



JUDICIAL REORGANIZATION OF BRAZILIAN FIRMS: THE INSTABILITY OF CREDITORS COMMITTEES

.Resumo

Este artigo utiliza metodologia de direito e economia para apresentar modelo teórico construído a partir do ferramental disponibilizado pela teoria dos jogos. O modelo é desenhado com o objetivo de analisar as estratégias para tomada de decisão de devedores e credores sobre o pedido de falência e recuperação da empresa em crise no Brasil. As estratégias sugeridas pelo modelo são comparadas às alternativas existentes na lei brasileira de falências e recuperação de empresas (Lei n. 11.101/2005).

O modelo proposto é estruturado de acordo com a teoria da escolha racional e a teoria dos jogos. Analisam-se os principais interesses envolvidos, limitados às restrições existentes, que reduzem as escolhas dos agentes.

Estudamos também os comportamentos de devedor e credores, resumidos a três possibilidades: estabelecimento de negociações privadas, falência e recuperação da empresa. Compreendem-se as decisões mais prováveis e também os possíveis erros na tomada de decisão, influenciados pelos interesses dos agentes, restrições econômicas e imposições legais.

Apontamos os problemas de revelação de informações, as decisões tomadas em assembléia de credores, os efeitos das decisões e propõem-se soluções para os principais problemas, sempre com base nos conceitos da teoria dos jogos e na teoria do desenho de mecanismos.

Detalhamos as assembléias de credores que decidem pela aprovação ou rejeição do plano de recuperação da empresa em crise, bem como a divergência entre a decisão eficiente e a efetivamente tomada pelos agentes. Demonstramos que as decisões assembleares são mecanismos instáveis que aumentam a incerteza a respeito da distribuição de ativos da empresa em crise.

Palavras-Chave: Reorganização judicial; falência; insolvência; análise econômica do direito; teoria dos jogos; teoria do desenho de mecanismos.

Key Words: Judicial reorganization; liquidation; insolvency; economic analysis of law; game theory; mechanism design theory.

1. Introduction¹

Legislators and policymakers claim that the new Brazilian Bankruptcy Law (BBL, law n. 11.101/2005) is capable of reorganizing a distressed but efficient firm, and of liquidating an inefficient business. They argue that the law is a well designed mechanism capable of maximizing market efficiency, reducing costs and improving market stability, since it preserves firms and jobs. They also affirm that the creditors are capable of making such decision, maximizing the well-being for all players.

This paper analyses if such argument is valid. We use a law and economics approach to study the legal incentives to reorganize a distressed firm, and discuss the reasons why the creditors' committees are not always capable of making efficient decisions.

2. Brazilian Bankruptcy Law (BBL) Overview

After almost 12 years of discussions, the new Brazilian Bankruptcy Law finally replaced the old decree-law n. 7661, of 1945. The decree-law was incapable of meeting the demands of Brazilian marketplace, since it permitted only two alternatives for distressed firms: liquidation or the implementation of an enterprise restructuring clause ("concordata") that did not include all kinds of debts. The consequence was that the old decree-law dissatisfied both debtors and creditors, and many "work-around" strategies were taken to bypass the decree-law.

The new bankruptcy law was approved in 2005 in order to minimize this problem. The main characteristics of the new law are:

- It includes proceedings for reorganization, liquidation and other forms of agreements;
- It encourages out-of-court debt restructuring (direct negotiations between debtors and creditors) and provides alternatives for "extrajudicial reorganization", but, as well as the old decree-law 7761/45, it may not include all existing debts;
- It permits other forms of workouts and prepackaged bankruptcy agreements;
- It has special regimes for small and medium businesses;
- It eliminates the enterprise restructuring clause ("concordata");
- It focuses on commercial and industrial firms and does not apply to all kinds of firms, since it does not include financial institutions; government-owned companies etc.;

The main actors present in BBL are:

- Judge: Civil courts (not specialized) and/or Bankruptcy courts (specialized insolvency courts, in large cities);
- Judicial administrator: physical or moral person, hired in the marketplace (not a creditor) and responsible to manage the insolvency proceedings, guided by the judge;

¹ This article is a brief analysis, derived from a larger study, a dissertation presented in 2009 by the author. A full copy of the study (Portuguese version) can be requested to the author by email: fnimer@terra.com.br.

