costly and demanded long periods of time. For instance, an agreement among parties was difficult to reach and these procedures could take two years before reaching a resolution. In addition, these mechanisms were

insufficient to handle the massive number of bankruptcies of firms and local governments that occurred in the recession of 1999. Consequently, the Colombian Government reformed these procedures through Law 550, or *ley de intervencion economica*, with the purpose of making the reorganization and liquidation processes easier and keeping the employment in the restructured firms.

The purpose of this paper is to analyze the Colombian bankruptcy mechanism established by Law 550. I want to show the principal strengths and weaknesses of this law based on the theory of bankruptcy, as well as how it performed between 2000 and 2003. Law 550 was conceived as a temporary mechanism to solve bankruptcies until the end of 2004, when the Colombian Parliament has to decide whether to make it permanent legislation or revert to the previous system. Consequently, an evaluation of its strengths and weaknesses will help determine which elements can be improved.

This paper is organized as follows: in section two, I explain the basic issues about bankruptcy mechanisms and their main goals, the participant groups in the negotiating processes, their incentives and expected behaviors. In section three, I explain the historical context in which Law 550 was introduced, describing some topics of the previous bankruptcy mechanisms. In addition, I make a brief description of that law, its purposes and some descriptive results. Later on, an empirical evaluation of some restructuring processes under Law 550 is shown. The last section is the conclusion.

II. BASIC ISSUES ABOUT INSOLVENCY MECHANISMS, PARTICIPANT GROUPS, INCENTIVES AND EXPECTED BEHAVIORS

A. BASIC ISSUES ABOUT INSOLVENCY MECHANISMS

According to Nam and Oh (2000), "an insolvency mechanism is usually superior to individual debt collection mechanisms because it can lead to an increase in the economic value of a bankruptcy firm that can be distributed to creditors and debtors by limiting creditor's ability to collect their claims individually."[2]

When a bankruptcy mechanism does not exist, a creditor has two main legal remedies to collect his loans: first, in case of a secured loan, the creditor can seize the assets that serve as collateral for the loan; second, in the case of an unsecured loan, the creditor can call on the court to sell some of the debtor's assets. Nevertheless, in many cases the debtor's assets are not enough to cover his liabilities; consequently, creditors will try to be first to recover their debts. The competition among creditors first may cause them to expend resources in an attempt to be the first to seize their collateral or to obtain a judgment against the debtor. Secondly, it may lead to the dismantlement of the firm's assets with a loss of value for all creditors and stakeholders.

In addition, when the value of a debtor firm as a going concern exceeds its liquidation value, the race among creditors may result in the liquidation of firms that could be profitable in the future and the allocation of the firm's economic resources to other, less lucrative sectors. Therefore, it is in the collective interest of creditors and society to see that, if the debtor firm's value as a going concern is larger than its liquidation value, the firm continues working with a new debt structure. If the firm

does not continue, it is in the collective interest of creditors and society to see that the the debtor's assets are distributed in an orderly manner, via a bankruptcy mechanism.

According to Hart (2000),[3] a good bankruptcy procedure must achieve three goals:

First, it should deliver an ex-post efficient outcome; it should maximize the total value available for division among the debtor, creditors and possibly other interested parties. A firm should be reorganized, sold for cash as a going concern, or shut down and liquidated piecemeal according to which of these options produces the greatest total value and most improves the welfare of the parties and society (ex-post efficiency condition).

Second, a good bankruptcy procedure should preserve the bonding role of debt by penalizing managers and shareholders adequately when bankruptcy occurs. When a firm borrows money, it also acquires a commitment to pay off its debts in a certain period. If this promise is not fulfilled, this behavior should be punished by wiping out the shareholders' claims, which makes the managers less likely to maintain their jobs, etc. These kinds of punishments are important because, without any adverse consequences, there are few incentives for the firm to pay its debts.

Finally, a good bankruptcy procedure should preserve the absolute priority of claims, except that some portion of value should possibly be reserved for shareholders. A simple way to penalize shareholders in bankruptcy is to respect the absolute priority of claims (i.e., senior creditors are paid off first, then junior creditors, and finally shareholders). In addition, this absolute priority has other advantages. First, it helps to ensure that creditors receive a reasonable return even in the event of a declaration of bankruptcy, which encourages them to lend. Second, it means that bankruptcy and

solvency are not treated as fundamentally different states: contractual obligations entered into during solvency are respected to the fullest extent possible during bankruptcy. However, it is necessary to reserve some portion of value in bankruptcy for shareholders because, if they receive nothing in bankruptcy, then management, acting on behalf of shareholders, will have an incentive to "go for broke," meaning they will do anything to avoid bankruptcy, including undertaking highly risky investment projects and delaying a bankruptcy filing.

On the other hand, Nam and Oh (2000) consider that any bankruptcy mechanism must address the following three fundamental issues: 1) what to do with the firm itself (i.e., whether to liquidate or restructure); 2) how to restructure (liquidate) the firm if it is to be restructured (liquidated); and, 3) how to divide the economic value of the firm among various stakeholders during liquidation or restructuring.

For the first issue, these authors consider that any bankruptcy procedure should, in principle, follow the ex-post efficiency condition. In other words, they say that it is desirable to liquidate a firm when the liquidation value is greater than the going-concern value, and vice versa. For the second issue, they suggest that the bankruptcy procedure should look to maximize the value of the firm regardless of the choice between restructuring and liquidation.

Finally, they recommend that, during liquidation procedures, assets of the firm should be auctioned off and the proceeds distributed to the stakeholders according to a previously-fixed rule, such as the absolute priority rule. In case of restructuring, however, the division of economic value can be achieved through debt-equity swaps, in which creditors receive shares of the firm in return for forgoing parts of the loans. Due to the fact that these debt-equity swaps generally increase the gross economic

value of the firm, it is necessary for creditors who participate in swaps to receive the part of the increase in the firm's value that corresponds to the firm's shares owned as a result of this procedure. Therefore, the old shareholders end up owning a smaller share of the firm, which now has a larger value.

Although Nam and Oh (2000) state that these are the most desirable principles to take into account when designing a bankruptcy procedure, they also highlight other elements to consider. For example, they consider that the way in which the value of an insolvent firm is divided and the fate of the firm determine some ex-ante behaviors of the parties (ex-ante efficiency).

In the first case, what happens to the debts during bankruptcy determines the degree of risk-sharing by lenders and equity investors at a stage at which decisions on lending and equity participation are made. Consequently, the structure of the insolvency proceeding can affect the supply of credit in financial markets and the equilibrium prices for credits.

In the second case, the bankruptcy mechanism affects the behavior of creditors and debtors, particularly in terms of limited liability. The authors add that the results of the bankruptcy proceeding can determine the resources that creditors use to screen activities during the lending stage and later the monitoring stage. In addition, the shareholders and managers have incentives to choose their actions based on outcomes expected to be realized during bankruptcy (such as incentives to gamble on an "all-or-nothing" strategy when they expect very bad payoffs during bankruptcy), or looking to be indispensable in the state of bankruptcy.

In sum, an ideal bankruptcy mechanism should guarantee that its result fulfills the ex-post efficiency condition: 1) maximize the economic value of the firm no matter its

fate (liquidation or restructuring), and 2) restructure a firm if, and only if, its going-concern value is greater than the liquidation value, and vice versa. In addition, this procedure should internalize changes in the parties' behavior produced by possible results, and it should adequately penalize managers and shareholders in a state of bankruptcy to preserve the bonding role of debt. Finally, for the process of division of economic value, it is desirable for the mechanism to include any fixed rule that respects the acquired rights of the creditors (i.e. the absolute-priority-of-claims rule) while reserving some portion of value for shareholders, and to include the possibility of debt-equity swaps.

B. DIFFERENT KINDS OF BANKRUPTCY MECHANISMS

In actuality, the ex-ante and ex-post efficiency objectives that any bankruptcy mechanism tries to achieve involve a tradeoff: the expected outcomes of a bankruptcy procedure could affect the ex-ante behavior of the interested parties, and these behaviors can influence the mechanism's final outcome. In an effort to balance these two objectives, governments have developed various types of bankruptcy procedures. Aghion, Philippe et al. (1992) and Nam and Oh (2000) have arranged bankruptcy procedures into four main groups based on the mechanism by which the firm's reorganization is determined: 1) Decision by a Single Authority, 2) Formal Bargaining Games, 3) Informal Bargaining Games and 4) Automatic financial restructuring.

1) Decision by a Single Authority: In this mechanism, a central entity (Government) has the best information about the economic environment surrounding an insolvent firm; consequently, it can determine the optimal strategy for restructuring or liquidating the firm and the optimal division of

value among stakeholders.

Even though this mechanism would be ideal, it is based on an unrealistic assumption. There is no central entity with the best information; therefore, it does not know the best way to restructure or liquidate an ailing firm. In addition, its incentives and objectives could be different from those of the stakeholders.

2) Formal Bargaining Games: In this mechanism, the fate of an ailing firm is determined by a bargaining process among stakeholders with some formal rules. These rules generally include protecting the firm's assets from attempts to collect debt by creditors, classifying creditors according to some prioritized order, drawing up reorganization plans, and establishing voting mechanisms.

   The advantage of this mechanism is that stakeholders, who have the best information about the firm, can participate in the restructuring process. Each party tries to maximize their respective objective in a non-cooperative game, while accounting for the fact that the others are doing the same. However, heterogeneity of information and varying attitudes toward risk among stakeholders could result in negotiations with non-optimal outcomes (i.e. non-viable firms continue working, and vice versa). In addition, it is difficult to design a bargaining process that always distributes the firm's value in an optimal way. Finally, this mechanism is time-consuming and costly, which reduces the firm's value.

3) Informal Bargaining Games: In this mechanism, stakeholders can reach a deal outside the rules of the formal bargaining games. Even though this mechanism can facilitate the process of a firm's reorganization, it is restricted to the possible results of formal proceedings because no stakeholder is willing to

receive less payment than they would in the formal games. In addition, there is Pareto superiority in the formal bargaining games .

4) Automatic Financial Restructuring: In this mechanism, all the firm's debts and equities are swapped according to an option scheme based on the absolute priority rule. Each stakeholder can exercise their options to buy the firm's equities or sell their shares (options) to other stakeholders or in the market. This procedure has two advantages: i) it can improve the financial profile of the ailing firms because their debts are converted into equities, and ii) creditors and shareholders become part of the same side because both of them have the same incentives in maintaining the viability of the ailing firms. This mechanism has been proposed by academic researchers, but it has not been applied in any country yet.[4]

Law 550 can be considered an example of a formal bargaining procedure. Under this law, different stakeholders participate in bargaining games with some rules that determine their behaviors. Each stakeholder has their own objectives and incentives to maximize in a non-cooperative game. Thus, the next subsection explains who the participants in the bargaining process are, their objectives, and their incentives.

C. PARTICIPANT PARTIES, INCENTIVES AND BEHAVIORS

In a corporate restructuring, there are five different stakeholders' groups that participate in the negotiation under a formal bargaining game. Each group has its own objectives and incentives, and each one tries to maximize them in a non-cooperative game with limited information about the firm's conditions. These groups are: a)

shareholders and managers; b) current and retired workers; c) government; d) secured creditors; and e) unsecured creditors and other creditors.

a) Shareholders and managers: They are the owners of the firm's equity. In micro, small and medium-size firms, it is common for shareholders to be in charge of the company's management, but in large companies, management and ownership usually are separated.

   In general, shareholders and managers are interested in maximizing the firm's value and their benefit. However, this is not a homogeneous group. There are three subgroups—dominant shareholders, minority shareholders and managers— that, in certain circumstances, have contradictory incentives:

   - Dominant shareholders have two objectives: i) maximizing the firm's value and ii) increasing their percentage in the firm's ownership. Therefore, in the event of a corporate restructuring, they would be interested in keeping the firm working, and when ownership reform occurs (i.e. share issue, new capitalization, etc), they would tend to protect their rights, thereby affecting the minority shareholders' rights.
   - Minority shareholders have two objectives: i) maximizing the firm's value and ii) protecting their rights in the firm's ownership. Therefore, in the event of a corporate restructuring, they would also be interested in keeping the firm working. In addition, they would push for a corporate governance agreement that protects their ownership rights.
   - Managers have as objectives maintaining their jobs and the firm's management. In general, this objective is achieved if managers maximize the firm's value (measured by the shares' price in the market, etc.), but in financial distress, managers could have other incentives. According to

White (2001),[5] in times of crisis, managers have an incentive to use the firm's assets inefficiently. Since the value of the financially-distressed firm's equity amounts to zero in liquidation, managers no longer have an incentive to behave in the interest of shareholders. Then, they could: i) strip the firm of its most valuable assets by transferring these assets at a low price to new firms that the managers control, and/or ii) use the firm's capital to make risky investments with a low probability of a high payoff. In the last case, managers are encouraged to play an "all-or-nothing" gamble that has a low probability of saving the firm: if they win the gamble, they would receive a high return that would help them save the firm; otherwise, the gamble would leave managers and equity no worse off than they would have been anyway.

As shown above, amid financial distress, shareholders and managers can have different purposes and incentives. This is the main feature of a "principal-agent relationship," which generates problems of moral hazard and could produce bargaining outcomes that are economically inefficient.

b) Current and retired workers: They are stakeholders whose main income is salaries and wages received from the firm. When the firm goes bankrupt, their main objective is to maintain employment and wages with the same privileges as in normal circumstances. However, since their main (and in most cases, only) source of income is their jobs, they are interested in keeping their employment in order to guarantee their present and future incomes. Consequently, during a restructuring process, they are interested in keeping the firm working.

c) Government: When a firm goes bankrupt, it usually has debts with the government (i.e. unpaid taxes, social security contributions, etc). Consequently, the main objective of government is to recover these debts, whether the firm is viable or not.

d) Secured creditors: They hold a firm's assets as collateral for their credits (i.e. financial creditors, banks, etc). When a firm goes bankrupt, their objective is to recover their credits and unpaid interest through the liquidation of the firm's collateral. Therefore, in a bargaining process, they would only be interested in keeping the firm working if the proceeds they can collect in that scenario are larger than the value of the collateral.

   They are usually not interested in the firm's fate because they habitually cut any financial relationship with the ailing firm after a default episode. However, if their rights are not correctly protected during the bargaining process, no potential creditors will be willing to lend to the firm in the future. The treatment of creditors' claims, when the firm defaults, affects creditors' overall return, and thus their incentive to lend.

Unsecured creditors: They do not hold a firm's assets as collateral for its credits. Their objective is to recover their loans and the unpaid interest. Nevertheless, there is a group of unsecured creditors related to the firm's business cycle (i.e., input suppliers), and another group that is not related (i.e., financial institutions without collateral). The former group is not only interested in recovering its resources, but also in preserving a relationship with the firm if the association benefits both parties. The latter is only interested in recovering its resources. Therefore, only the former group would be interested in keeping the firm working.

III. HISTORICAL CONTEXT OF THE BANKRUPTCY PROCEDURE IN

COLOMBIA AND DESCRIPTION OF THE LAW

A. HISTORICAL CONTEXT OF THE BANKRUPTCY PROCEDURE IN COLOMBIA

In 1991, Colombia began its process of economic liberalization. For 40 years, Colombian economic growth was rooted in an Import Substitution Industrialization model and an Export Promotion Policy. Its presence in the world capitalist system was based principally on its exports of coffee, oil and coal. But in 1991, some economic studies reported that without an International Openness Policy, the country's economic growth rate of 5% was no longer viable. Total factor productivity was declining, and the rupture of the International Coffee Agreement affected the supply of foreign currency into the economy.

In response, the government carried out a series of economic policy changes to deregulate the Colombian economy, called *Apertura* (Openness). During the first half of the 1990s, the trade balance and the capital account were liberalized. Also, the banking system and the dollar quotation were deregulated, and the price of the dollar was determined by an exchange rate band (*banda cambiaria*) rather than the previous crawling peg system. In addition, the Central Bank lost its authority to promote certain economic sectors, and its role was limited to coordinating the monetary, exchange and credit policies independent of the government. Finally, the pension and health care systems were reformed and semi-privatized; seaports and energy distribution were privatized; and telecommunication and TV broadcasting were permitted to accept private capital.

