

WORKING PAPER

**Tailor-made reorganization:  
How choosing between procedures affects efficiency**

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## ABSTRACT

Following international trends, the 2009 reform of the Belgian insolvency system aimed to increase flexibility in corporate reorganizations, adding distinct procedure choices and the option to switch between procedure types. We evaluate the efficiency of the system using multinomial logit models to unveil which factors drive a firm's decision when it can choose from different procedures to handle distress. In a system where managers receive a large degree of discretion in their decision-making, correct self-selection forms an important prerequisite for the well-functioning of the insolvency system. Although we find that within the subset of reorganizations, the most promising firms indeed target their reorganization at reaching settlements, while the liquidation-like transfer procedure is more popular among firms in less favorable shape, the financial health of firms entering reorganization is very poor even when compared to firms filing for liquidation. Cognitive biases disturbing rational decision-making by distressed firms' management and the law's potential for abuse explain this suboptimal situation. With a lack of incentives to intervene timely, limited assistance and guidance to distressed debtors and insufficient admission requirements, pre-entry screening and discriminatory power for judges, some critical prerequisites for a flexible reorganization system appear to be absent. Major revisions to the system may be required to justify the existence of a (flexible) dual-chapter reorganization system in a bank-oriented economy like Belgium.

*JEL classification:* G33, G34, K20, M10

*Keywords:* Bankruptcy, liquidation, restructuring, managerial decision-making

## **1. Introduction and background**

After the introduction of the Chapter 11 reorganization procedure as a complement to Chapter 7 bankruptcy in the United States, many countries have adopted similar changes to their insolvency systems to offer distressed firms alternative ways to handle their difficulties as to dismantle the entire firm through a traditional liquidation procedure. The exact implementation of these complementary procedures, however, differed considerably across countries, even within the European Union, and has been subject to numerous changes over the years. As a consequence, legal systems vary in the degree of flexibility they offer to restructuring firms and the debate about the optimal design of insolvency legislation remains ongoing (Brouwer, 2006; Couwenberg, 2001; Kaiser, 1996). Furthermore, the situation for entrepreneurs in the US does not perfectly match to, for instance, the European context. While failing is sometimes considered an essential step throughout an entrepreneur's career to learn from the failure's mistakes in a later, more successful venture in the US, the European business culture is often characterized by the stigma that failure results from preventable mistakes by the entrepreneur for which he or she deserves a punishment (Wang, 2012). Although most policymakers in Europe recognize this attitude as a potential obstacle for successful reorganizations, insolvency procedures still include preferential treatments that ensure that public claimants are among the first creditors to recover their claims, thereby reducing the recovery rates of other creditors and investors and, hence, hampering the willingness of these private parties to show forgiveness towards the debtor (Morgan, 2000). In addition, the role of debt financing provided by a limited number of financial institutions is more pronounced in the European context, whereas in the US, financing is more dispersed, allowing for a more debtor-oriented reorganization system (Ravid & Sundgren, 1998). While various studies have documented the pros and contras of the US Chapter 11 system (Bris, Welch, & Zhu, 2006; Denis & Rodgers, 2007; Fisher & Martel, 1999; LoPucki, 1993; Warren & Westbrook, 2008; White, 1994), the value of flexibility in procedure choice for reorganization systems in Europe remains subject to debate. In this study, we aim to clarify the effect of a large degree of flexibility on the efficient functioning of a country's insolvency system. With its reorganization framework consisting of three different court-supervised procedure options plus a traditional liquidation procedure, the Belgian insolvency system forms a perfect setting for our research question.