- Debtor: owner, controllership or administrator of the distressed firm;
- Creditors, a rigid division into three classes: workers; secured (senior) creditors; unsecured (junior) creditors. As a matter of fact, the unsecured creditor class is a combination of multiple subclasses of creditors with different levels of subordinated credits. For the purposes of this article, this class was simplified to ease the understanding of the proposed model.

The court reorganization proceeding refers to the fact that the plan is proposed exclusively by the debtor in 60 days, and there is no previous evaluation of the plan, performed by the judge or judicial administrator. The creditor cannot propose an alternative plan; he only suggests changes in the plan already proposed by debtor, and those changes require debtor's concordance. The plan can be cancelled by the debtor, if he has motivated reasons. The law also incorporates a so-called "Brazilian-style" cram-down, a mechanism that permits the judge to impose to all creditors the approval of a plan rejected by a minority of creditors.

Some other characteristics of the "Chapter 11-style" reorganization are:

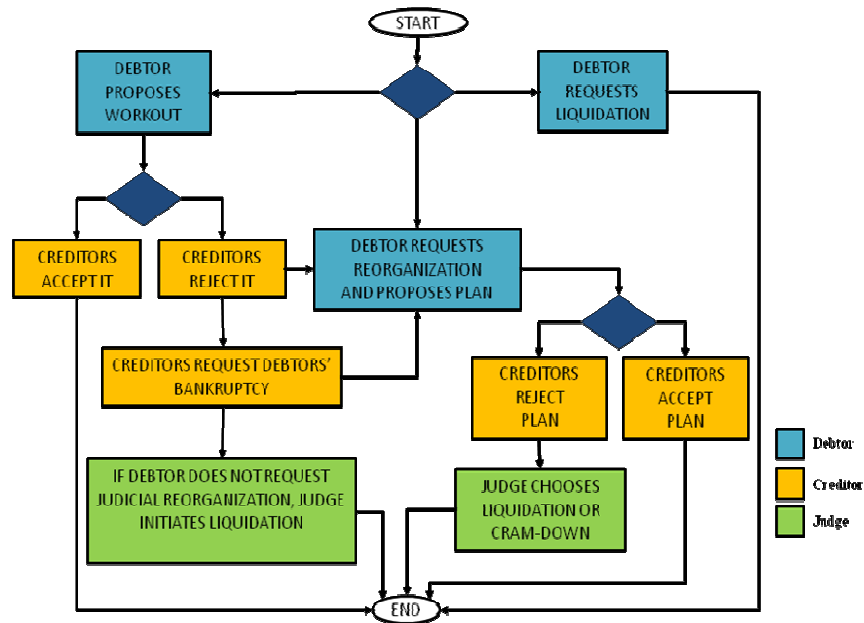
- Reorganization can only be proposed by the debtor;
- It is a debtor-in-possession lending model; in most cases, the debtor remains in control of the business;
- It includes a stay period of 180 days, in which all claims or actions against the debtor cannot be executed;
- Faster and less-bureaucratic verification of credits and claimants, if compared to the previous decree-law;
- Existence of multiple reorganization methods, including administrative, financial and structural changes in the distressed business;
- Prohibition to transfer previous labor debts to the new firm owners;
- No limits or deadlines for repayment: the debtor can propose a repayment plan that lasts many years;
- Faster liquidation of assets and anticipation of repayments to creditors, when possible;
- Priority to keep the firm as an integrated business, rather than selling it "piece-meal" in the market.

The new law also changed the approach for liquidation, with the objective to avoid the deteriorating assets and to preserve the organization of the business as much as possible. The main characteristics of the renewed liquidation proceeding are:

- It can be requested by the debtor or the creditors;
- Creditors have to present a minimum claims' value to apply for the liquidation of the debtor (40 times the value of minimum wage);
- Compared to the old decree-law, the new law changes the absolute priority rule; the new priority order privileges workers, secured creditors and tax claimants, rather than other creditors;
- Preservation of asset integrity and organization, when possible, meaning: i) no transfer of previous fiscal and tax obligations to the new owner; ii) selling the

firm as an integrated business rather than piece-meal.

We can state that the new law is a formal proceeding for organizing the negotiation process between creditors and debtors. The BBL dynamics is the following:



Bankruptcy is a non-cooperative game with incomplete and imperfect information, because there is a high level of uncertainty about the distribution of gains (or losses) and the creditors don't know the difference between efficient and inefficient firms.