Besides these transformations, Colombian society changed the structure of the

State by drafting a new Constitution in 1991. Among other changes, the judicial system was expanded to include a Prosecutor's Office (*Fiscalia*), a Constitutional Court, an Administrative Court (*Consejo Superior de la Judicatura*) and the *Tutela*, which is a judicial tool to protect the fundamental rights of citizens. The new Constitution also designed the Colombian decentralization system and ordered the Government to transfer 55% of its current revenues to local administrations. All of these changes increased the size of the State and the public sector's need for more resources.

In the early 1990's, the Cusiana and Cupiagua oil fields were discovered. They allowed oil exports to increase from US$1.5 billion in 1994 to US$2.9 billion in 1996. In addition, there was a boom in drug trafficking, which became 8% of Colombian GDP.[6]

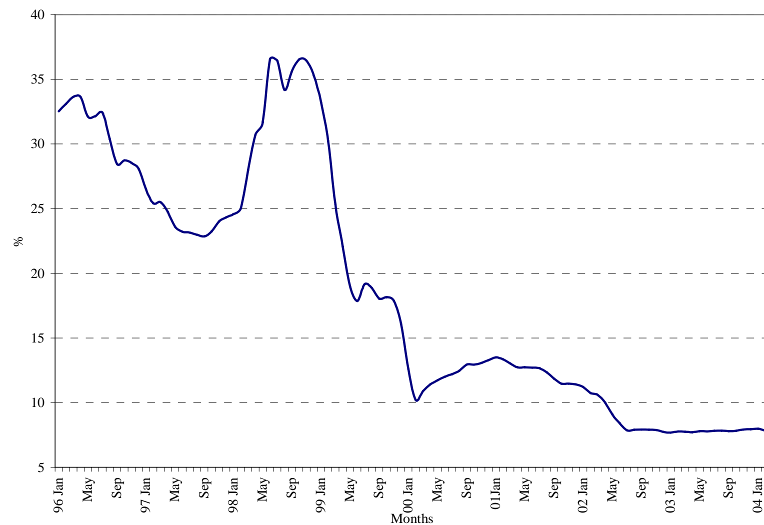
According to Echeverry (2001), the *Apertura*, the discovery of oil fields and the drug trafficking boom allowed a massive influx of foreign capital that increased the debt possibilities of all economic agents. The *Apertura* reduced some restrictions to imports and to foreign currency movements, whereas the new oil explorations and drug traffic augmented the liquidity of the Colombian financial system. Also, some international banks reduced their restrictions on lending to Colombian firms and the government. Consequently, many economic agents took out amounts of debt far above any realistic possibilities of repayment in order to finance consumption and investment. In addition, the financial system did not take cautions to evaluate risk and protect their credits. The government also increased consumption from 13% GDP in 1991 to 19% GDP in 1998, particularly to finance the institutions created by the new Constitution and the new decentralization system, and to support the public pension system. The economic growth rate reached 4% on average between 1991 and 1997,

almost entirely due to the increasing possibilities to acquire debt.[7]

Between 1997 and 1999, the Southeast Asia countries, Brazil and Russia fell into serious financial difficulties and economic crisis. As a result, access to international credit for the emerging markets was reduced and the amount of foreign capital coming into Colombia diminished. The government and the private firms had to adjust their own budget constraints, shrinking their levels of consumption and investment. In addition, the Colombian business cycle was winding down in 1997, generating a deep decline in aggregate demand. The Central Bank interpreted these signals as demand weakness and adopted an expansive monetary policy, but a significant amount of foreign capital went abroad, thereby increasing the depreciatory pressures on the currency.

To avoid a massive loss of international reserves, a weakening currency and inflation, the Central Bank increased the interest rate for its transactions with commercial banks. Moreover, the Government's needs to finance its expenses also generated pressures over the market interest rates and the exchange rate. As shown in Figure 1, the interest rate for 90-day deposits skyrocketed from 22.8% in 1997 to 36.5% in 1998, and only returned to its initial level in April 1999.

Figure 1: Interest Rate on 90-Day Deposits, 1996-2004



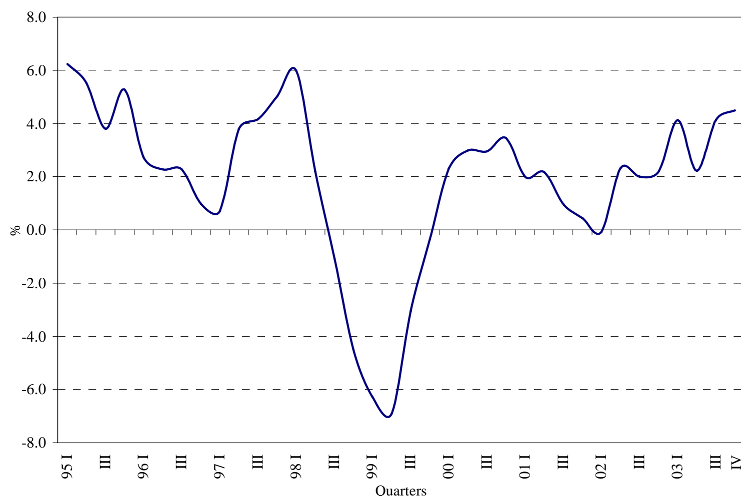
Source: Banco de la Republica (Central Bank of Colombia).

The combination of high interest rates, weak demand and delayed payment from clients affected the economic situation of many firms. Some of them saw diminishing revenues on the one hand and, on the other, an increase in the percentage of their budgets dedicated to interest payments. Moreover, as Echeverry and Salazar (1999) reported, the increasing market uncertainty and the weak profile of clients produced a reduction in the credit supply, called a credit crunch.[8] Consequently, many firms could not take out new loans in 1998 and 1999.

According to the Colombian Government (*Superintendencias de Sociedades y Superintendencia de Valores*), in 1998 and 1999, 626 firms entered into restructuring or liquidation processes (323 firms to *concordato* and 303 companies to *quiebra*). These companies had liabilities of COL$13.2 trillion pesos (US$7.5 billion dollars); 52% of which was owed to commercial banks and financial institutions. In 1999, these firms spent COL$850 billion pesos (US$483 million dollars) paying interest costs. Their losses were approximately COL$930 billion pesos (US$528 million dollars). These results worried the government because these firms employed 350,000 people and their sales represented 20% of Colombian GDP. Of course, these results

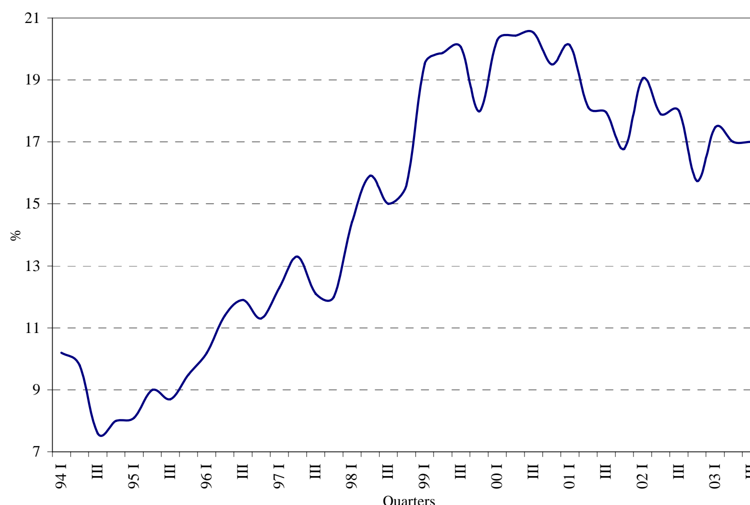
were reflected in GDP growth and the unemployment rate, as shown in Figures 2 and 3.

Figure 2: Quarterly GDP Growth Rate, 1995-2003



Growth rate measured as quarterly GDP of current quarter compared with the same quarter in the previous year. Source: DANE (Colombian Statistic Agency).

Figure 3: Unemployment Rate, 1994-2003



Source: DANE

In 1999, Colombia faced its worst economic crisis in 70 years. As shown in Figure 2, quarterly GDP plummeted –6.9% in the third quarter of 1999, and the annual GDP growth rate was –4.3% that year. By contrast, the unemployment rate skyrocketed from 12% in 1997 to 20% in 1999. The external sector also affected the economy: in that period, coffee reached historically-low prices, and Colombia's second and third-

largest trade partners, Venezuela and Ecuador, were also suffering serious economic problems. To offset these negative results, the Central Bank established a floating exchange rate, and the government commenced a fiscal adjustment program under an agreement with the IMF. Under the agreement, ambitious State reform was introduced, the decentralization process was reformed and Law 550 was enacted. This program helped reduce pressures on the interest rate and increased confidence in the viability of the Colombian economy.

In addition, many firms understood the weakness of domestic demand and started up new businesses with the USA and Europe. Using the Andean Trade Preferences Act (ATPA) with the USA and the Generalized Preference Act (GPA) with the European Union, some industries, like clothing, flowers, and vegetable oil, increased their exports with the help of technical support provided by the government. Although exports have been rising between 2000 and 2004, at the moment they are still not an "engine" to lead the economic growth of Colombia.

Until 1999, the Colombian bankruptcy procedure was composed of two parts: the *concordato* and the *quiebra*. The first was a financial reorganization procedure designed to reach a conciliatory agreement between a firm and its creditors, with the purpose of rehabilitating and conserving the company as an economic unit and protecting its credit. This mechanism was in the hands of a specialized government agency named Superintendence of Companies (*Superintendencia de Sociedades*) that was in charge of resolving disputes and confirming any agreement between parties. However, the *concordato* was criticized because of its tendency toward liquidation solutions, its excessive length of time, the high administrative costs and the formality of the bargaining process. The second, the *quiebra*, was a liquidation procedure, in which the assets of the company were sold and their proceeds distributed to creditors.

It was also criticized because it was delayed and penalized the liquidated firm's owners and managers. Moreover, these two procedures were criticized for giving too much weight to creditors and for being too slow to face the massive amount of bankruptcies in 1999. Law 550 changed the purpose of the Colombian bankruptcy mechanism, among other things. These elements are explained in the next section.

B. CHARACTERISTICS OF THE COLOMBIAN BANKRUPTCY PROCEDURE

According to the Colombian Constitution, firms and companies are the source of economic development. Although the Constitution guarantees them free enterprise and private property, it also imposes the social responsibility of creating productive employment. Under this constitutional mandate, the government has permission to intervene in the economy through market regulations that promote employment.

Following this line of argument, Law 550's main purpose is to facilitate the bargaining processes among shareholders, creditors, etc. that allow for the preservation of economically-viable companies that generate working positions. According to the government's exposition to Parliament, the intention of this law is to provide debtors and creditors with adequate incentives and mechanisms to reach agreements among parties, and design and carry out programs that allow firms and companies to normalize their activities, honor their financial commitments and maintain the employment already generated.

Law 550 is essentially an act regulating the bargaining process among stakeholders, to be supervised by the government through specialized agencies (*superintendencias*) in each economic sector, but under the overall control of the

Superintendence of Companies. This act does not establish a specific result or distribution of the firm's economic value as determined by a third party (the government), but it encourages debtors and creditors to reach agreements that benefit them and society under a definite regulation. These agreements are contractual deals outside the judicial sphere, but carry all the penalties that civil justice considers for these kinds of contracts.

The law states that the Superintendence of Companies must collect all available information to evaluate the firm's economic viability and offer it to the parties to make a decision about the firm's fate. Specifically, a person called *promotor*, appointed by the Superintendence, is the mediator among stakeholders and is in charge of collecting information about the firm's operation, performing business forecasting (revenues, costs, profits, etc), and suggesting what should be done with the bankrupted company; however, only the interested parties can make the final decision. The law does not explicitly stipulate the ex-post efficiency condition as the main criterion for decision-making, and due to the fact that it is also interested in maintaining already-generated employment, there might be cases in which firms that should have been liquidated are still working.

Law 550 is oriented to give more importance to restructuring processes than liquidation processes. This orientation to restructuring is observed in the priority preservation of claims. The act suggests an order of priority in which employees, retired workers, tax debts and social contributions should be paid first in the distribution process. Afterward, secured creditors, unsecured creditors and shareholders have equal priority. The law considers that this treatment of creditors allows for more flexible bargaining and encourages creditors to value the economic viability of the bankrupted firm more than their own interests. In other words, there is

not an absolute-priority-of-claims rule in which creditors' interests are first honored.

To approve any restructuring plan, the *promotor* has to determine the voting right for each stakeholder based on their proportion of the value of liability and value of equity (i.e., in the case of creditors, the number of votes is determined by the value of the principal of their loans without interest payments; in the case of shareholders, their votes are equivalent to the initial value of their shares; in the case of workers, their votes will depend on the amount of unpaid wages, and so on). To facilitate an agreement, this act reduced the minimum percentage necessary to approve a restructuring plan from 75% to 50% plus one vote, but it also established the condition that at least three kinds of stakeholders must accept the plan. If no proposed plan is approved, the firm enters into a liquidation process.

Law 550 is concerned that delayed processes can reduce the economic value of a firm. Therefore, in theory, it establishes certain negotiating periods that allow a restructuring agreement to be reached in around 8 months. First, the process starts with a request of restructuring negotiation by the debtor, one or various creditors (whose loans must be at least 5% of the firm's liabilities) or the government. The *superintendencias* have 3 days to decide whether to accept the request or not. Second, if request is accepted, the respective *superintendencia* in charge of the process has 5 days to appoint the *promotor* and to summon creditors and stakeholders interested in the process. The secured creditors have 10 days to declare whether they are interested in redeeming the collateral of their loans, but they can only redeem the collateral after two years if a restructuring deal is achieved. Third, there is a period of 4 months in which the *promotor* is in charge of collecting all relevant information about the firm's operations, computing business forecasts (revenues, costs, profits, etc), designing possible restructuring plans to present to the parties and determining the admissible

number of votes for each stakeholder. After that period, there is a meeting in which the *promotor* communicates the distribution of voting power and the total amount of the firm's debt. Finally, after that meeting, there is up to 4 months to achieve a restructuring agreement among parties and the fulfillment of the deal is mandatory for all stakeholders, regardless whether they participate or not in the bargaining process. In case a deal is not reached, the firm enters into a liquidation process, which is a stage where the firm's assets are auctioned off and the money is distributed among stakeholders. The law does not stipulate that a portion be reserved for shareholders, and the process of liquidation can last up to two years.

However, in practice, the processes can be time-consuming because the law states that any stakeholder can protest the results of each stage (i.e. protest the *promotor*'s election, the distribution of voting power, etc), and the law does not include periods to resolve these protests. Furthermore, the law gives the following stakeholders the power to veto the restructuring agreement: a) to current and retired workers if the agreement does not respect their acquired rights; b) to the firm's owners if the deal changes the property rights of the firm's assets; and c) to the government if the agreement affects the firm's ability to pay taxes, social security contributions, etc. These powers generate a delayed bargaining process, resulting in the dissipation of firm value and the ability of some groups to extract favorable outcomes from stakeholders who do not hold veto rights. Although Law 550 professes to establish equality among stakeholders in the voting process, in practice the veto powers give more power to stakeholders interested in saving the firm.

Law 550 also has a debtor-oriented act. This law eliminated penal and civil sanctions on owners and managers that led the firm into bankruptcy, except if illegal activities are proved.[9] In addition, the law allows the managers to maintain their posts

during the bargaining and/or liquidation process and gives the owners voting and veto power during the negotiation. However, the law recognizes the existence of "go for broke" and "all-or-nothing" incentives in the shareholders and managers. It establishes that a Code of Corporate Conduct (*Codigo de conducta empresarial*) must be approved among parties during the bargaining process. The code stipulates the accounting standards that managers promise to meet, the transparency and availability of all of the firm's information for all parties, and the commitment that managers will not perform any operation that increases the firm's risk or changes the ownership of the firm's assets. If the code is not followed, the managers are sanctioned and the firm is liquidated.

The Code of Corporate Conduct is a good policy to guarantee stakeholders' rights during the bargaining process and the quality of information that everyone can obtain. In addition, this rule does not encourage risky behaviors by managers and allows for administration of the firm by the most experienced people. Nevertheless, the debtor-orientation of the law affects the negotiation process by itself because owners and managers have significant bargaining power, can manipulate stakeholders in order to reach the majority needed to approve a restructuring plan,[10] and can affect the creditors' interests.