Following other European countries, Belgium introduced a Chapter 11-style dual-chapter insolvency system by the enactment of the Law on Judicial Composition (*LJC*) in 1997. This new law acted as the complement of the former bankruptcy legislation by offering distressed firms the possibility to restructure through a formal court procedure in which they were granted protection and guidance, as an alternative to the more radical liquidation bankruptcy. However, driven by the poor success rates of the *LJC*, the legislator made substantial changes to the reorganization system and came up with an entirely new legal framework, named the Law on the Continuity of Enterprises (*LCE*). The new system is not just designed to deal with the low success rates, it is also aimed at attracting more firms in better financial shape to increase the usage of reorganization procedures by distressed but viable firms. Several features of the law are particularly designed with these goals in mind. First, entry barriers are explicitly brought back to a minimum. All firms whose continuity is somehow threatened can file for reorganization under the *LCE*. Next, the new legislation is very flexible. The Belgian system offers a range of options to distressed debtors, not just compared to the previous law but also when looking at similar reorganization regulation in other countries (for overviews, consult e.g. Brouwer (2006) or Hotchkiss, John, Thorburn, and Mooradian (2008)). A first dimension of flexibility consists of the procedure choice. Firms can file for different purposes and the *LCE* offers them different procedures, each designed at reaching a specific goal. Widening the possibilities also serves the purpose of attracting more companies to a formal reorganization procedure. Whereas under the *LJC*, firms had no other option as to develop a reorganization plan in order to reach a collective agreement, the new law includes, among others, a cheaper option for companies which previously would not have filed due to budget constraints. Next, firms enjoy even more flexibility since they are allowed to change the goal of their reorganization procedure during the process. They can opt for an alternative procedure in case the initial option appears not to be feasible. Although the judges in the survey of Dewaelheyns and Van Hulle (2010) believed that the introduction of the *LCE* would have a moderately positive effect on the success of the Belgian reorganization procedures, the question whether this flexibility pays off in practice so far remains unanswered. A detailed overview of the different steps firms undertake in those proceedings is included in the next section.

The range of possible reorganization options distressed debtors can choose from under the *LCE*-framework, together with the traditional liquidation under the Bankruptcy Act, make the Belgian context suitable to evaluate the contribution of procedure choice flexibility. The contribution of this paper is twofold. On the one hand, we study the efficient functioning of flexible reorganization systems and thereby contribute to the ongoing debate on the optimal design of (European) reorganization procedures. For the purpose of this study, we approach efficiency in the first place as correct self-selection by distressed firms into the most feasible procedure depending on their financial situation, as suggested by White (1994) and Bricongne, Demertzis, Pontuch, and Turrini (2016). Alternative measures of efficiency rely on both the perspective of viable and unviable entrants. The survival rate is an often used proxy for a reorganization procedure's performance from the point of view of viable cases (Bradley & Rosenzweig, 1992; Fisher & Martel, 1999). One expects efficient procedures to rescue a large proportion of firms qualifying for restructuring. Next to looking at the proportion of viable firms, other measures account for their failing counterparts. For a reorganization system to be efficient, the unviable cases should ideally be identified prior to the start of court protection such that they can be transferred to the liquidation procedure without spending much of their resources in useless restructurings (Cirmizi, Klapper, & Uttamchandani, 2012; European Commission, 2003; White, 1994). In this respect, the low entry barriers might constitute a disadvantage to the law's filtering capabilities, since they could result in the allowance of a relatively large proportion of unviable cases to the *LCE*'s procedures. The availability of the transfer under court supervision as a reorganization procedure, in contrast, might offer firms in rather poor financial shape an alternative to bankruptcy liquidation, to which this procedure resembles to a large extent. Before evaluating the *LCE*'s survival rate and filtering capabilities, we focus on the proper application of self-selection by distressed firms in Belgium's insolvency framework, since this forms a prerequisite in order for flexibility in procedure choice to make sense.

As already depicted briefly, some of the law's features might fail to increase the effectiveness of the reorganization procedures and even deteriorate its efficiency, even despite the *LCE* following many international recommendations, both European (Bricongne et al., 2016; European Commission, 2003) and global (Cirmizi et al., 2012; World Bank, 2015). A first potential concern relates to the complexity

resulting from flexibility offered by the law. Since it is not mandatory for debtors to specify the aim of their reorganization procedure and given that they can even switch to other procedures throughout the process, creditors face difficulties in the follow-up of their claims. This might result in these important stakeholders being unwilling to collaborate in the development of a reorganization plan, causing some reorganizations of actually viable firms to fail. Another remark, already concisely mentioned, lays in the potential for abuse as a consequence of the limited admission requirements a case must fulfill to get access to a reorganization procedure. This in combination with the provision that the law temporarily exempts a distressed firm from its debt obligations, might cause severely distressed firms to enter the procedure in an attempt to seek protection under the *LCE*, while they should actually be liquidated as a formal bankruptcy case (Blazy, Chopard, & Nigam, 2013). These entrepreneurs benefit from a delay in the shutdown of their firm to safeguard some of its resources, while their creditors and other stakeholders could be harmed by such actions.