Firms can be efficient or inefficient. An efficient firm experiences only short-term cash-flow problems, and the crisis is temporary; this firm should be reorganized. An inefficient firm has severe economic and financial problems, and the crisis tend to be permanent; this firm should be liquidated.

According to Brazilian law, the debtor remains in control of the distressed firm and the creditors are non-homogeneous groups incapable to self-organize. As a consequence, when voting a reorganization plan, the creditors' decisions may not be able to maximize the gains to all players. One of the main uncertainties about bankruptcy proceedings relates to not previously knowing the distribution of gains after voting.

Liquidation can be requested by both creditors and debtor, but reorganization is a privilege exclusively granted to the debtor. In liquidation, the request made by the debtor may indicate that the firm was poorly managed, but this may not be the case for reorganization. A single creditor can request the liquidation of the firm, and this attitude may be a strategy to force the debtor to negotiate and repay his claims in advance to try to avoid bankruptcy, deteriorating the firm's assets; in this case, the individual creditor is using the judicial proceeding to accelerate the repayment of his claims.

It is also possible that creditors and debtor establish private negotiations (workouts) in order to solve the crisis without using the judicial proceedings. It's a situation typically initiated by the debtor, because the creditors are not a previously organized group.

The debtor initiates the game and chooses between declaring his own bankruptcy (art. 105) and establishing negotiations with his creditors. He opts for the second

alternative, because the first option has no payoff and the debtor is not punished by not declaring bankruptcy. Creditors may also request for bankruptcy of the distressed firm (art. 94), before any tentative of private negotiations, but, within 10 days of notice, the debtor can (and will) request “conversion” into a judicial reorganization proceeding (art. 95). If the debtor does not apply for conversion, the judge is obligated to declare bankruptcy (art. 75).

If it's not the case for bankruptcy, a negotiation process is established and the debtor has to choose between negotiating the debts privately (workouts, art. 167) or by using judicial reorganization proceeding (art. 48). The decision is based on the nature of the debt, timeline and due dates, and financial alternatives available, among other reasons.

The debtor of the inefficient firm must try a workout in order to postpone liquidation, because the inefficiency of the firm is not solved by the agreement. If the firm does not succeed in obtaining an agreement, the debtor should propose a plan with low payment of debts, in order to bargain and try to transfer to creditors part of the risks related to continuing the business.

If the workout succeeds, the game ends, the gains established by the negotiations are distributed and the firm does not go bankrupted. If negotiations fail, the debtor must institutionalize the crisis by requesting a judicial reorganization, with the disadvantage of having revealed information to creditors in advance. Since the creditors are not allowed to request the reorganization of the firm or propose an alternative reorganization plan, they can only opt for two strategies: vote the plan proposed by the debtor, or request its liquidation (arts. 94, 95). Therefore, if negotiations fail, the creditors that do not prefer reorganization should rapidly request the liquidation of the firm.

In judicial reorganization, the debtor proposes the division of gains offering a reorganization plan. The creditors, divided into three committees, have two alternatives: approve it, or reject it. To be approved, the plan needs to receive favorable votes in two or more committees (arts. 41 and 45).

The game ends if creditors accept the plan. If they reject it, the judge may declare the liquidation of the firm (art. 56, §4º) or try to force the approval of the plan using two different strategies: (i) direct approval, by using the ‘cram-down’ clause (art. 58, §1º) rejecting the decision taken by a minority of creditors; (ii) indirect approval, by attributing positive value to the votes of absent creditors, if the quantity is sufficient to reach the majority of votes needed to approve the plan.

Some of the alternatives described above may not occur by various reasons. The most probable alternatives are described later.

3. Game-theoretic Analysis of BBL

The new law changes the incentives to debtors and creditors, affecting the distribution of gains and influencing the strategic decisions. BBL introduces the possibility of reorganization of firms, giving creditors the final word about the future of the distressed business, but also creates room for opportunism of agents.