The debtor-orientation of the law may also affect the credit supply for the firms. In Colombia, for example, firms and companies are characterized by a low level of shareholders' capitalization and a high level of debt. When a firm goes bankrupt, creditors face more risk than shareholders. This affects the credit supply because creditors have to use more economic resources to screen activities during the lending stage and afterwards, the monitoring stage. Therefore, if Law 550 produces debtor-oriented results, creditors may not be interested in lending money to firms, thereby

reducing the ex-ante efficiency.[11]

Finally, Law 550 contemplates the possibility of debt-equity swaps. Creditors interested in swapping their loans for equities can receive shares, bonds or other securities that represent their rights on the firm's assets. During and after the bargaining process, these securities can be sold to other stakeholders or to external investors. Even though this mechanism has been used in some restructuring processes, a significant problem arises in that creditors, especially financial institutions, do not have experience in managing companies. In addition, the Colombian stock market, which has few investors interested in buying the securities of restructured firms, is not adequately developed.

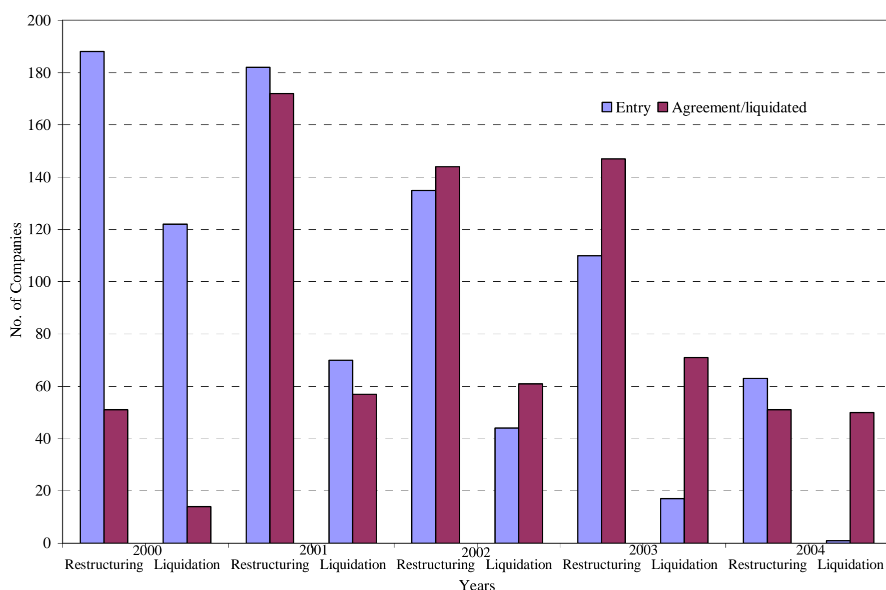
According to LaPorta and Lopez-de-Silanes (2001),[12] the Colombian Bankruptcy Law is part of the French civil code family. This family is considered the most debtor-friendly and offers the least amount of protection to creditors. The main features of this code are: i) an automatic stay on assets; ii) no assurance that secured creditors get paid first; iii) no restrictions on managers seeking court protection from creditors; and iv) no removal of managers during reorganization proceedings.

C. DESCRIPTIVE RESULTS OF LAW 550

Between 2000 and mid-2004, 932 companies entered into either restructuring or liquidation processes: 678 firms used the restructuring mechanism (72.7% of the total) and 254 companies went into liquidation (27.3% of the total). In this period, 565 firms, or 83.3% of all firms in the restructuring process, reached a restructuring agreement, and 113 remain in the negotiating process. Figure 4 shows the number of

companies in each type of mechanism for each given year.

Figure 4: Companies in Restructuring or Liquidation Processes, 2000-2004



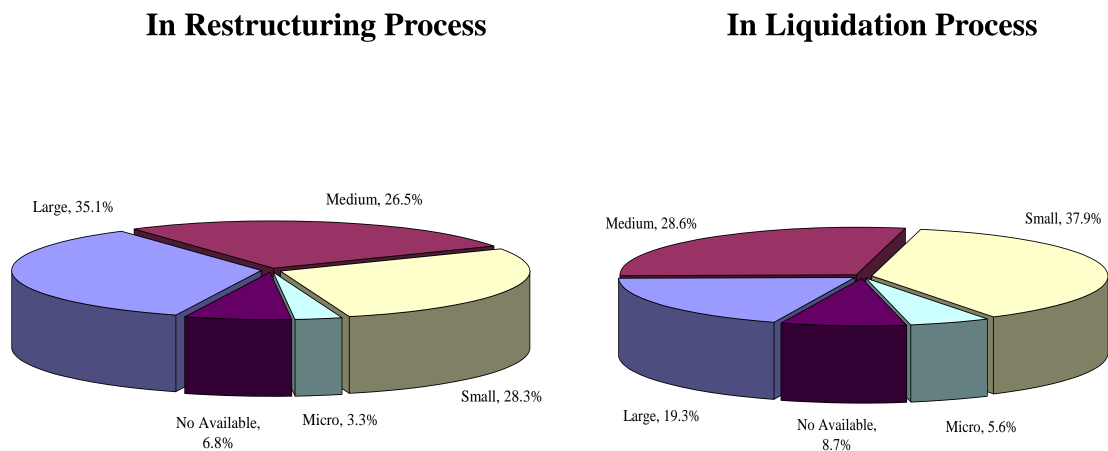
Source: Superintendence of Companies.

In addition, these firms represent an important part of the Colombian economy. The firms in the restructuring process have COL$9.2 trillion pesos in assets (US$3.9 billion dollars); COL$6.3 trillion pesos in liabilities (US$2.7 billion dollars); COL$2.8 trillion pesos in equity (US$1.3 billion dollars) and employ 57,377 people. The firms in the liquidation process have COL$1.1 trillion pesos in assets (US$480 million dollars), COL$937 billion pesos in liabilities (US$423 million dollars) and employ 13,156 people[13].

Among users of the restructuring mechanism, large firms represented the greatest number (35.1%), followed by small and medium companies (28.3% and 26.5%, respectively). In contrast, small firms were more often found in the liquidation process (37.9%), followed by medium (28.6%) and large firms (19.3%). As shown in Figure 5, only 3.3% of restructuring cases are micro firms, whereas they represent 5.6% of companies in the liquidation process. It is clear that the larger a firm, the

greater the chance it will be restructured. This phenomenon could be explained because large companies have more options for obtaining credit (domestic financial institutions, the stock market, international financial markets, etc) while small firms can only borrow resources from domestic banks and financial institutions. Consequently, when these firms enter the restructuring process, large firms have more opportunities to achieve favorable restructuring plans than small ones. In addition, large firms generally have more shareholders than small companies and therefore more parties interested in reaching a restructuring deal.[14]

Figure 5: Firms in Restructuring and Liquidation Process by Size, 2000-2004

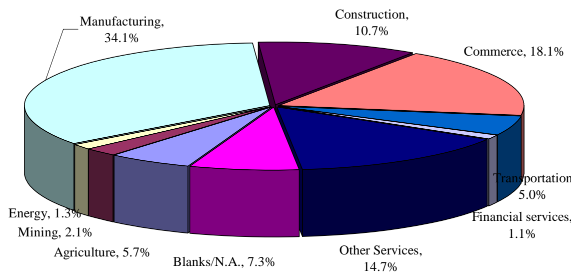


Source: Superintendence of Companies.

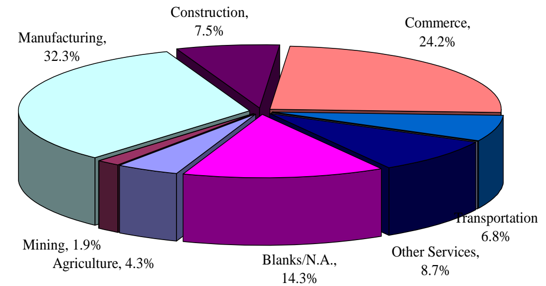
If one observes the economic sectors to which the firms belong, we see that manufacturing and commerce are the sectors that most often filed for restructuring and liquidation, with 34.1% and 18.1%, respectively, for the former, and 32.3% and 24.2%, respectively, for the latter. After them, other services and construction are the sectors that most often apply for these procedures. It is apparent, then, that the firms most affected by the Colombian recession and most likely to need the bankruptcy mechanism come from the labor-intensive sectors. This result might suggest that the purpose of helping firms that generate employment was the main objective in applying these mechanisms. However, this hypothesis will be tested in future research.

Figure 6: Firms in Restructuring and Liquidation Processes by Economic Sector, 2000-2004

In Restructuring Process



In Liquidation Process

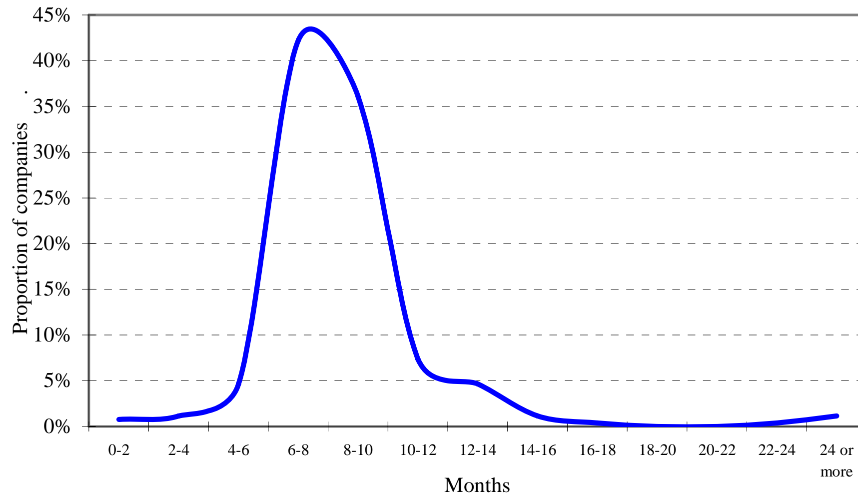


Blanks/N.A.: Information not available. Source: Superintendence of Companies. Information available up to June 2004.

How well has Law 550 performed? To answer this question, it is necessary to analyze some indicators like length of the bargaining process, and some financial indicators.

Figure 7 shows the length of the bargaining process for cases in which restructuring plans were achieved. It can be observed that 42.2% of firms that reached restructuring agreements did so in a period between 6-8 months, as Law 550 intends, and 36% between 8-10 months. Furthermore, 6.6% of companies were able to finish the bargaining process successfully in less than 6 months. However, in 15% of cases, a restructuring plan was approved only after 10 months and, in some cases, approval took up to 24 months. This result means that the law has been relatively successful in achieving restructuring agreements within the intended time frame, but it is still necessary for the law to reduce and limit the periods for responding to protests and vetoes. This would increase the speed of the bargaining process and, therefore, would increase ex-post efficiency.

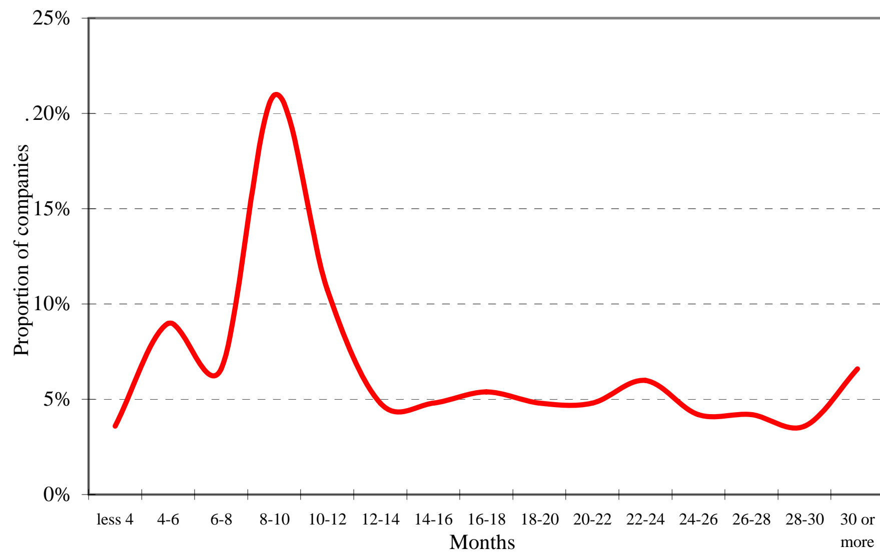
Figure 7: Length of Bargaining Process of Companies that Reached Agreements, in months



Source: Superintendence of Companies. Calculations by the author..

Liquidation processes consume more time. As seen in Figure 8, 21% of the finished processes of liquidation lasted between 8-10 months, and there is a uniform distribution around 5% after 12 months. In other words, 60% of the liquidation cases ended after 1 year, with some lasting up to 30 months or more. Only 19% of cases are finished before 8 months, making the liquidation process very expensive in economic terms.

Figure 8: Length of Liquidation Process, in months



Source: Superintendence of Companies.

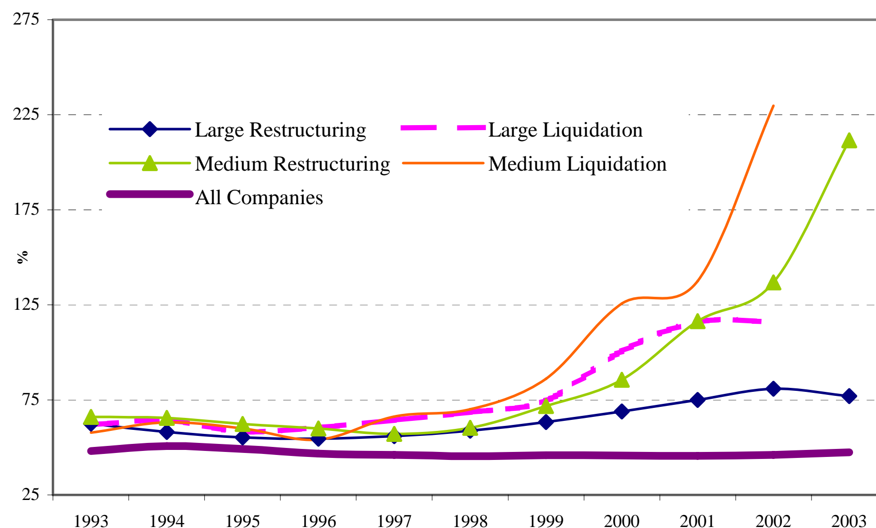
How have the companies in restructuring processes performed in financial terms? To analyze this performance, I calculated some financial indicators which shed some light on the reasons for their financial distress and their performance since Law 550 was enacted.

Using a data base from the Superintendence of Companies, I collected available information on assets, liabilities, equity, income, expenses and earnings from 261 firms between 1993 and 2003: 152 large-size companies in the restructuring process, 26 large-size companies in the liquidation process, 63 medium-size firms in a restructuring agreement and 20 medium-size firms in the liquidation process.[15] Then, I calculated some financial indicators of liquidity (asset-liabilities ratio and acid test), debt (short-term liability concentration, debt level and debt-equity ratio) and profitability (asset turnover, equity profitability, gross margin and operating margin). Finally, I compared these financial indicators with those of all companies in the data base.[16]

As seen in Figure 9, those firms accepted into protection under Law 550 accumulated large levels of debt significantly above their financial capabilities since 1996-1997. If we observe the debt level indicator (total liabilities over total assets), we can see that, on average, the distressed firms showed higher levels of debt since 1993, but not much different from healthy companies. Nevertheless, between 1996 and 1997, distressed large and medium-sized companies started to show consistently higher amounts of debt until they reached levels five times higher than those of non-distressed companies. The debt-equity ratio confirms this result (Figure 10).