Next to the efficient functioning of the Belgian reorganization law, the paper contributes, on the other hand, to the managerial decision making literature. More specifically, we investigate whether it is appropriate to allow managers to use their discretion in selecting a procedure option. It has been shown that managerial decisions are often characterized by departures from rational economic theory (Kahneman & Tversky, 1973). As one of the first researchers to examine this behavior in more detail, Staw (1976) finds that, although one would expect a decision maker to redirect projects leading to negative returns, they in fact appear to enlarge their commitment in loss-making investments under certain circumstances. This so-called escalation of commitment is explained by self-justification theory, which states that these decision makers take excessive risks by continuing these projects in an attempt to justify their earlier decisions or behavior. Similar findings are obtained by other researchers using an experimental setup (Anderson, 2003; Brundin & Gustafsson, 2013; McCarthy, Schoorman, & Cooper, 1993) or case study (Ross & Staw, 1986). In contrast to the sample of students in Staw's experiment, Brundin and Gustafsson (2013) use owner-managers for their investigation of the role of emotions in explaining entrepreneurs' inability to discontinue failing investment projects. Next to a confirmation of the relative importance of emotions and cognitive biases in decision making, they additionally conclude

that the influence of emotions relates to the degree of uncertainty associated to the project. Hence, in the context of approaching bankruptcy, increasing levels of uncertainty are expected to result in more biased decision-making, which might justify the replacement of incumbent management. Other psychological explanations, like people's preference to postpone decision-making under some conditions (called decision avoidance) suggest that managers often deviate from rational theory when they are confronted with multiple choice alternatives (Anderson, 2003). Khanna and Poulsen (1995), in contrast, find no indication for escalating commitment and suggest that in case managers are blamed for a firm's bankruptcy, they are more likely to serve as a scapegoat than as a villain. As a consequence, according to these authors, management should not necessarily be replaced to rescue the firm. However, since their sample is limited to publicly listed firms and given that the majority of the firms in our sample is either small or medium-sized, we doubt whether incumbent management is in the best position to decide when to initiate restructurings and by means of which procedure option, as these managers are likely to suffer from escalation of commitment behavior in their decision-making. The fact that most firms only start a formal procedure when their financial situation has deteriorated too much is a clear example of escalating commitment behavior (Mayr & Lixl, 2019; Moulton & Thomas, 1993; Povel, 1999)<sup>1</sup>. The occurrence of similar irrational behavior influenced by psychological processes for the procedure choice decision is relevant in the evaluation of the high level of flexibility that characterizes the Belgian insolvency framework.

The remainder of this paper is structured as follows: Section 2 consists of a brief overview of the Belgian legislation on court-guided reorganizations. Section 3 presents the potential determinants of procedure choice. We describe the data in Section 4. Section 5 covers the methodology used to obtain the results, which are reported in Section 6. To end, Section 7 contains conclusions and some policy implications.

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<sup>1</sup> Therefore, most policy recommendations also highlight the importance of early warning tools to increase the survival chances of distressed firms (Bricongne et al., 2016; Leyman, Schoors, & Coussement, 2011; World Bank, 2015).

## **2. Flexibility in reorganization procedure choice under the Belgian Law on the Continuity of Enterprises (*LCE*)<sup>2</sup>**