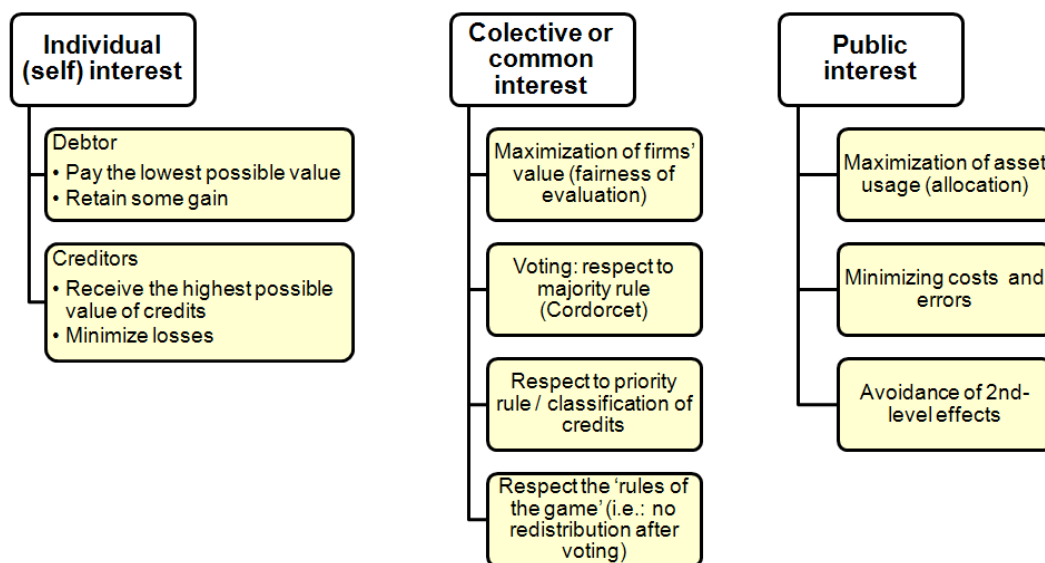
The crisis of a distressed firm has multiple aspects, but once established, the main incentives are related to revelation of information, voting sessions and the (re)distribution of gains (or losses).

Following the rational choice theory, debtors and creditors should have

preferences (interests), limited by **restrictions**, and then make **choices**. These characteristics are briefly described below.

The law should be able to align individual, collective and public **interests**. The individual interests are: for the debtor, pay the lowest value of debts; for creditors, recover the highest value of existing claims. The collective interests are: maximize firm's value; respect to majority rule; respect to absolute priority rule; no change in the "rules of the game" during the game. The public interest is represented as follows: maximize asset usage and allocation; minimize social cost of errors; avoid the existence of second level effects to the community that should not be affected by the bankruptcy case.

The conflicting interests can be resumed as follows:



Those interests are not aligned, and, as a consequence, the law is not designed to avoid type-I and type-II errors, i.e., reorganization of the inefficient firm, and liquidation of the efficient firm.

The main **restrictions** faced by the actors are related to the value of the distressed business, i.e., evaluation of assets that will be used to pay the claims. The higher the value, the more interested in negotiations the agents will be. There are three forms typically used for evaluation: i) judicial; ii) market; iii) directly by the agents involved with the case (debtors and creditors). Since the judges tend to dislike market evaluation and don't want to perform it directly, they rely on the parties to establish the firm's value, and, therefore, how much of the claims will be repaid. As a consequence, the reorganization plan can be seen as a proposal for negotiation, made by the debtor and approved (or rejected) by the creditors during the committees.

The **choices** are, then, the result of such negotiation process, represented by the game-theoretical model described below.