Figure 9: Debt Level, 1993-2003

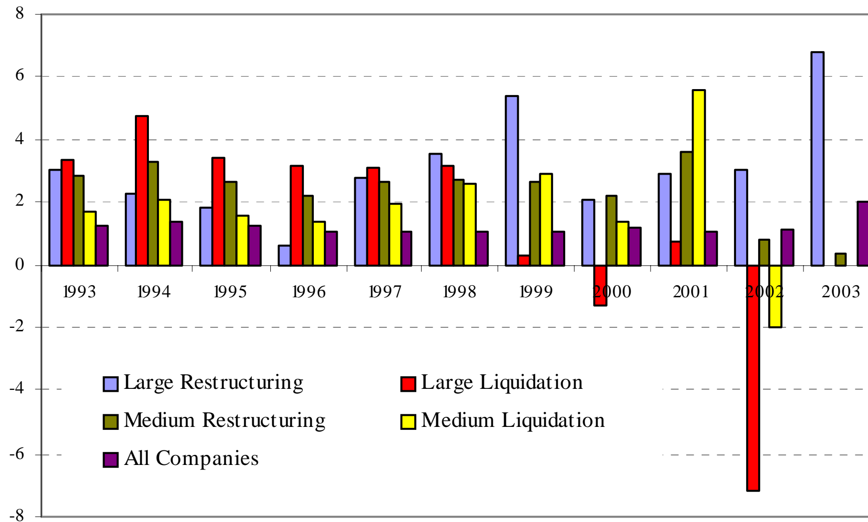
(Total liabilities/Total assets)



Source: Superintendence of Companies. Calculations by the author.

Figure 10: Debt-Equity Ratio, 1993-2003

(Total liabilities/Total assets)

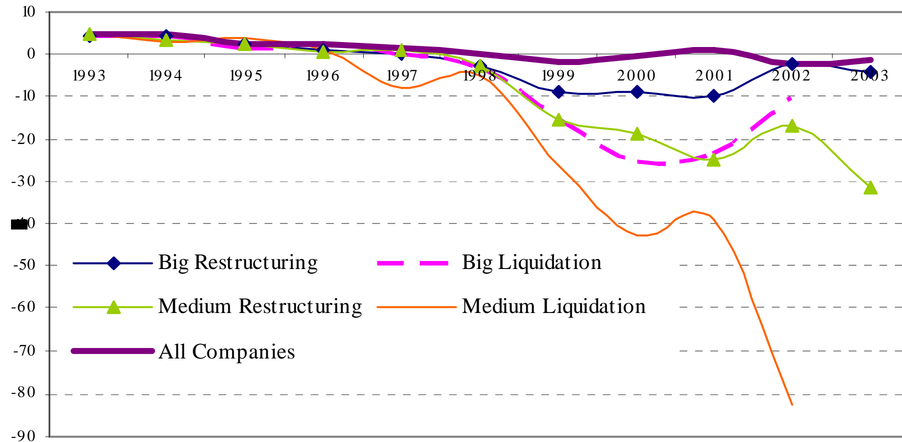


Source: Superintendence of Companies. Calculations by the author..

In addition, these ailing firms had reductions in their profitability indicators. As shown in Figure 11, the firms under Law 550 had asset turnover indicators similar to healthy firms until 1997. However, since 1998, firms with financial troubles systematically showed less benefit with respect to assets than companies without problems.

Figure 11: Asset Turnover, 1993-2003

(Total Net Benefit/Total assets)

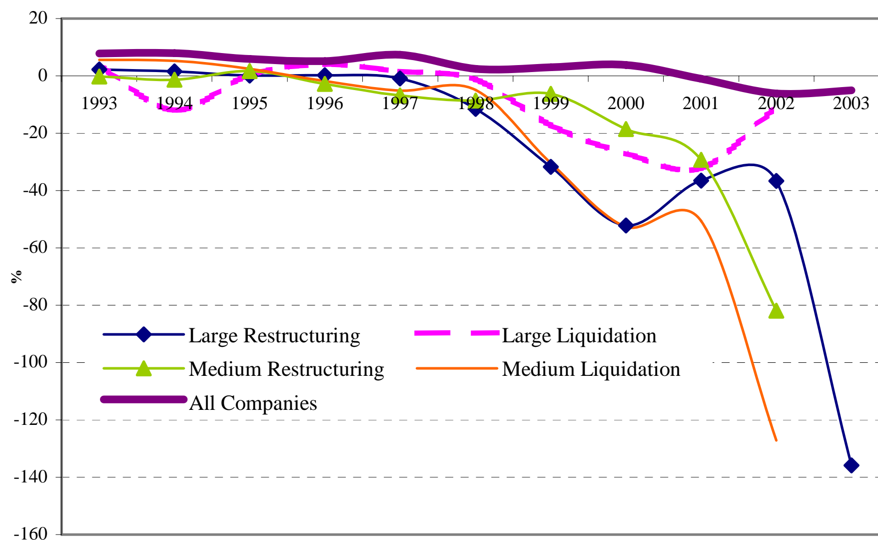


Source: Superintendence of Companies. Calculations by the author.

The reduction of profitability in ailing firms can also be observed using operating margin indicators (Figure 12). Both ailing firms and healthy companies showed similar operating margins, on average, until 1997. However, since 1998, ailing firms (in restructuring or in liquidation processes) had negative operating margins whereas healthy companies had positive ones.

Figure 12: Operating Margin, 1993-2003

(Operating Earnings/Operating Income)



Source: Superintendence of Companies. Calculations by the author.

From the results of the financial indicators, I conclude that ailing firms that applied Law 550 demonstrated financial troubles since 1997 and that these problems were not generated by the 1999 recession. In other words, the rise of debt level and reduction of profitability indicators started two years before the recession; therefore, some of the ailing firms could have had structural problems that the decline in GDP growth in 1999 exacerbated. Law 550 has as a main objective facilitating the negotiation of the restructuring process for firms with financial troubles caused by the recession, but it is possible that some companies with long-term problems have also been accepted into the restructuring process instead of going straight to the liquidation process.

Have ailing firms' financial performances improved with Law 550? According to Quiñonez (2003),[17] ailing firms have not demonstrated better financial indicators under Law 550 than under the previous *concordato* bankruptcy system. She conducted a survey with 89 medium and small-size firms, 36 with restructuring agreements under Law 550 and 53 in *concordato* to test the hypothesis that the companies in the Law 550 restructuring process show better financial ratios than those in *concordato*. With the collected information, she figured out some financial indicators like debt-to-equity ratio, pre-tax profit margin, profit margin, operational cycle, net working capital, asset turnover, change-of-net-income-to-change-of-equity-ratio, and change-of-net-income-to-change-of-asset ratio.

She did not find any statistical evidence that confirmed the existence of different ratios between these two types of companies, but she found some interesting results. For instance, in the operational cycle, she found that firms in *concordato* have shorter cycles than companies in the restructuring process and, therefore, more liquidity. In addition, firms in *concordato* showed recuperation in their net working capital whereas companies in the restructuring process experienced reductions. In asset

turnover, both types of firms reported bad results, but those companies in the restructuring process were worse. In debt-to-equity ratio, the firms in the restructuring process had higher levels of debt than the companies in *concordato*, but the former showed faster reductions in this indicator.

Also, Quiñonez (2003) found that both kinds of firms have negative profit margins, but firms in *concordato* are more affected. This negative result means that all firms have operational and management problems that prevent them from transforming sales into benefits. Finally, the indicators change-of-net-income-to-change-of-equity-ratio and change-of-net-income-to-change-of-asset ratio showed in both kinds of firms that the shareholders have not made the effort to inject capital and improve the operation of the firms. Consequently, these companies have operational problems and cannot transform their assets into operational profits. This panorama has worsened because of their high levels of debt.

IV. EMPIRICAL EVALUATION OF THE LAW 550

For an empirical evaluation of the bargaining process under Law 550, I collected information from some restructuring and liquidation processes that took place between 2000 and 2003. Until December of 2003, the Superintendence of Companies had a set of 252 processes in which companies reached restructuring agreements and another 52 cases of firms in mandatory liquidation. From this set, I picked a sample of 50 companies with restructuring agreements and 10 firms in mandatory liquidation, and gathered the following information on the bargaining process for this sample: i) the stakeholders' voting rights; ii) the voting process; iii) the restructuring formula with different stakeholders; iv) the elements of corporate governance included in the

Code of Corporate Conduct (*Codigo de Conducta Empresarial*); and v) the reasons that firms in liquidation filed for this process.

In Appendix 1, I listed the companies that belong to the sample in both restructuring and liquidation cases. In addition, I listed company information about assets, liabilities, equity, starting date of restructuring/liquidation process, date in which the agreement was reached, size and economic sector to which they belong.

A. COMPANIES IN RESTRUCTURING PROCESS

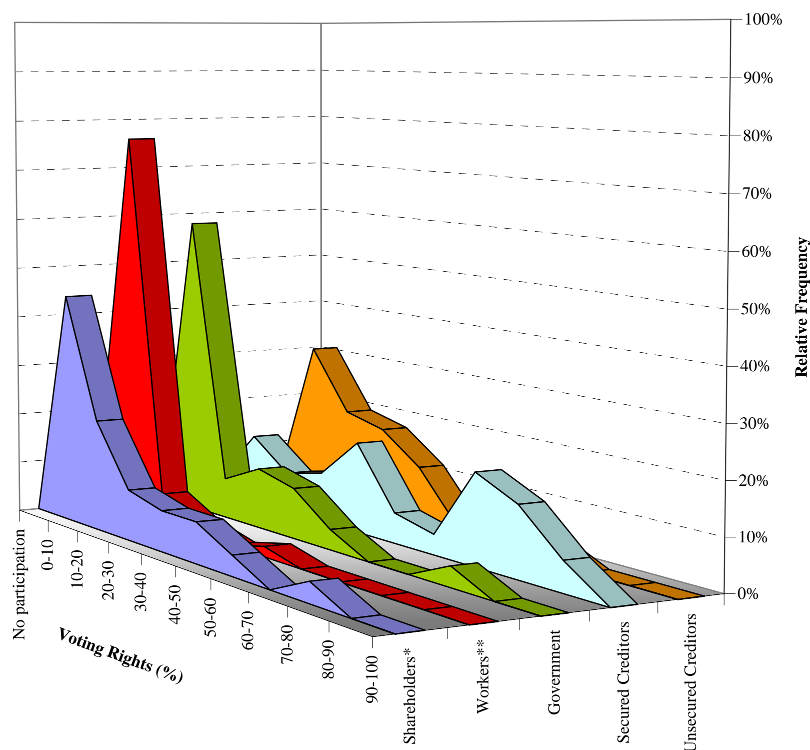
i) The stakeholders' voting rights and voting participation

Law 550 establishes a process to determine the voting rights for each stakeholder participating in the restructuring negotiation. Article 22 says that the *promotor* computes the voting rights for stakeholders (different from shareholders) based on the amount of capital owed them by the ailing firm. He can only consider the debt's principal, and not interest payments, sanction fees, etc., in his calculations. To determine the voting rights of shareholders, the *promotor* considers the shareholder's share in equity after deducting dividends, equity revalorization, financial surplus, etc. If the equity is negative, the *promotor* gives each shareholder a voting right equivalent to one Colombian Peso (US$0.00037 dollars in 2004). The law allows only the inclusion of interest payments, sanction fees, etc. into the voting rights calculation if the firm had a debt with the government agency in charge of collecting national taxes and tariffs, the *Direccion de Impuestos y Aduanas Nacionales DIAN*.

Based on the sample of 50 firms in the restructuring process, I calculated the voting rights for each stakeholder group. I found that, on average, shareholders have 17.4% of the voting rights, current and retired workers have 4.1%, the government

and social security institutions have 13.2%, secured creditors have 42.7% and unsecured creditors have 22.6%. Figure 13 shows a histogram of frequencies for the voting rights of each group of stakeholders.

Figure 13: Distribution of Voting Rights among Stakeholder Groups



* In 33.3% of cases, shareholders have voting rights close to 0%.

** In 58.8% of cases, current and retired workers have voting rights of less than 5%.

Source: Superintendence of Companies. Calculations by the author.

As observed in Figure 13, there is a high concentration of cases in which shareholders, workers and government groups have low percentages of voting rights (positively skewed distribution). the percentage of cases where voting rights were between 0% and 10% was 45.1% for shareholders, 76.5% for workers, and 58.8% for the government.

On the other hand, the secured creditors group shows a distribution with voting rights percentage peaks between 30% and 40% and between 60% and 80%. In

addition, the unsecured creditors group is concentrated in low voting rights percentages, although they are not as concentrated as shareholders, workers and the government.

Even though the shareholders, workers and government groups show the lowest percentages of voting rights, Law 550 gives them veto power in the bargaining process. In Article 30, the law gives veto power to workers if any part of the restructuring agreement affects their benefits, to shareholders if the agreement includes any change of property on the firm's assets and to the government if the agreement includes a sale of assets that affects the firm's capacity to pay fiscal, social security and labor debts. Consequently, the law could be generating debtor-friendly agreements because it gives significant bargaining power to minority groups associated with the objective of keeping the firm working, whereas creditor groups with large amounts of loans and, therefore, larger risk, have relatively weak bargaining power with respect to their voting rights.

What is the percentage of stakeholder participation in the restructuring process? To answer this question, I added the voting rights percentages of those stakeholders who effectively participated in the restructuring agreement. Based on the information collected from 50 restructuring agreements, I found that, on average, 79.2% of stakeholders with voting rights participated in the bargaining process: in 10% of cases, this participation was between 50% and 60%, 22% were between 60% and 70%, 20% were between 70% and 80%, 20% were between 80% and 90% and 28% of cases were between 90% and 100%.

Law 550 establishes that any restructuring agreement must be approved by a minimum of three stakeholder groups with 50% plus one of the voting rights. Figure

14 shows that in 52% of the cases, all stakeholders who participated in the bargaining process gave a positive vote to approve the restructuring agreement. In other words, there was unanimity in the voting process in 26 of 50 cases.

Figure 14: Voting Participation vs. Positive Voting in Restructuring Agreements

Source: Superintendence of Companies. Calculations by the author..

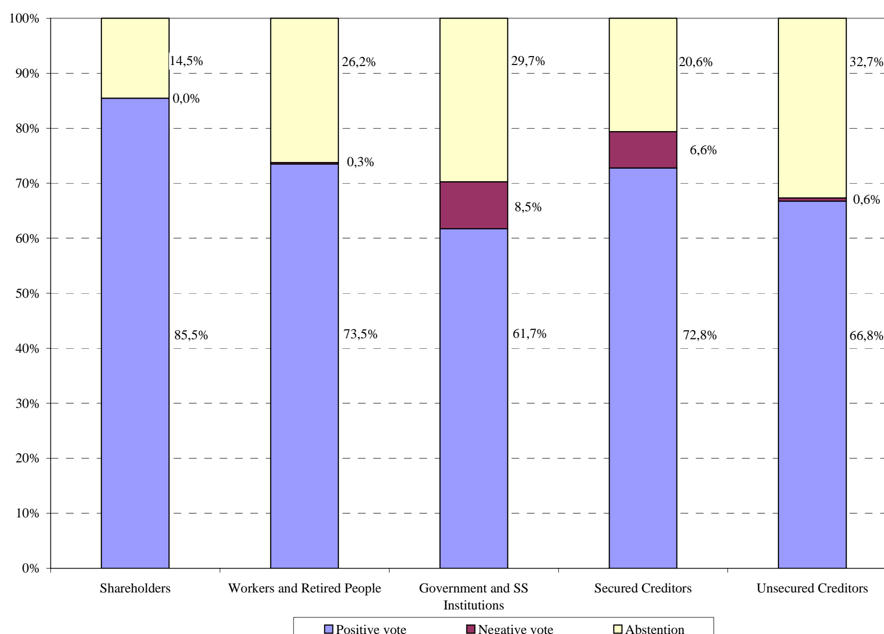
Figure 14 also shows that Law 550 has made the requirements to approve a restructuring agreement more flexible. The previous bankruptcy system (Law 222 of 1995) required that any restructuring agreement be approved by at least 75% of all stakeholders with recognized voting rights. Law 550 reduced this requirement to 50% plus one of the voting rights. As shown, 56% of cases (28 out 50) were approved by less than 75%: 16% had between 50% and 60% approval; 32% between 60% and 70%; and 8% between 70% and 75%. Law 550, then, saved more than one half of the cases being studied from liquidation.

ii) The voting process

On average, any restructuring agreement is reached with an approval rate equivalent to 71.9% of the total voting rights: 14.9% from shareholders; 3% from current and retired workers; 8.2% from government and social security institutions; 31% from secured creditors; and 14.8% from unsecured creditors. Negative votes and abstention corresponded to 4.1% and 24% of total voting rights, respectively.