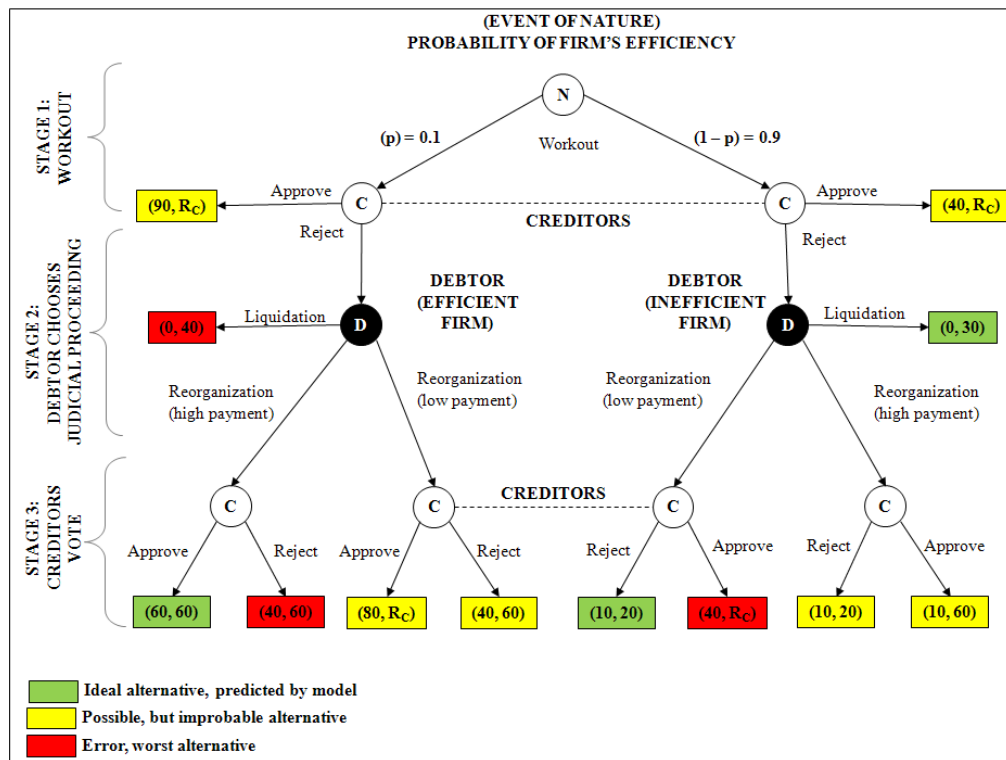
The model analyzes main incentives, constraints and strategies adopted by the debtor and his creditors, with special focus on the voting sessions (creditors' committees) that decide the future of the firm.

It is a non-cooperative game with incomplete and imperfect information, a three-stage game in which nature plays, followed by the debtor, and, then, the creditors. The

event of nature is the probability of the firm being efficient, asymmetric information known only by the debtor. Then the debtor plays, choosing between workouts, reorganization or liquidation of his firm. Later, creditors play, and choose between workout, approving the reorganization plan or rejecting it.

There are three strategic possibilities: to establish private negotiations (workouts); ii) liquidation of the distressed business; iii) judicial reorganization of the firm, with two alternatives: plan proposes high value of repayment of claims; plan proposes low value of payment, trying to transfer risks to creditors.

Based on the description of the BBL dynamics already presented (chapter 2), the complete game tree is shown below. The colors represent the author's evaluation about the alternatives: green indicates that the choice is ideal; yellow indicates a suboptimal choice, but possible to occur; red indicates an error or a wrong choice.



The creditors' committees are the main arena where the future of the firm is decided. This paper shows that, in many cases, the committees are an unstable mechanism that increases uncertainty, impeding the achievement of efficient decisions.

4. Consequences

The main problems not entirely solved by BBL are:

1) Adverse selection of firms

BBL does not eliminate filtering failure. The law permits the occurrence of errors, specially the type-I errors, i.e., the reorganization of an inefficient business.

When in doubt, BBL rules favor the reorganization of the firm. BBL and judges tend to reorganize firms submitted to proceedings, because it is difficult to differentiate efficient and inefficient firms.

As shown above, the inefficient firm tends to prefer the judicial proceedings, because it is the cheapest way to finance the firm and redistribute risks to creditors. The efficient firm will try to avoid BBL at all costs, because it is too costly to solve only short-term cash-flow problems.

2) Difficulties in revelation of information, specially about the value of the firm

The debtor knows more about the firm than the creditors and he privately owns the information necessary to making the decisions. There is an incentive to hide relevant information, affecting the interest of some creditors to negotiate the reorganization plan;

The accounting and financial reports requested by the law are insufficient to reveal information, and the study of firm's economic viability (art. 53) is also incomplete.

Since there is no secondary market to evaluate and sell the firm, and no punishment for the debtor who misconducts or proposes a false or unviable reorganization plan, there is an incentive to induce creditors in error and propose a plan that transfers risks to creditors.

We present a brief and incomplete set of reasons to support this conclusion: i) the asymmetry of information favors the debtor and the priority rule established by the law is an incentive to produce asymmetric information; ii) the debtor can produce an unviable reorganization plan; the viability of plan should be compared with a market evaluation, but this is difficult to obtain; iii) liquidation is a potential arena for fraud: the law only analyses possible frauds performed 90 days prior to the request for bankruptcy, becoming difficult to avoid unfair transfer of assets before that timeframe; iv) judges cannot change the rigidity of creditors' classes, treat different markets or industries differently, or adequate timelines of the proceedings to manage "real life" problems; v) the law does not enforce the use of modern evaluation methods to obtain the value of the distressed business, for example: DCF (discounted cash flow), multiples evaluation, option theory, impairment test etc.; vi) there are no rules to prevent agency conflicts when producing "independent" evaluations; vii) there are no rules (or prizes) to incentive the debtor to cooperate with the creditors; etc.

3) The creditors' committees are an unstable mechanism that negatively impacts the majority of creditors' classes;

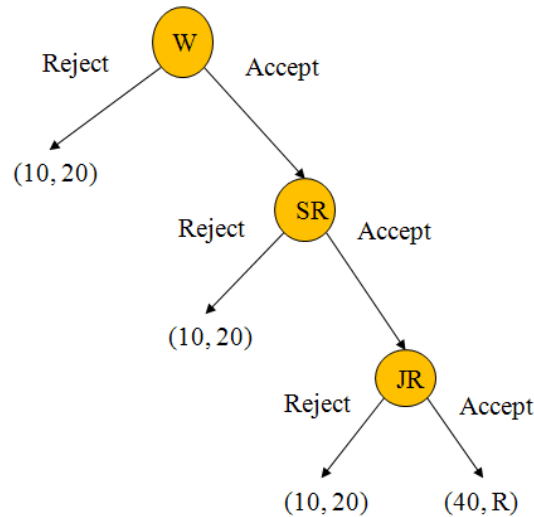
With respect to the creditors' committees, the model shows that it is a sequential game with incomplete information and communication of information between the committees. This negatively impacts the results, since it allows the influence of control groups and encourages the adoption of opportunistic behavior.

BBL (art. 37) states that all committees have to be managed by the judicial administrator. This makes all three voting sessions a sequential game. Art. 41 indirectly defines the sequence: workers vote first, followed by senior creditors and, then, junior creditors vote.

The creditors' classes are not homogeneous, and the creditors have to vote without knowing if the firm is efficient or not. Their best strategy is to reject any reorganization

plan that proposes insufficient payment of credits. The problem is that the strategy depends on each type of creditor and his position in the negotiation process, relatively to other creditors. Therefore, we cannot affirm that all creditors' interests are aligned.

The sequential game can be described as follows:



Each creditor's class behaves differently. According to the proposed model, we can affirm that, in many cases, the following strategies may be adopted:

- Workers (class I) vote first and tend to approve the reorganization plan to save jobs. The law protects their claims in both reorganization and liquidation, but the jobs are only saved in case of reorganization. Besides, the workers' employability matters in the decision-making: the more employability (ability to be hired by competition), the less interest the worker shows in preserving the firm.
- The law permits that senior creditors (class II) vote in two committees: in their own committee, by the value of their collaterals; in the junior creditors' committee (class III) by the remaining value of the credit, i.e., the difference between the value of claim and the value of collaterals. As a consequence, if they control his own committee and one third of total credit value in class III, they can control the final decision regarding the future of the distressed firm. Knowing that, these creditors will negotiate with the debtor to save, at minimum, the value of their collaterals, and, in return may decide in favor of the reorganization; in practice, they will force the debtor to increase their payoff in order not to vote for liquidation.
- Junior creditors (class III) are the most heterogeneous class, and have the lowest chance to receive any value in both reorganization and liquidation. This class congregates too many different subclasses of low-ranked creditors, with different priorities. They are deeply impacted by the reorganization proceedings. Their best option is to "free ride" and adopt a "strategic delay" approach, i.e., try to postpone the ending of the proceedings as long as they can, in order to try to retain some gain, imposing costs to other creditors and to the debtor. This strategy impedes the judicial procedure to finish rapidly, increasing the costs to all players, specially the other classes of creditors.

- 4) The judge can change the result of voting by the committees, increasing uncertainty for all players, since it allows the redistribution of gains after the decision is made by creditors;

BBL permits the judge to change the decisions taken by creditors, avoiding that a minority of creditors reject a valid decision. In the other hand, it creates room for opportunism of other agents.

There are two ways to change creditors' decision: i) direct form: implementation of a 'Brazilian-style' cram-down (art. 58); ii) indirect form: computing absence votes as positive (option not formally present in BBL).