Which group was most likely to support a restructuring agreement? To make the results comparable, I calculate the following ratio for each stakeholder group: sum of voting rights of stakeholders who voted positive (negative or abstention) over total voting rights. Figure 15 shows these calculations.

Figure 15: Results of Voting Process for each Stakeholder Group



Source: Superintendence of Companies. Calculations by the author..

The shareholders group has the largest proportion of positive votes approving restructuring agreements: 85.5% of shareholders voted positive, 0% voted negative and 14.5% did not participate in the voting process. Government and social security

institutions are the group with the smallest proportion of positive votes and the largest proportion of negative votes: 61.7% voted positive, 8.5% voted negative and 29.7% did not participate. Finally, unsecured creditors abstained most often: 66.8% voted positively, 0.6% voted negatively and 32.7% did not participate.

We can see that some participation results agree with the theory. For example, the shareholders group has the largest positive voting proportion because they have the most interest in keeping the company working. This is because they can maximize their benefits and the firm's value by preventing the company's liquidation.[18] In addition, this group does not have any negative votes and the smallest proportion of abstentions.

Another group interested in keeping the firm working is the current and retired workers because the salaries and pensions they receive from the firm are usually their only source of income. 73.5% voted positive, and only 0.3% voted negative with a large abstention rate of 26.2%.

The government and social security institutions group is indifferent to the firm's fate. According to the theory, they are only interested in collecting the capital owed them by the firm. Consequently, their rationality during the bargaining process is to approve agreements that provide the best payment conditions, whether or not the firm is viable. Therefore, it is not illogical that this group has the smallest percentage of positive voting (61.7%) and the largest percentage of negative voting (8.5%).

Finally, the secured and unsecured creditors groups show large percentages of positive voting (72.8% and 66.8%, respectively). The theory explains that secured creditors have less interest in holding up a restructuring agreement because they have incentives of getting their money back and, probably, cutting any link with the ailing

firm after restructuring. They would not approve those agreements in which the restructuring formula gives them less return than agreed to in the defaulted loan contract or less money than the loan's principal. Therefore, we can expect low positive voting percentages from this group. Nevertheless, we see that the secured creditors group, with the third largest percentage of positive votes among stakeholder groups (72.8%) and a small proportion of negative votes (6.6%), plays an important role in approving an agreement. This result is very important because it demonstrates that the secured creditors have a particular interest in helping to rescue the firms from bankruptcy, which was the intent of Law 550. In other words, secured creditors have shown a sense of collaboration in approving restructuring agreements, probably in contradiction to their own incentives.

The theory also explains that unsecured creditors have an interest in receiving their money, but that some would maintain their relationship with the ailing firm if their businesses are related. If the unsecured creditor's business cycle is similar to the firm's, the former is interested in maintaining a business relationship with the latter (i.e., input suppliers). Otherwise, the relationship would be broken.

We see that this group has the second smallest proportion of positive votes (66.8%) and the largest proportion of abstentions among all stakeholder groups (32.7%). The large percentage of positive votes is probably due to the large number of input suppliers in this group. Consequently, they would be interested in approving restructuring agreements.

If we analyze which groups usually participate in the coalitions that approve the restructuring agreements, we see they usually consist of shareholders, secured creditors and unsecured creditors (Appendix 2). From 39 cases in which all

stakeholder groups had voting rights, shareholders appeared in 29 cases, secured creditors in 31, and unsecured creditors in 34. Workers and the government appeared in only 28 and 23 cases, respectively. From eight cases in which only four stakeholder groups participated, the shareholders appeared in four cases, and both secured and unsecured creditors appeared in seven. Workers and government groups appeared in only two and three cases, respectively. Finally, in one case in which only three groups have voting rights, shareholders, the government and unsecured creditors are the coalition. In one case in which only two groups had voting rights, shareholders and secured creditors participated in the coalition.

This result leads to an important conclusion: in order to approve any restructuring agreement, it is necessary for the groups with the largest amount of voting rights (i.e. shareholders, secured creditors and unsecured creditors) to agree with the restructuring process. It is also necessary that minority groups with veto powers (i.e. workers and the government) agree with the restructuring process because they could halt the agreement even if they do not participate in the voting process.

iii) The restructuring formula with different stakeholders

a. Priority order

In general, restructuring agreements do not explicitly consider a priority order of payments. However, in nine cases, there is a priority structure among stakeholders: in six of those cases, the priority order was i) current and retired workers; ii) government and social security institutions; iii) secured creditors; iv) unsecured creditors; and v) shareholders. In two cases, the priority order of payments depended on the amount of new money the stakeholders were able to offer in the restructuring process: i)workers and the government; ii)unsecured creditors; iii) secured creditors with new money; iv)

creditors willing to accept debt-equity swaps; v) creditors who do not accept debt-equity swaps; and vi) shareholders. Finally, in one case the priority was: i) government; ii) unsecured creditors; and iii) shareholders.

As explained above, the Colombian bankruptcy law is part of the French civil code family. Among other things, this family does not assure that secured creditors receive first payment, and offers less protection for creditors. The order of priority shown above is an example of this feature.

b. Debt Rescheduling

I found that the usual restructuring formula is the postponement of debt payments. In all cases, the stakeholders were willing to reschedule their credits, and in some cases, by up to 20 years. However, this is not the only formula: the rescheduling of credits was accompanied with the sale of the firm's assets, new credits, new capital, debt-equity swaps, bonds and/or forgiving a portion of debts. Table 1 shows the number of cases of each restructuring formula.

Table 1: Formulas of Debt Restructuring

Debt Restructuring	No. of Cases
Payments rescheduling	50
Sale of assets	21
New money (new credits)	3
New money (new capital)	2
Debt/Equity swap	7
Bonds	2
Forgiving debts	1

Source: Superintendence of Companies. Calculations by the author.

Table 1 shows that, in 21 cases, the restructuring formula includes not only a payments rescheduling, but a sale of the firm's assets. In other words, some agreements consider the firm paying its debts by giving its assets to creditors. In

addition, in only five cases the restructuring agreement included new money from credits or new capital. Finally, in seven cases, restructuring included debt/equity swaps; in two cases, it included bonds converted to equity; and, in one case, it included a portion of debts forgiven.

Similar to the Korean case, the new Colombian bankruptcy system has not been efficient in attracting new resources to the ailing firms. Even though Law 550 has facilitated the procedures for reaching restructuring agreements among stakeholders, its incentive have not induced shareholders and creditors to offer new resources, probably because the perception of risk is high, even after the restructuring process. Colombian companies have historically used bank loans to finance their businesses instead of new shareholder capital or investment flows from the stock market. Consequently, when a firm experiences financial distress and secured creditors (i.e. banks and financial institutions) close their credits, break their commercial links with the company or are unwilling to offer new resources, the perception of risk is high among new investors even though financial indicators show improved performance.

Any restructuring is a long-term process. In general, the firm's debts are rescheduled for some years to help solve the firm's financial troubles. Consequently, the benefits of the restructuring process (i.e. productivity improvements, healthy, sustainable financial indicators, etc.) can be seen at the end. In the sample, a restructuring agreement resulted in an average debt rescheduling of 9.5 years. In nine cases, the restructuring process was planned to take less than 5 years; in 27 cases, between 5 and 10 years; in five cases, between 10 and 15 years; and, in five cases, between 15 and 20 years. In four cases, the information was unavailable.

The next part describes the results of bargaining with each stakeholders group in order to recognize the main features of the restructuring agreements and their benefits

or costs for each stakeholder.

b.1. Restructuring with current and retired workers

There are 39 cases of restructuring agreements in which current and retired workers participated. On average, the restructuring agreements call for labor debts to be paid 13.6 months after the agreement has been signed. In five cases, labor and pension debts have to be paid immediately; in 14 cases, less than six months; in 10 cases, between 6 and 12 months; in four cases, between 12 and 24 months; and in five cases, more than 24 months and no more than 84 months (Appendix 3).

In 14 cases, the restructuring agreement has a dead period. On average, this period is 14.5 months. The period is less than 6 months in six cases; 12 months in three cases; 24 months in three cases; and more than 24 months in two cases.

Because these restructured debts are paid in a short time, the agreement does not include any interest rate in 22 of the 39 cases. However, in seven cases, the agreement establishes an interest rate equal to the Consumer Price Index (CPI); in six cases, the interest rate was DTF[19] plus some interest spread (between 0% and 9%); and, finally, in four cases, the interest rate was defined by the civil code.

Current and retired workers are willing to accept restructuring formulas other than debt rescheduling in few cases. In 2 of 39 cases, they were willing to combine debt rescheduling with the possibility of a debt-equity swap, and, in one case, they accepted the firm’s assets or bonds. In addition, workers were willing to freeze their wages and/or extralegal privileges to help the firm restructure in only two cases.

b.2. Restructuring with Government and Social Security Institutions

This group is divided into two subgroups: Government-fiscal institutions and social security institutions. In the first group, I include the national tax agency *DIAN* and local governments who collect local taxes. In the second group, there are institutions in charge of collecting pension and health contributions from firms and workers.

In 44 cases, the firms in the restructuring process have to negotiate debt payments with fiscal institutions, especially with *DIAN*. As explained above, Law 550 considers that the amount of money under restructuring with each stakeholder to be the debt's principal the firm owes him or her. However, in the case of fiscal institutions, the Law includes the sum of capital, interest, sanctions and fees owed by the firm.

On average, the restructuring agreements establish that fiscal debts should be paid within 41.3 months after the agreement has been signed. In 10 cases, tax debts must be paid within 12 months; in nine cases, between 12 and 24 months; in six cases, between 24 and 36 months; in seven cases, between 36 and 60 months; and, in eight cases, more than 60 and no more than 120 months.

In 23 cases, the restructuring agreement has a dead period. On average, this period is 21.3 months: this is less than 12 months in nine cases; between 12 and 24 months in 11 cases; and more than 24 months in three cases.

In respect to interest rates, I found that the restructuring agreements include annual CPI growth as an interest rate in six cases; the DTF interest rate in 11 cases; the DTF interest rate plus an interest spread (between 3% and 5%) in eight cases; and the DTF interest rate plus an interest spread that increases (between 0% and 30%) during the payment period in eight cases. In six cases, the interest rate is determined by the tax law or by other means.

With respect to restructuring formulas, all agreements use debt rescheduling as the main method of debt payment to government institutions, but in three out of 44 cases, the tax debts were paid with a combination of debt rescheduling and firm's assets.

Firms had to restructure their debts with social security institutions in 22 out of 50 cases. On average, the restructuring agreements establish that debts with social security institutions should be paid within 37 months of approving the agreement: in four cases, within 12 months or less; in six cases, within 24 months; in three cases, within 48 months or less; in four cases, within 60 months; and, in two cases, within 84 months. In 13 cases, the restructuring agreement had a dead period that lasted, on average, 19 months: in five cases, it was less than 12 months; in six cases, between 12 and 24 months; and in two cases, 36 months.

With respect to the interest rate paid by the firm to social security institutions, in four cases, the yearly CPI was used; in two cases, the DTF interest rate was used; in four cases, the interest rate was equal to DTF plus some interest spread (between 4% and 5%); and in three cases, there was a DTF interest rate with an interest spread that grew during the payment period (from 0% to 15%). In three cases, labor law determined the interest rate.

Finally, similar to other stakeholders, there were few cases in which debt rescheduling was combined with other possible restructuring formulas. Social security institutions were willing to accept firm's assets as payment for their credits in only one case.

b.3. Restructuring with Secured Creditors

The ailing firms had to negotiate their debts with secured creditors in 45 out of 50 cases. On average, their debts must be paid within 115 months. In nine cases, debts

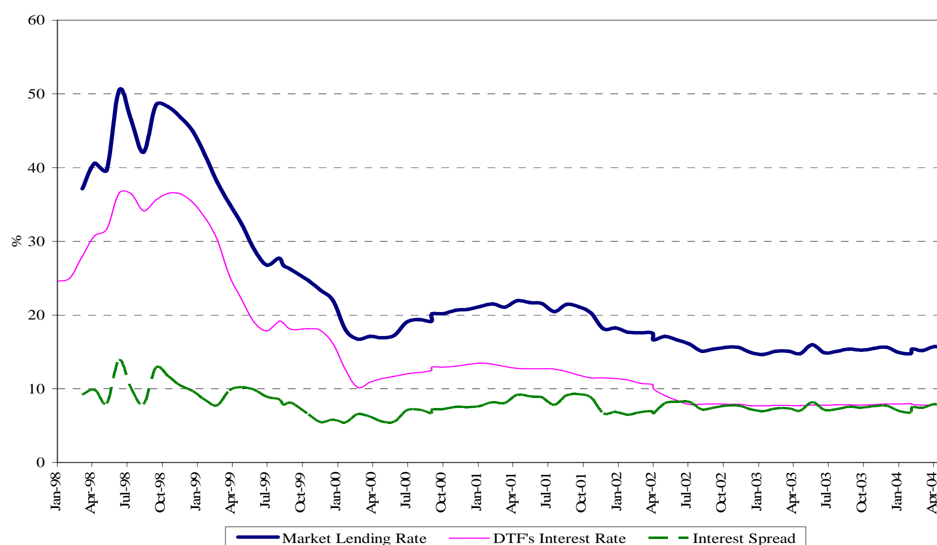
must be paid within 60 months or less; in nine cases, between 60 and 84 months; in four cases, between 84 and 108 months; in ten cases, between 108 and 132 months; in eight cases, between 132 and 180 months and, in five cases, between 180 and 240 months.

On average, the dead period agreed to with secured creditors is 51.6 months in a total of 35 cases: in 11 cases, the dead period was 24 months or less; in 12 cases, between 24 and 48 months; in five cases, between 48 and 72 months; in three cases, between 72 and 96 months; and in four cases, more than 96 months.

The interest rate with secured creditors is often restructured. In 12 cases, the interest rate is reduced to annual CPI growth (in one case, 50% of annual CPI growth); in nine cases, the interest rate is adjusted to equal the DTF interest rate (in two cases, the interest rate was equal to 50% the DTF interest rate); in six cases, the interest rate is equal to DTF plus some interest spread (between 1% and 6%); and, in nine cases, the interest rate is the DTF interest rate with the interest spread increasing during the payment period (from 0% to 5%). There is one case with the interest rate equal to CPI rate plus an increasing interest spread (between 2% and 8%), and another case with interest rate equal to the DTF rate plus an increasing interest spread (between 0% and 15%), and two cases with other interest rate formulas.

The agreements that I checked do not show the interest rate of secured creditors' loans before restructuring. However, we can assume that these rates are similar to the market-lending rate. Figure 16 shows the market-lending rate, the DTF interest rate and the interest spread between them. As we can see, the average interest spread is 7.9%. Therefore, in 38 out of 45 cases, secured creditors were willing to reduce the interest rate.

Figure 16: Market Lending Rate, DTF Interest Rate and Interest Spread



Source: Superintendence of Banks and Banco de la República. Calculations by the author.

Restructuring agreements with secured creditors include restructuring formulas that are combined with debt rescheduling. In eight cases, secured creditors accepted the firm's assets as payment; in three cases, the restructuring formula included debt-equity swaps or the firm's bonds, with better rescheduling conditions for those creditors who were willing to accept them; and in three cases, secured creditors were willing to offer new money through loans. The loans of secured creditors who do not participate in the restructuring process are typically rescheduled for the maximum period of time and with no interest rate.

b.4. Restructuring with Unsecured Creditors

In 42 cases, ailing firms had to negotiate their debts with unsecured creditors, particularly input suppliers. On average, these agreements have a limit of 83.5 months, the second largest period among stakeholders. In 14 cases, debts must be paid within 60 months or less; in six cases, between 60 and 84 months; in three cases, between 84 and 108 months; in eight cases, between 108 and 132 months; and in three cases,

between 132 and 240 months.

In 28 cases, a dead period with an average of 48.4 months was established. In nine cases, the dead period was 24 months or less; in 11 cases, between 24 and 48 months; in three cases, between 48 and 72 months; in one case, between 72 and 96 months; and in four cases, more than 96 months.

The interest rate was rescheduled in 27 cases. In four cases, it was reduced to zero percent; in 10 cases, it was rescheduled to match the annual CPI rate; in seven cases, the new interest rate was the DTF interest rate (in one case, the interest rate was 50% of the DTF rate and, in another case, was a combination of CPI increase and the DTF rate); in two cases, the interest rate was equal to the DTF rate plus an interest spread between 3% and 4.5%; and in four cases, the interest rate was the DTF rate plus an increasing spread between 3% and 15%.

Restructuring agreements with unsecured creditors also include restructuring formulas combined with debt rescheduling. In seven cases, unsecured creditors accepted the firm's assets as payment, and in six cases, the restructuring formula included debt-equity swaps or the firm's bonds, with better rescheduling conditions for those creditors willing to accept them. In three cases, the restructuring agreement gives better payment conditions to creditors who were willing to give new money or keep their loans.

b.5. Restructuring with Shareholders and the Code of Corporate Conduct (*Codigo de Conducta Empresarial*)

The restructuring agreements explicitly establish the rescheduling of debt with shareholders in 16 cases. These agreements say that any debt to shareholders would be paid at the end of the restructuring process. In only two cases, the agreement

recognizes an interest rate equal to CPI annual growth rate. In five cases, shareholders have to swap their debts with equity or bonds, and, in two cases, with firm´s assets. Finally, in three cases, the agreement forbids any distribution of dividends during the restructuring process.

According to Law 550, those firms applying for the restructuring process have to sign the Code of Corporate Conduct (*Codigo de Conducta Empresarial*), which is a list of management requirements that the company must fulfill during the restructuring process. In general, the code forces the firm to keep appropriate, transparent, complete and efficient accounting information for all stakeholders participating in the agreement. In addition, it reduces the scope of shareholders´ participation to strategic management and the design of good performance policies. The code forbids the firm's management from giving or asking for loans, distributing dividends among shareholders, or buying the firm's shares without permission from the stakeholders´ committee during the restructuring process.

The Code of Corporate Conduct mandates other specific restructuring conditions that the ailing firm must fulfill. For example, in four cases, the code states how the ailing firm should be merged with other companies; in three cases, it regulates the conditions for paying off debts through the firm's assets or debt prepayments; in two cases, the code obliges the firm to sell some non-productive assets and, in two cases, it gives conditions to change the firm's management when stakeholders participate in the firm's equity. Finally, in one case, it regulates how the firm can ask for new loans.

Table 2 shows the conditions for restructuring payments negotiated with different stakeholders. We can see that restructuring agreements have an implicit priority order of payments: i) current and retired workers; ii) social security institutions; iii) government; iv) unsecured creditors; v) secured creditors; and vi) shareholders.

Therefore, these agreements do not satisfy the absolute-priority-order rule. In addition, these agreements frequently establish a reduction of the interest rate to the level of CPI or the DTF interest rate.

Table 2: Conditions for Restructuring Payments with Stakeholders

	Workers and Retired People	Government Institutions	Social Security Institutions
Number of cases	38	44	22
Time-limit period (in months)	13.6	41.3	37
Dead period (in months)	14.5	21.3	19
Interest rate*	0%	DTF interest rate	CPI annual growth rate DTF interest rate with spread
	Secured Creditors	**Unsecured Creditors**	**Shareholders**
Number of cases	45	42	End of agreement
Time-limit period (in months)	115	83.5	
Dead period (in months)	51.6	28	
Interest rate*	CPI annual growth rate	CPI annual growth rate	0%

* The most frequent interest rate agreed to with each stakeholder.
Source: Superintendence of Companies. Calculations by the author.

B. COMPANIES IN LIQUIDATION PROCESS

Law 550 says that those firms unable to garner the approval of 50% plus one of voters, or unable to fulfill the conditions of their restructuring payments must apply for a mandatory liquidation process. This process is regulated by the previous bankruptcy law (Law 220 of 1995).

i) The stakeholders' voting rights and voting participation

I calculated the voting rights for each stakeholder group based on information from firms in mandatory liquidation. I found that, on average, shareholders have 1.3% of total voting rights, current and retired workers have 5.4%; government and social security institutions have 23.7%; secured creditors have 29.4%; and unsecured creditors have 40.1%.

Similar to those firms in the restructuring process, there is a high concentration of

cases in which shareholders and workers have a small proportion of voting rights. For example, the maximum percentages of voting rights that shareholders and workers received in this sample were 8.4% and 15.7%, respectively.

In this sample, government and social security institutions have a higher percentage of voting rights than in the restructuring process. Some companies have large tax debts with the national and local governments, making the government one of their most important creditors. The largest percentage of voting rights the government enjoyed in this sample was 48.8%.

Similar to firms in the restructuring process, creditors have an important proportion of the voting rights of companies in mandatory liquidation. While creditors (both secured and unsecured) have 65.3% of voting rights in restructuring cases, they have 69.5% in mandatory liquidation cases. However, because firms in mandatory liquidation have more debts with unsecured creditors than secured creditors, the composition is different.

Information about voting results is unavailable for most of the mandatory liquidation cases. Consequently, I was unable to analyze the voting process of these companies.

ii) The restructuring formula with different stakeholders

a. Debt Rescheduling

In the failed restructuring processes of firms undergoing mandatory liquidation, the usual formula was the rescheduling of debt payments. In most cases, the payment schedules were rearranged up to 8 years. In three cases, payment rescheduling was combined with the sale of the firm's assets to stakeholders, and in one case, a portion of the debt was paid with services (T.V. advertisements) produced by the ailing firm.

a.1. Restructuring with current and retired workers

In seven cases, these firms had debts with current and retired workers. On average, the debts have to be repaid within 24 months and a dead period of 10.5 months. With respect to interest rates, in four cases the interest rate is 0%; in one case, it is annual CPI plus 2%; and in one case, it is the DTF interest rate plus 5% during the first four years, and the DTF interest rate plus 6% until the end of payments. In one case, the interest rate is determined by previous agreements. In this sample, only the payments rescheduling is considered as the restructuring formula.

a.2. Restructuring with Government and Social Security Institutions

In nine cases, firms in mandatory liquidation had to negotiate their debts with government and fiscal institutions. On average, the time limit to pay their debts was 32 months and the dead period was 15.2 months. In two cases, the interest rate that firms had to pay was the DTF interest rate; DTF plus 5% in one case; CPI annual growth rate plus a spread (between 0% and 2%) in three cases; and a rate regulated by the tax law in two cases. In one case, there was no information.

The government and fiscal institutions accepted a different restructuring formula than payments rescheduling in only one case. This formula required the ailing firm to pay 50% of its debt in cash and 50% with services (T.V. advertisements) produced by the company.

In five cases, ailing firms had debts with social security institutions. The average limit to pay these debts was 34.5 months, with a dead period of 14 months. In two cases, the interest rate was regulated by the civil law; in one case, it was the CPI annual growth rate; in one case, it was the DTF interest rate plus 5%; and in the final case, there was no information. The restructuring formulas were the same as those

used with government and fiscal institutions.

a.3. Restructuring with Secured Creditors

In eight cases, ailing firms negotiated their debts with secured creditors. On average, these loans were rescheduled to be paid in 72 months, with a dead period of 44 months. In three cases, the interest rate was reduced to the CPI rate; the DTF interest rate in one case; and the DTF interest rate plus a spread (between 2% and 6%) in three cases. In one case, there was no information.

Finally, in all cases, the restructuring formula was postponement of payments. However, in three cases, this formula was combined with sale of the firm's assets and, in one case, with payment based on services.

a.4. Restructuring with Unsecured Creditors

In nine cases, firms in mandatory liquidation had to negotiate their debts with unsecured creditors. On average, these agreements had a limit of 64.5 months, with a dead period of 39 months.

The negotiated interest rate was 0% in two cases; the CPI annual growth rate in two cases; the DTF interest rate in one case; and the DTF interest rate plus 2% in one case. In three cases, there was no information.

Finally, in all cases, the restructuring formula was payments rescheduling. However, in three cases, this formula was combined with the sale of the firm's assets and, in one case, with payment based on services.

In summary, we can see that voting rights distribution and restructuring formulas during mandatory liquidation are similar to those in the restructuring process. Therefore, I conclude that agreements approved with firms in restructuring and firms

in liquidation are analogous in conditions and time limits.

iii) Causes of mandatory liquidation

On average, the bargaining process took 7.7 months to reach restructuring agreements. However, these ailing firms were working for 17.4 months before starting the mandatory liquidation process.

From the liquidation processes files, I gathered information on the causes of the firms' entrance into mandatory liquidation. The most usual cause was the firms' inability to meet debt payments after the approved restructuring agreement. In 7 out of 10 cases, firms could not pay their post-agreement debts. In five cases, ailing firms could not fulfill their restructured tax payment scheme; in three cases, they could not pay debts to secured creditors, unsecured creditors and social security institutions; in two cases, they could not pay their debts to current and retired workers; in one case, the firm could not generate new money from new investors, and in one case, the ailing firm was not fulfilling its social purpose (i.e. it was producing nothing).

In all cases, the firms' managers tried to negotiate other restructuring agreements with stakeholders (especially new creditors), but these new agreements were not approved. Finally, in 7 out of 10 cases, ailing firms had negative equity when they started the liquidation process.

C. EMPIRICAL EVALUATION OF EX-POST EFFICIENCY CONDITION

As explained above, the ex-post efficiency condition says that a firm should be reorganized if its value as a going concern is greater than its liquidation value. Otherwise, this firm should be shut down and liquidated piecemeal. If a bankruptcy law is able to guarantee this condition, then the welfare of the interested parties and

society would be improved.

To evaluate whether or not Law 550 satisfies the ex-post efficiency condition, I obtained available financial information from two sources: first, the files of 31 firms in the restructuring process and five in the mandatory liquidation process; second, accounting information from the Superintendence of Companies' data base.

To compute a proxy of a firm's going-concern value, I gathered information of predicted cash flows for each ailing firm during their restructuring period. I calculated the present value of these cash flows using a forecast of the DTF interest rate as a measure of capital opportunity cost. The source of this information is the records of each firm's restructuring process.

Then, I took the firm's book value as a proxy of its piecemeal value. The source of this information is the Superintendence of Companies' data base.

I calculated the value of each firm's cash flows for the year it entered the restructuring process, and I compared it with the firm's book value of the same year. Because firms in mandatory liquidation were previously in a restructuring process, I calculated these values for the year in which they filed for the restructuring process (Appendix 4).

I found that, in the firms in a restructuring process, the ex-post efficiency condition is satisfied in 23 out 31 cases, because the firm's going-concern value is greater than its piecemeal value. However, in eight cases, the condition is not satisfied, and the companies should have been liquidated.

In addition, in those firms in the mandatory liquidation process, the firm's going-concern value was greater than its piece-meal value in four out five cases. However,

in one case, the condition was not satisfied, and the firm should have been liquidated instead of entering into a restructuring process before being liquidated.

In summary, in 25% of cases, the ex-post efficiency condition was not satisfied. Therefore, Law 550 allows some companies that should be liquidated to take part in a restructuring process.

V. CONCLUSIONS

Law 550 was conceived as a temporary mechanism to resolve bankruptcy cases in effect until the end of 2004, when the Colombian Parliament must choose whether to make it part of the permanent legislation, transform it or return to the previous system. Its main purpose was to give debtors and creditors adequate incentives and mechanisms to: i) reach agreements among parties, and ii) design and carry out programs that allow firms and companies to normalize their activities, honor their financial commitments and preserve already generated employment.

So far, this law has helped 932 firms restructure their liabilities with their stakeholders or be liquidated. It has also helped to protect employment. 57,377 people did not lose their jobs from 678 firms in the restructuring process.

Law 550 has improved the Colombian bankruptcy system by including rules for formal bargaining games, which has made the process more flexible. Under these rules, stakeholders can easily negotiate the restructuring of ailing firms' debts. In addition, the number of votes required to approve agreements was reduced, thereby helping a large proportion of firms avoid liquidation.

This law also made the restructuring process less time-consuming than the previous system. In *concordato*, a restructuring process can easily be delayed two years. In the new system, around 78% of restructuring deals are achieved in 8 months or less. Nevertheless, around 15% cannot reach an agreement in the period established by law because it does not establish time-limits to respond to protests and the abuse of this instrument by some stakeholders, which reduces the firm's economic value. In addition, most of the liquidation cases take more than 1 year to be resolved, and Law 550 has been unable to expedite them, with a consequent cost in economic terms.

The Code of Corporate Conduct (*Codigo de conducta empresarial*) has been one of the law's most important achievements. This code has protected stakeholders' rights during and after the bargaining process, and improved the quality of information available to all. It has improved the firms' management quality, helped prevent high-risk behavior by managers, and allowed the most experienced workers to administer the firm.

However, the law has demonstrated some shortcomings that must be improved on if the efficiency of the procedure is to be increased. For example, the law does not explicitly contemplate the ex-post efficiency condition, which has produced a large proportion of restructuring agreements for non-viable companies and the process of liquidation for those firms has taken more time than necessary. Because the law aims to preserve employment in ailing firms, reasons other than economic efficiency may be considered more important in deciding between restructuring or liquidation.

In addition, the law is oriented to restructuring by regulating the bargaining process to encourage stakeholders to think more about the firm's interest than their own; to give equal priority to all stakeholders; to reduce the minimum level of votes

needed to approve a restructuring plan; and to give veto power to minority groups interested in achieving a restructuring agreement.

The law has been debtor-oriented because it eliminates sanctions on owners and managers responsible for the firm's bankruptcy, allows them to maintain their posts during the bargaining process, and gives them voting and veto power. Also, like other liquidation procedures based on the French civil code, Law 550 gives less protection to creditors because, although it does not have an explicit priority order of payments, it does not guarantee that secured creditors are paid first (i.e., it does not follow the absolute-priority-of-claims rule).

These shortcomings could potentially affect the ex-ante behavior of some agents, especially creditors, thereby reducing ex-ante efficiency.

A new bankruptcy law for Colombia should focus on improving the ex-ante and ex-post efficiency of the bankruptcy procedures. These objectives can be achieved with the explicit inclusion of a rule that states the restructuring option must be chosen if, and only if, the going-concern value is greater than the liquidation value. Also, these objectives can be achieved by reducing the periods in each stage of the bargaining process and limiting the time allotted to respond to stakeholders' protests.

Moreover, the law can improve the procedure's efficiency if it gives creditors and debtors equal roles in the bargaining process. For this, it is necessary to establish a pre-fixed rule that prioritizes the preservation of claims, spreads equal voting and veto power among stakeholders and restores sanctions to owners and managers who are responsible for the firm's bankruptcy. It is also necessary to extend the Code of Corporate Conduct to the relationships between stakeholders outside the bargaining table.

Law 550 has not been successful in attracting new capital to ailing firms during the restructuring processes. Almost all processes are based on rescheduling payments and/or the sale of assets, and only a small portion of the restructuring includes new money (from credits or shareholders' capital), debt/equity swaps or bonds. Therefore, the bankruptcy mechanism must be complemented by other kinds of policies. For example, the government should encourage the use of debt-equity swaps through tax-exemptions for investors who invest in the equity of restructuring companies, particularly small and medium-size firms. Also, the government should increase the information available to firms about credit lines that exist to provide funds for companies.

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8 Echeverry, J.C. y Natalia Salazar. "¿Hay un estancamiento en la oferta de crédito?". *Archivo de Macroeconomía* No.118. Departamento Nacional de Planeación, 1999.

9 This change was made because the causes of most bankruptcy cases were considered to be national and general for all industries rather than individual to each firm. Superintendencia de Sociedades. *Exposición de Motivos Ley 550 de 1999.* Gobierno Nacional de Colombia, Bogota, 1999.

10 The Superintendence of Companies has found that, in many cases, shareholders and managers have reached restructuring plan agreements with small creditors, workers, other shareholders, etc., outside of the bargaining process (*compra de votos*). This practice is facilitated by the reduction in the minimum percentage needed to approve such plans. Revista Dinero. "La nueva ley 550". Edicion No.179, Seccion Negocios, 2003.

11 One indirect example of this behavior has been observed in the restructuring processes. According to the Superintendence of Companies, of COL$9.6 trillion pesos of assets in the restructuring processes (US$3.8 billion dollars) only COL$85 billion pesos are new resources (US$34 million dollars). Of these resources, one firm absorbed COL$65 billion pesos (US$26 million dollars). Revista Dinero. "La nueva ley 550". Edicion No.179, Seccion Negocios, 2003.