The 'Brazilian-style' cram-down (art. 58) is a rule that permits the judge to change the creditors' decision, given a set of predefined conditions. The problem is that the rule is not completely designed to prevent opportunism. If well-designed, the rule should guarantee three conditions: i) unfair discrimination (similar claims receive similar treatment); ii) fair and equitable plan (pay the prioritized creditors first); iii) best-interest test (avoid treating differently the creditor who voted against the plan). Only the first condition is formally present in BBL.

As a consequence, cram-down is a credible threat, since it permits a distribution of gains after voting, based on rules not entirely clear to all players. Besides, cram-down happens too late in the proceedings, when too many costs have already incurred. Also, Brazilian judges tend not to anticipate their intention to declare a cram-down, turning it a non-observable event. According to game theory, a credible threat should be previously observable and irreversible, following a sub-game perfection condition.

We can argue that no discrimination rule is better than other. A good rule is predefined and does not change during the game. The results may be different than expected, but they are not "unfair" to players, since it is known before taking the decision (voting). According to BBL rules, players can be surprised by a change in decision, based on a cram-down rule that does not follow the three basic conditions stated above.

The indirect form of changing creditors' decision is by computing the absence votes as positive. This is not formally ruled by BBL, but it can happen, based on recent court decisions.

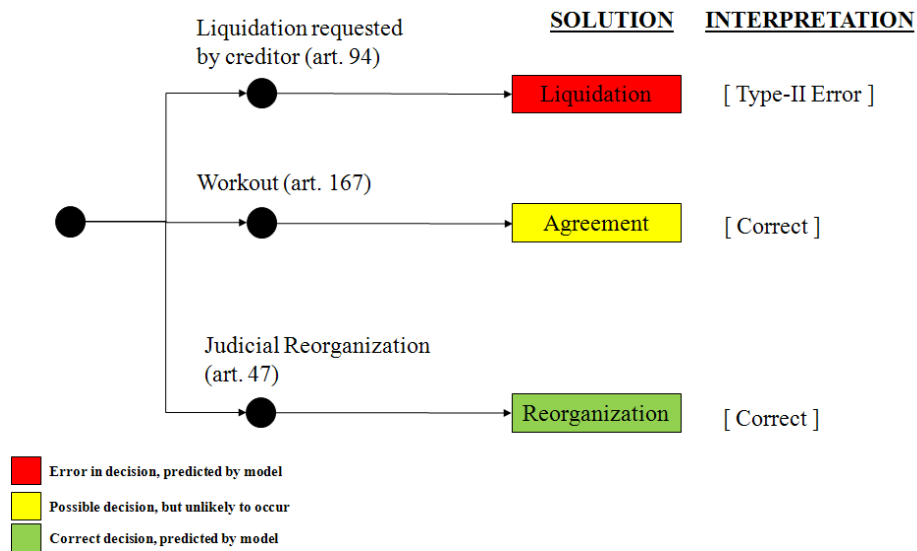
Some recent court decisions state that the intention of BBL is to preserve firms and the absence of a creditor means that he is not interested in the result of voting. These decisions state that the reorganization plan is a contract between debtor and creditors and, when in doubt, the law should preserve the effects of a contract, i.e., preserve the distressed firm.

Our opinion is different. A reorganization plan is not a complete contract until creditors approve it, and that happens only after the voting in the committees. Also, the absence of creditors may not indicate that the creditor is indifferent to the results of voting: a creditor may be present and do not vote; he may also be absent, using a strategy of not voting. Finally, liquidation of a firm is also a way to preserve firms, i.e., all the other firms rather than the distressed firm; these are firms that should not suffer the effects of maintaining a distressed firm in the marketplace.