12 LaPorta, Rafael and Florencio Lopez-de-Silanes. "Creditor Protection and Bankruptcy Law Reform". In Claessens, Stijn, Simeon Djankov and Ashoka Mody Eds. *Resolution of Financial Distress. An International Perspective on the Design of Bankruptcy Laws*. World Bank Institute Development Studies. Washington D.C., USA, May 2001.

13 However, the results of firms in liquidation are underestimated because many companies in the process do not report their assets, liabilities and employees.

14 Colombian law defines a micro-size firm as one with total assets less than COL$130 million pesos (US$62,300 dollars) and less than 10 workers. It defines a

small company as between COL$130 million and $1300 million pesos (US$623,000 dollars) in assets and between 11 and 50 workers. A medium-size company is one whose assets are valued between COL$1.3 billion and COL$3.9 billion pesos (US$1.9 million dollars) and has a staff between 51 and 200 employees. Finally, a large firm has more than COL$3.9 billion pesos and more than 200 workers. Figures are in pesos of 2000.

15 According to the Colombian regulations, only large and some medium-size companies are required to send their financial data to the government (Superintendence of Companies). Small and micro-size firms can voluntarily send them. Consequently, the financial data base from the Superintendence of Companies has consistent information only for these large and medium-size companies.

I obtained information from 316 firms: 179 large-size companies in the restructuring process, 32 large-size companies in liquidation, 81 medium-size companies in restructuring agreement and 24 medium-size firms in liquidation. However, some of these companies had missing information for some years, or their information generated very volatile behaviors in the financial indicators constructed. Therefore, I eliminated the following number of firms with these problems: 27 large-size companies in restructuring, 6 large-size firms in liquidation, 18 medium-size companies in restructuring, and 4 medium-size companies in liquidation.

16 The Superintendence of Companies' data base contains financial information for 5,111 companies in 1993, 9,511 in 1994, 9,553 in 1995, 9,350 in 1996, 10,102 in 1997, 9,647 in 1998, 9,724 in 1999, 10,254 in 2000, 6,185 in 2001, 9,179 in 2002 and 9,053 companies in 2003.

17 Quiñonez, Tatiana Andrea. "El efecto de las leyes de intervención económica en las PYME. Un estudio comparativo". *Monografías de Administración*. Serie Mejores Proyectos de Grado. No.71. Universidad de los Andes, April, 2003. Financial information for all the firms is not publicly available.

18 The theory specifies that the shareholders group is not a homogeneous one. As explained above, there are three subgroups with different incentives and, in some circumstances, with contradictory positions among themselves. However, they have the common incentive of maximizing the firm's value by keeping the company working.

From the restructuring agreements consulted, I couldn't find sufficient information about the position of dominant shareholders, minority shareholders and managers to confirm the behaviors and results the theory suggests. Therefore, I assume a homogeneous shareholders group with their common incentive.

19 The DTF interest rate is the rate of *Depósitos a Término Fijo*, which is the average of the 90-day deposits in commercial banks and financial institutions. In Colombia, this rate is used as a measurement of the market's deposit interest rate.

APPENDICE

APPENDIX 1

COMPANIES IN RESTRUCTURING OR LIQUIDATION PROCESSES

The sample I constructed to analyze Law 550 is composed of 50 companies that approved restructuring agreements and 10 firms undergoing mandatory liquidation. In both cases, the companies were selected based on the composition of firm size and economic sector found in the Superintendence of Companies' database. In the sample, I tried to keep the same proportion of large, medium, small and micro-size companies, as well as the proportion for each economic sector, found in the database.

In the selection of large companies, I first included the most typical and emblematic Colombian companies in financial distress to include some elements of the Colombian economy into the analysis. Later, there was a random selection of companies. The sample for liquidation companies was also chosen randomly.

Table A.1.1.:Companies with Restructuring Agreements

	Name	Assets (million pesos)	Liabilities (million pesos)	Equity (million pesos)	Starting Date	Signature Date	Modification Date	Size	Economic Sector
1	Danaranjo S.A.	19,513.0	12,787.0	6,726.0	4/14/2000	11/14/2000	3/4/2002	Large	Manufacturing
2	Hotel Santa Clara	54,097.0	41,162.0	12,935.0	4/15/2002	3/14/2003		Large	Other Services
3	Colchones El Dorado S.A.	6,968.0	4,787.0	2,181.0	11/22/2001	7/15/2002		Large	Manufacturing
4	Andes Television S.A.	2,694.0	2,027.0	667.0	11/7/2001	8/3/2002		Medium	Transportation-communication
5	Cable Andino S.A.	12,037.0	8,575.0	3,462.0	7/19/2002	9/12/2003		Large	Transportation-communication
6	Caribu internacional S.A.	5,813.0	12,809.0	-6,996.0	6/7/2000	3/2/2001		Large	Other Services
7	Casa Color S.A.	27,738.0	26,762.0	976.0	5/18/2000	6/29/2001		Large	Commerce
8	Urbanizacion Santa Barbara Central LTDA	14,948.0	12,655.0	2,293.0	2/9/2000	2/5/2002		Large	Construction
9	Centro Ford y Chevrolet LTDA	404.0	223.0	181.0	7/10/2002	3/7/2003		Small	Commerce
10	Club Social Tequendama	2,304.0	1,052.0	1,252.0	10/17/2001	6/6/2002		Medium	Other Services
11	Hotel El Porton de Oviedo	11,093.0	3,140.0	7,953.0	4/17/2001	12/14/2001		Large	Commerce
12	Educar S.A.	2,806.0	3,294.0	-488.0	3/2/2001	2/4/2003		Medium	Commerce
13	Avicultura Tecnica S.A.	42,317.0	26,058.0	16,259.0	9/15/2003	12/30/2003		Large	Manufacturing
14	Educar Venta Directa S.A.	5,237.0	5,923.0	-686.0	3/2/2001	2/4/2003		Large	Manufacturing
15	Ingenieros y arquitectos consultores S.A.	2,561.0	4,368.0	-1,807.0	9/18/2000	5/25/2001	7/19/2001	Medium	Construction
16	Productos Naturales de la Sabana S.A.	43,973.0	41,627.0	2,346.0	2/9/2000	12/1/2000		Large	Manufacturing
17	MF Publicidad y Mercadeo S.A.	934.0	782.0	152.0	8/10/2000	4/16/2001		Small	Other Services
18	Alberto Ochoa y Cia LTDA	2,612.0	1,006.0	1,606.0	2/9/2000	2/19/2001		Medium	Commerce
19	Comlasa de Colombia S.A.	2,772.0	2,418.0	354.0	3/28/2001	11/27/2001		Medium	Other Services
20	Arotec Colombiana S.A.	2,967.0	2,681.0	286.0	10/11/2000	6/8/2001	9/3/2003	Medium	Commerce
21	Manufacturas Bonny LTDA	101.0	212.0	-111.0	3/8/2000	7/27/2000		Micro	Manufacturing
22	Fibratolima S.A.	110,947.0	76,575.0	34,372.0	4/18/2002	6/21/2003		Large	Manufacturing
23	Plastihogar S.A.	8,965.0	15,304.0	-6,339.0	5/9/2002	1/14/2003		Large	Manufacturing
24	Automotores del Oriente LTDA	302.0	458.0	-156.0	9/27/2000	5/25/2001		Small	Commerce
25	Pizano S.A.	231,916.0	154,356.0	77,560.0	11/17/2000	3/22/2002		Large	Manufacturing
26	Mundiven S.A.	1,937.0	2,691.0	-754.0	1/29/2001	9/21/2001		Medium	Construction
27	Remel LTDA	1,260.0	1,063.0	197.0	12/14/2000	6/28/2001		Small	Commerce
28	Icobandas S.A.	4,520.0	3,840.0	680.0	5/2/2000	12/5/2000		Large	Manufacturing
29	Derilac S.A.	5,656.0	2,211.0	3,445.0	3/5/2001	10/26/2001	12/23/2003	Large	Manufacturing
30	Aceites comestibles del Sinu S.A.	17,217.0	7,987.0	9,230.0	9/15/2003	12/30/2003		Large	Agriculture
31	Nutrilisto de Colombia S.A.	38,136.0	24,458.0	13,678.0	9/15/2003	12/30/2003		Large	Manufacturing
32	Fabrica de Hilados y Tejidos del Hato S.A. Fabricato	451,987.0	323,005.0	128,982.0	3/3/2000	11/7/2000		Large	Manufacturing
33	Grupo Electrico S.A.	413.0	513.0	-100.0	3/18/2002	11/7/2002		Small	Other Services
34	Transportes Rapido Ochoa S.A.	8,115.0	7,089.0	1,026.0	2/9/2000	2/19/2001		Large	Transportation-communication
35	Tecnipotencias Tecpo LTDA	841.0	781.0	60.0	5/19/2000	1/19/2001	9/28/2001	Small	Construction
36	Agropecuaria La Laguna LTDA	811.0	508.0	303.0	9/11/2000	5/14/2001	11/5/2003	Small	Agriculture
37	Puntocol LTDA	722.0	845.0	-123.0	11/1/2002	12/1/2003		Small	Manufacturing
38	Educar Editores S.A.	8,007.0	5,816.0	2,191.0	3/2/2001	2/4/2003		Large	Manufacturing
39	Educar Cultural S.A.	17,262.0	8,588.0	8,674.0	3/2/2001	2/4/2003		Large	Manufacturing
40	Ingenieros Constructores Gayco S.A.	36,205.0	19,851.0	16,354.0	12/20/2000	12/12/2001	4/5/2002	Large	Construction
41	Expreso Bolivariano S.A.	34,212.0	38,117.0	-3,905.0	2/14/2002	6/6/2003		Large	Transportation-communication
42	Industria Colombiana de Harinas S.A.	5,672.0	3,841.0	1,831.0	10/11/2000	6/6/2001		Large	Manufacturing
43	Laboratorio Smart S.A.	6,802.0	3,669.0	3,133.0	7/6/2000	3/2/2001		Large	Manufacturing
44	Jeans and Jackets S.A.	14,861.0	12,405.0	2,456.0	1/15/2002	6/12/2003		Large	Manufacturing
45	Agroindustrial San Jose	2,959.0	1,699.0	1,260.0	6/23/2000	2/19/2001	4/16/2003	Medium	Agriculture
46	Laboratorios Cosmeticos Vogue-Visee S.A.	23,047.0	23,989.0	-942.0	8/4/2000	11/24/2000	9/8/2003	Large	Manufacturing
47	Fundacion Abood Shaio	80,298.0	37,754.0	42,544.0	4/14/2000	11/27/2000	12/5/2002	Large	Other Services
48	Conconcreto S.A.	145,854.0	90,054.0	55,800.0	8/30/2002	12/18/2003		Large	Construction
49	Compania Colombiana de Tejidos S.A.	762,672.0	491,692.0	270,980.0	3/15/2000	2/20/2001		Large	Manufacturing
50	Acerias Paz del Rio S.A.	570,713.0	329,373.0	241,340.0	6/23/2000	7/18/2003		Large	Manufacturing

Table A.1.2.:Companies in Liquidation

	Name	Assets (million pesos)	Liabilities (million pesos)	Equity (million pesos)	Starting Date	Signature Date	Modification Date	Liquidation Date	Size	Economic Sector
1	Luis Soto Proyectos S.A.	1,240.0	778.0	462.0	4/12/2000	10/31/2000	10/11/2001	9/19/2002	Small	Construction
2	Compania productora de Television S.A.	2,852.0	3,230.0	-378.0	8/4/2000	3/30/2001		4/23/2003	Medium	Transportation-communication
3	Alimentos Nacionales Pinky	6,414.0	11,711.0	-5,297.0	12/14/2000	8/10/2001		12/27/2002	Large	N.A.
4	Identicar de Colombia LTDA	439.0	928.0	-489.0	2/9/2000	10/9/2000		9/10/2002	Small	Other services
5	Fabrica de Calzado Hevea C.I.S.A.	4,106.0	3,941.0	165.0	12/1/2000	7/30/2001		9/12/2002	Large	Manufacturing
6	La Moda Alemana y Compania LTDA	693.0	833.0	-140.0	1/29/2001	10/1/2001	8/12/2002	1/29/2003	Small	Commerce
7	Alfatecnica S.A.	2,562.0	3,520.0	-958.0	9/11/2000	5/18/2001		1/23/2004	Medium	Commerce
8	En Vivo S.A.	10,904.0	10,917.0	-13.0	5/23/2000	1/25/2001		6/22/2001	Large	Transportation-communication
9	Compania colombiana de Citricos S.A.	2,160.0	3,516.0	-1,356.0	4/30/2001	5/21/2002		4/23/2003	Medium	Manufacturing
10	Florecer LTDA	1,136.0	719.0	417.0	2/27/2001	11/4/2001		10/3/2003	Small	Agriculture

Source: Superintendence of Companies.
Exchange Rate: COL$2705 pesos/US$ dollar (2004).

APPENDIX 2

STAKEHOLDER COALITIONS TO APPROVE RESTRUCTURING AGREEMENTS

To analyze which groups of stakeholders had key roles in approving restructuring agreements, I arranged coalitions of those groups that could approve the agreement together. For instance, if there was a case in which all groups had voting rights, but only some of them actually voted positive, I assembled a coalition formed only by those groups that voted positive and the sum of whose voting rights was more than 50% plus one of the total voting rights.

Table A.2.1. shows cases in which all stakeholders' groups had voting rights. The rows show the possible relevant coalitions (among three groups, as Law 550 states) that were able to approve the agreement. The columns show the participation of each stakeholders' group in all coalitions.

Table A.2.1.: Coalitions among 5 Groups with Voting Rights

Coalitions	Shareholders	Workers	Government	Secured Creditors	Unsecured Creditors	Total
All stakeholders	6	6	6	6	6	**6**
W-G-SC-UC		4	4	4	4	**4**
S-G-SC-UC	5		5	5	5	**5**
S-W-SC-UC	5	5		5	5	**5**
S-W-G-UC	1	1	1		1	**1**
S-W-G-SC	1	1	1	1		**1**
G-SC-UC			1	1	1	**1**
W-SC-UC		4		4	4	**4**
W-G-UC		1	1		1	**1**
W-G-SC						
S-SC-UC	2			2	2	**2**
S-G-UC	3		3		3	**3**
S-G-SC						
S-W-UC	2	2			2	**2**
S-W-SC	3	3		3		**3**
S-W-G	1	1	1			**1**
Total	**29**	**28**	**23**	**31**	**34**	**39**

Source: Restructuring-agreements files. Calculations by the author.

S: Shareholders

W: Current and Retired Workers

G: Government and Social Security Institutions

SC: Secured Creditors

UC: Unsecured Creditors

Table A.2.2. shows the cases in which only four stakeholders' groups had voting rights. The rows show the group that does not have voting rights. The columns show the participation of each group in each coalition.

Table A.2.2.: Coalitions among 4 Groups with Voting Rights

	Shareholders	Workers	Government	Secured Creditors	Unsecured Creditors	Total
No Workers	1		2	5	5	**5**
No Government	1	1		1	1	**1**
No S. Creditors	1		1		1	**1**
No U. Creditors	1	1		1		**1**
Total	**4**	**2**	**3**	**7**	**7**	**8**

Source: Restructuring-agreements files. Calculations by the author.

There is one case in which only three groups had voting rights. The coalition was Shareholders, Government and Unsecured Creditors. Finally, there is one case with two groups with voting rights. The coalition was Shareholders and Secured Creditors.

APPENDIX 3

RESTRUCTURING CONDITIONS WITH STAKEHOLDERS

This Appendix describes the main restructuring conditions that each company agreed to with each group of stakeholders. The columns show the conditions of the time-limit for debt rescheduling (in months), the dead time of payments (in months) and other considerations, like debt-equity swaps, payment with firm's assets, better payment conditions, etc. The numbers on each row represent each firm, as in the tables in Appendix 1.