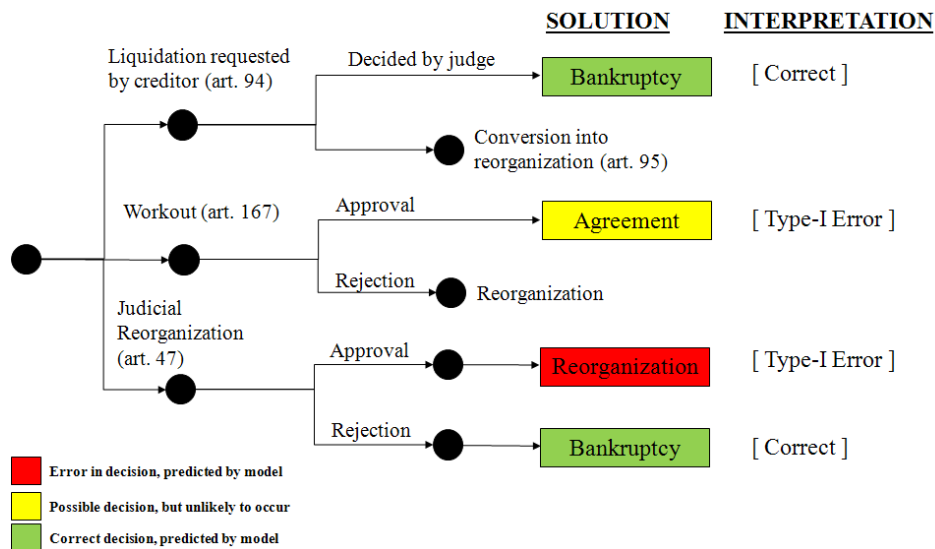
5. Observable Choices

The proposed model describes in detail the behavior of creditors' classes. The description of BBL dynamics was presented above.

For the crisis of the efficient firm (temporary crisis), the model predicts that the best solution is the is to avoid the BBL proceedings at all costs, and, if forced to be submitted to judicial reorganization, to propose a reorganization plan with high payment of credits, signaling the efficiency of the firm. The sub-optimal solution is a workout, because it can be difficult to organize all creditors necessary to avoid the reorganization. The solution in error (type-II error) is liquidation of an efficient firm (see decision tree).



For the crisis of the inefficient firm (structural crisis), the model predicts that the preferred strategy is to make opportunistic use of the judicial proceedings, proposing a reorganization plan with low payment of credits, a bargain strategy to transfer risks to creditors. Liquidation should be an optimal solution in this case, but is not chosen by the debtor, but can be made by the creditors and the judge. Reorganization of this firm is a type-I error (see decision tree below).



The debtor has always an alternative to bargain and try to offer low payment, but the debtor of an efficient firm can risk the rejection of a reorganization plan by doing that.

The model also shows that the debtor is not likely to declare its own bankruptcy, because he has no punishment by not-doing that, and, also, a reorganization plan is a cheaper way to transfer risk to creditors.

Uncertainty increases debtor's appetite for risk, because it permits the reallocation of risks to creditors. Once there is no secondary market for financing reorganization in Brazil, the best way to reorganize is to use creditors' money. Creditors will have difficulties in discriminating efficient and inefficient firms.

The value of the distressed firm matters, since the interest to negotiate depends on the value, i.e., it defines the possibility of receiving any repayment of claims. The creditors have to screen the firm to make a decision. One way to do that is by looking at the proposal of payment of the claims, made by the debtor. Creditors can do that is by using Bayes Theorem: to evaluate the level of payment (low or high) based on the probability of the firm being efficient. In any case, a dominant strategy for creditors is to reject a reorganization plan that offers low payment of claims, because it can be interpreted as a signal of the firm's inefficiency.

6. Concluding Remarks

According to Mechanism Design Theory, we can argue that:

1. The law is not an "incentive-compatible" direct mechanism, since it does not follow the "revelation principle"; the principle states that the law is "incentive-compatible" if the revelation of private information is a dominant strategy to the debtor; according to BBL rules, this condition rarely occurs, because the law does not punish the debtor who hides relevant information;
2. The law does not function as a complete "message center", since it does not aggregate all relevant messages regarding agents' preferences; there is relevant information not revealed by the judicial proceeding; instead, it can be known during private negotiations between the debtor and well-informed creditors. As a consequence: i) private negotiations between debtor and some creditors can occur; ii) the law does not prevent all possible forms of fraud nor the transfer of assets before the declaration of judicial reorganization, among other issues;
3. The law does not follow the basic rules of Implementation Theory, since: i) it permits "veto" power of agents, for example, the debtor may not approve changes in the plan, proposed by creditors; ii) it does not follow the "monotonicity" rule (alternatives does not change in the preference order), since a change in the "absolute priority rule" affects the interest to negotiate; iii) it does not maximize the gains to all players, increasing the overall cost of reorganizing distressed firms.

The law made some improvements, if compared to the old decree-law of 1945. But the model demonstrates that BBL is not entirely capable of delivering the promises made by policymakers, and the creditors' committees are an unstable mechanism that increases the uncertainty about the future of the distressed firm.

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