Table A.3.1.: Restructuring with Current and Retired Workers

Firm	Time-limit	Dead Period	Interest Rate	Special Considerations	
1	12			No annual increment of salaries	Extralegal benefits have to be paid in 8 months without no increment
2	15		Civil Law		
3	N.A.	36	CPI		
4					
5					
6	18		Civil Law		
7					
8	0.5		CPI		
9	12		DTF+9%	Debt-to-Equity Swap	
10	12		Civil Law		
11					
12	4				
13	6				
14	4				
15	12	12			
16	0			Debts will be paid when they be caused	
17					
18	48	24	DTF+4.5%	Interest Rate cannot be less than CPI g.r. and more than CPI+7%	
19	36	12	CPI		
20	12		DTF+4%	Foreign Debts Interest Rate: LIBOR+4%	
21					
22	24			Payment when there be cash flow	
23	60	24	Civil Law		
24	0			Payment when there be cash flow	
25					
26					
27	3				
28	6		CPI		
29	0.5	0.5			
30	6				
31	6		DTF		
32	0			Payment when there be cash flow	
33	0			Payment when there be cash flow	
34					
35	12				
36	2	2			
37	54	48	CPI		
38	8	4			
39	8	4			
40	4	4			
41	0			Payment when there be cash flow	
42					
43	12	12	CPI		
44	24	6	DTF		
45	12				
46	4			Payment with the firm's assets or bonds	
47	1				
48	0.3		DTF	Creditors will give new money to the firm. These debts will be paid 10 days after that this money enters to the firm's accounts.	
49					
50	84	24	CPI	No increment of extralegal benefits	Debt-to-Equity Swap

Table A.3.2.: Restructuring with Government-Fiscal Institutions

Firm	Time Limit	Dead Period	Interes Rate	Special Considerations
1	36		1.56% per month	Payment with firm's assets
2	42		DTF	
3	60	24	CPI	
4	18		CPI	
5	24	24	DTF	
6	84	24	Tax Law	
7				
8				Payment with firm's assets
9	2			
10	36	6	DTF	
11	36	24	DTF	
12	24		DTF+5%	
13	6		DTF	
14	24		DTF+5%	
15	24	24	DTF+5%	
16		7	DTF	
17	18	12	DTF	
18	54	48	DTF+4.5%	Interest Rate cannot be less than CPI g.r. and more than CPI+7%
19	36	12	Increasing*	*CPI during the first year, DTF the next years
20	12		DTF+4%	Foreign Debts Interest Rate: LIBOR+4%
21				
22	120	24	DTF	
23	84	60	Tax Law	
24	12	6	Tax Law	
25	60		CPI	
26	48	6	Increasing*	* First 3 years: DTF, next 3 years: DTF+6%, more than 6 years:DTF+5%
27	42		Increasing*	* First 3 years: DTF, next 3 years: DTF+6%, more than 6 years:DTF+15%
28				
29	7	7	Tax Law	
30	9		DTF	
31	9		DTF	
32	120	24	Increasing*	* First 3 years: DTF, next 3 years: DTF+6%, next 3 years: DTF+15% and last year DTF+30
33				
34				
35	72		Increasing*	* First 3 years: DTF, next 3 years: DTF+6%, more than 6 years:DTF+15%
36	6			
37	N.A.	60	CPI	Payment with firm's assets
38	24		DTF+5%	
39	24		DTF+5%	
40	4	4		Payment with firm's assets
41			Tax Law	
42				
43	60	7	CPI	
44	30	24	Increasing*	* First 4 years: DTF, next year: DTF+6%
45	24	16	DTF	
46	84		DTF+3%	
47	36		2.26% per month	
48	0.3		DTF	Creditors will give new money to the firm. These debts will be paid 10 days after that this money enters to the firm's accounts.
49	120	24	Increasing*	* First 3 years: DTF, next 3 years: DTF+1.06%, next 3 years: DTF+1.15%, last year:DTF+1.3%
50	120	24	CPI	

Table A.3.3.: Restructuring with Social Security Institutions

Firm	Time Limit	Dead Period	Interes Rate	Special Considerations
1	60			
2				
3	60	36	CPI	
4				
5				
6				
7	60	24		
8				
9				
10				
11				
12				
13				
14				
15				
16				
17	84	36	Increasing*	* First 3 years: DTF, next 4 years: DTF+6%
18	48	24	DTF+4.5%	Interest Rate cannot be less than CPI g.r. and more than CPI+7%
19	36	24	Increasing*	*CPI during the first year, DTF the next years
20	12		DTF+4%	Foreign Debts Interest Rate: LIBOR+4%
21				
22	24		Civil Law	
23	36	24	Tax Law	
24	12	6	N.A.	
25				
26				Payment with Firm's assets
27	60	12	Increasing*	* First 3 years: DTF, next 3 years: DTF+6%, more than 6 years:DTF+15%
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38	24		DTF+5%	
39	24		DTF+5%	
40	4	4		
41				
42				
43			CPI	
44	24	6	DTF	
45	24	16	DTF	
46	24	12	CPI	
47				
48	0.3		Civil Law	Creditors will give new money to the firm. These debts will be paid 10 days after that this money enters to the firm's accounts.
49				
50	84	24	CPI	

Table A.3.4.: Restructuring with Secured Creditors

Firm	Time Limit	Dead Period	Interes Rate	Special Considerations
1	84	36	CPI	
2	240	144	DTF+6%	
3	120	96	CPI	
4				
5				
6	180		50% of CPI	
7	72	12	Increasing*	*First two years: CPI+2%, next two years:CPI+6.5%, last two years: CPI+8%
8	120		CPI	Payment with firm's assets
9	84	12	DTF+3%	Payment with firm's assets
10	180	36	DTF	
11	6			Payment with firm's assets
12	120		Increasing*	*First 4 years: DTF+1%, next 2 years: DTF+2%, next 2 years: DTF+3%, last 2 years: DTF+5%
13	180	48	DTF	Payment with firm's assets
14	120		Increasing*	*Increasing rate from DTF+1% to DTF+5%
15	96	84	CPI	
16	60	12	Increasing*	* First 2 months: DTF, next 10 months: DTF+2%, last 4 years: DTF+5%
17	144	24	10% UVR	
18	69	54	DTF+4.5%	
19	84	48	Increasing*	*CPI during the first year, DTF the next years
20	48	12	Increasing*	* First year: DTF+4%, next 2 years: DTF+3%, last year: DTF+5%
21				
22	228	120	DTF	
23	192	72	CPI	
24	60	60	N.A.	
25	180	96	Increasing*	*First 8 years: 0%, next years: CPI+5% Debt-to-Equity Swap
26	48		Increasing*	* First 3 years: DTF, next years: DTF+5%
27	84	24	Increasing*	* First 3 years: DTF, next 3 years: DTF+6%, more than 6 years:DTF+15%
28	48	24	Increasing*	* First 4 years: DTF+4%, next years: DTF+5%
29	120	48	CPI	
30	180	48	DTF	
31	180	48	DTF	
32	240	60	50%DTF	Posible Debt-to-Equity Swap, up to 60% of the total debt
33	24	24	CPI	
34				
35	72		CPI	
36	24	12	CPI	A third part can pay the firm's debts with secured creditors
37	60		N.A.	
38	120	24	Increasing*	*Increasing rate from DTF+1% to DTF+5%
39	120	24	Increasing*	*Increasing rate from DTF+1% to DTF+5%
40	114	30	N.A.	Payment with firm's assets
41				
42	102	30	DTF+2%	Payment with firm's assets
43	N.A.		CPI	
44	90	48	DTF	
45	84	36	Increasing*	*Increasing rate from DTF+1% to DTF+5%
46	84		DTF	Payment with firm's assets or bonds
47	108	60	DTF+2%	
48	132	132	DTF	Creditors will give new money to the firm. Payments with firm's
49	240	120	50% DTF	
50	120	48	CPI	

Table A.3.5.: Restructuring with Unsecured Creditors

Firm	Time Limit	Dead Period	Interes Rate	Special Considerations
1	60	24	CPI	For debts less than COL$2 million pesos, payment must be when the agreement is signed
2	84		0	Debts less than COL$2 million: time-limit 1 year; debts between COL$ 2 million and COL$60 million: time-limit 2 years
3	120	108	CPI	
4	42			
5	120	24	DTF	
6				Debt-to-Equity Swap
7	24		0	
8				
9	84	12	DTF+3%	
10	84	48	DTF	
11	60		0	Payment with firm's assets
12	120	36	N.A.	
13	N.A.			
14	120	36	N.A.	
15	N.A.	108		
16				* Previous conditions are hold after agreement
17	84	60	DTF	
18	96	69	DTF+4.5%	
19	84	48	Increasing*	*CPI during the first year, DTF the next years
20	60	24	Increasing*	* First year: DTF+4%, next 2 years: DTF+3%, last year: DTF+5%
21				
22				
23				
24	60	N.A.	N.A.	Debts less than COL$500 thousand pesos: time-limit 2 years; between COL$500 thousand and COL$6 million: time-limit 3 years
25	180	96	Increasing*	*First 8 years: 0%, next years: CPI+5% Debt-to-Equity Swap with better payment conditions
26	60		Increasing*	* First 3 years: DTF, next 3 years: DTF+6%, more than 6 years:DTF+15% Prioritary creditors time-limit: 2 years
27	12		0%	
28	6		CPI	
29	48	12	CPI	Debt less than COL$3 million: payment just after the agreement is signed; debts between 3 and 10 million: time-limit 1 year
30				Payment with firm's assets
31				Payment with firm's assets
32				
33	24	24	CPI	
34				
35	N.A.	N.A.	CPI	New money from a client
36	N.A.	36	CPI	
37	96	72	N.A.	Better conditions to those suppliers with key output for the firm
38	120	36		Payment with firm's assets
39	120	36		Payment with firm's assets
40	114	30		Payment with firm's assets
41				
42				
43	7	7	CPI	Debt less than COL$10 million: time-limit 7 months
44	90	48	DTF	
45	84	36	Increasing*	*Increasing rate from DTF+1% to DTF+5%
46	24	12		
47	48	12	CPI	Debt-to-Equity Swap
48	144	132	DTF	If unsecured creditors hold their loans, the firm will start to pay after 6 years the agreement is signed.
49	240	120	50% DTF	Debt to Equity Swaps Reduction of time-limit to 120 months for new loans
50	120	48	CPI	Debt to Equity Swaps

Table A.3.6.: Restructuring with Shareholders

Firm	Time Limit	Dead Period	Interes Rate	Special Considerations
1				
2				New money from shareholders
3				
4				New money from shareholders and payment with bonds
5				
6				New money from shareholders and issuing of shares
7				Payment with firm's assets
8				Payment with firm's assets
9				Payment with firm's assets
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				Payment at the end of the process, no interest payments
20				Payment at the end of the process, no interest payments
21				
22				
23				
24				
25				
26				
27				
28				Only dividends payment
29	48	12	CPI	Payment at the end of the process, no interest payments
30				Payment at the end of the process, no interest payments
31				Payment at the end of the process, no interest payments
32				No dividends payment
33				
34				
35				
36			CPI	Payment at the end of the process
37				
38				
39				
40				Payment at the end of the process
41				
42				
43				
44				
45				
46	84		CPI	Payment at the end of the process with bonds
47				
48				
49				
50				No dividends payment

Firms in Liquidation Process

Table A.3.7.: Restructuring with Workers and Retired People

Firm	Time-limit	Dead Period	Interest Rate	Special Considerations
1	10			
2				
3	12	12	Previous to the agreement	
4				
5	60	12	0%	
6	19	15	CPI+2%	
7	72	24	DTF+5%	
8				
9	3		0%	
10	3		0%	

Table A.3.8.: Restructuring with Government-Fiscal Institutions

Firm	Time Limit	Dead Period	Interes Rate	Special Considerations
1	0.3		Tax Law	33% of debt must be paid just after the agreement is signed
2				
3	60	12	DTF	
4	22	12	Tax Law	
5	48		CPI	
6	39	28	CPI+2%	
7	72	24	DTF+5%	
8				50% with services (TV advertisement), 50% with cash
9	12		DTF	
10	36		CPI	

Table A.3.9.: Restructuring with Social Security Institutions

Firm	Time Limit	Dead Period	Interes Rate	Special Considerations
1				
2				
3	12	12	Previous to the agreement	
4	24		Tax Law	
5	30	6	CPI	
6				
7	72	24	DTF+5%	
8				50% with services (TV advertisement), 50% with cash
9				
10	36		CPI	

Table A.3.10.: Restructuring with Secured Creditors

Firm	Time Limit	Dead Period	Interes Rate	Special Considerations
1	48		DTF	
2				
3	96	60	DTF+6%	
4	60	36	CPI	For debts less than COL$ 1 million: time-limit 24 months
5	84	36	CPI	
6				
7	72	24	DTF+5%	
8				50% with services (TV advertisement), 50% with cash
9	96		DTF+2%	
10	48	12	CPI	

Table A.3.11.: Restructuring with Unsecured Creditors

Firm	Time Limit	Dead Period	Interes Rate	Special Considerations
1	48		DTF	
2	48	12	N.A.	
3	96	60	DTF+6%	Payment with firm's assets
4	60	36	CPI	Payment with firm's assets; For debts less than COL$ 1 million: time-limit 24 months
5	84	36	CPI	Input Suppliers: time-limit: 54 months, interest rate: 0%
6	60	51	0%	
7				
8				50% with services (TV advertisement), 50% with cash
9	96	12	DTF+3%	Payment with firm's assets
10	24		0%	

APPENDIX 4

Table A.4.1.: Present Value and Piecemeal Value of Firms in Restructuring or Liquidation Processes

In Restructuring Process	Length of Agreement (years)	Present Value (thousand of COL$ pesos)	Piece-Meal value (thousand of COL$ pesos)	Present Value>Equity Value
Aceites Sin	19	667,258	2,286,603	no
Nutrilisto	19	8,130,420	9,699,541	no
Vogue	8	17,705,524	-7,790,367	yes
Alberto Ochoa	9	52,714,977	1,028,598	yes
R? ido Ochoa	9	52,714,977	357,211	yes
Icobandas	7	11,331,368	4,786,144	yes
Avites	18	2,662,092	22,921,328	no
Danaranjo	10	10,373	9,700,991	no
Carib? Internacional	15	4,765,004	-1,777,351	yes
Casa Color	11	1,440,670	657,014	yes
Ingenieros Consultores S.A.	8	1,741,982	64,236	yes
Arotec	6	1,687,297	316,409	yes
Ingenieros constructores GAYCO S.A.	9	19,779,501	17,546,303	yes
Automotora de Oriente	6	90,007	-348,323	yes
Coltejer	23	364,353,235	258,608,367	yes
Hotel Port? de Oviedo	9	1,972,279	7,504,931	no
Andes TV	4	2,524,386	345,932	yes
Derilac	7	2,483,517	3,723,670	no
Hotel Sta. Clara	24	117,607,861	11,930,136	yes
Colchones El Dorado	11	40,636,788	1,754,264	yes
Ford y Chevrolet	11	2,804	157,694	no
Educar S.A.	11	4,385,019	-872,547	yes
Educar Venta Directa	11	19,340,794	-3,710,367	yes
Educar Editores	11	67,125,482	619,597	yes
Educar Cultural	11	67,125,482	3,918,048	yes
Plastihogar	11	12,255,961	-8,009,381	yes
Pizano	14	117,031,064	96,647,929	yes
Jeans and Jackets	6	12,704,808	423,321	yes
Agroindustrial San Jos	10	1,635,394	-180,060	yes
Conconcreto	13	29,779	49,314,437	no
Mundiven	7	278,689	-940,780	yes
In Liquidation				
Luis Soto Proyectos	5	236,003	420,420	no
Alimentos Nacionales PINKY	11	8,138,973	-4,857,471	yes
Fabrica de Calzado Hevea	7	460,548	-985,819	yes
La moda alemana	15	3,662,352	-847,151	yes
Alfat? nica	6	3,097,107	-958,000	yes

Source: Restructuring-agreements files. Calculations by the author.

The DTF interest rate used to calculate the present value of these companies was the observed DTF interest rate from 2000 and 2004 (12.1%, 12.4%, 8.9%, 7.8% and 7.9%, respectively). For the next years, I assumed no large changes in that interest rate, so it is equal to the 2004 DTF's interest rate. It should be pointed out that these rates are less than those used in the forecasting process by the companies' managers.