In an attempt to address the poor success rates and limited usage of the former Law on Judicial Composition, the Belgian legislator replaced the existing reorganization system by the innovative Law on the Continuity of Enterprises in 2009. In contrast to the traditional dual-chapter insolvency system installed in 1997, the new reorganization-side of the insolvency regime offers distressed debtors an increased level of flexibility in procedure choice, as they can currently choose from three court-supervised restructuring options. However, these different procedures are targeted at applicants with different degrees of financial difficulties such that one expects debtors to opt for the most suitable procedure depending on their (financial) shape. First, the amicable settlement procedure is focused on entrants who face minor difficulties and wish to renegotiate existing debt contracts under the supervision of the court. In these cases, only the most important creditors can be involved such that the costs for the restructuring can be kept minimal. Second, the collective agreement procedure is most similar to the typical reorganization procedure and consists of the writing of a reorganization plan which binds upon all claimants. Its implementation cannot cover a period of over five years and courts only validate plans which received approval by double majority of the firm's creditors. A final option resembles bankruptcy liquidation to a large extent. In contrast to procedures under the 1997 Bankruptcy Act, however, the transfer under court-supervision's aim lays explicitly on safeguarding sufficiently viable parts of the firm. The main goal of this procedure is to eliminate those elements of the firm that hamper its survival, while preserving the healthy part(s). A more detailed description of the Belgian reorganization framework is provided in appendix.

To give an indication about the functioning and performance of the *LCE*, we summarize some key elements of the reorganization procedure in Table 1. We observe an overall success rate of just under 20% when we consider a firm to fail its restructurings when the company went bankrupt prior to or at the end of the reorganization. Based on a much smaller sample of only 365 cases, Dewaelheyns

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<sup>2</sup> For the full law text, see. <http://www.ejustice.just.fgov.be/eli/wet/2009/01/31/2009009047/justel#hit1>.



and Van Hulle (2009) find that only 12.2% of the firms managed to exit as a going concern in the former *LJC* procedure. Although this might seem an increase in the success rate of the procedure, this conclusion changes when we also classify voluntary liquidations in their sample as successful, since this results in an additional 8.8% successes such that the overall survival rate has not improved after the introduction of the new legal system. This might be a first indication of the poor added value of granting reorganizing firms a large degree of flexibility. The survival rate for our sample even drops to less than 15% when we consider bankruptcies in the two years following a reorganization attempt as the result of the same causes underlying the restructurings and, hence, as additional failures. For both definitions of failure, the amicable settlement seems to be slightly less successful as compared to the collective agreement procedures. This might show that in a considerable number of cases, the choice for an amicable settlement might have been overly optimistic. Whereas the transfer procedure outperforms the other options in the first setting, the procedure's success rate drops to a more realistic level of only 8.70% for the second indicator, reflecting a considerable delay for those reorganizing firms to be declared bankrupt and the remarkable fact that not each firm in a transfer procedure ends up in liquidation within two years after its restructurings.

<<<<< Insert Table 1 about here >>>>>

### **3. Determinants of procedure choice<sup>3</sup>**

#### *3.1. Pre-filing financial health*

The legislator has designed the reorganization procedures of the *LCE* in such a manner that they should attract firms with a particular degree of financial difficulties. Firms facing only minor financial problems are expected to file for an amicable settlement. This is the most flexible and cheap option for a firm to restructure under court supervision whereby only a few of its creditors need to be involved and voting on a the proposed plan is not required. Especially small firms are expected to appreciate the opportunity to make such a semi-formal arrangement since other procedures imply more costly formal

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<sup>3</sup> In this section, we develop the rational determinants underlying the procedure choice and translate these into hypotheses, assuming rational decision making.

requirements. Aimed at firms in a less favorable financial shape, the collective agreement is designed for some more fundamental restructurings by involving all the firm's creditors. The firm draws a reorganization plan which presents the measures it will take to deal with its financial difficulties in order to get healthy again. Creditors must support the proposed plan before it receives court approval. A final option, targeted to firms whose financial health has become catastrophic, is to sell the viable parts of the business to an external party in order to preserve as much going-concern value as possible. In this case, the *LCE* offers the debtor the possibility to file for a court-supervised transfer. Logically, this procedure resembles a formal liquidation to a large extent. It does not make sense to work out a reorganization plan for firms in such a poor condition, since this will only delay the decision to liquidate the firm. Finally, we expect from firms which immediately end up in bankruptcy that their financial condition has deteriorated too much such that they lack the necessary potential to reorganize. To investigate to what extent the procedure choice is driven by the financial condition of the filing firm, we take into account various aspects of financial health just prior to the filing, i.e. liquidity, solvability and profitability (Dewaelheyns & Van Hulle, 2009; Leyman et al., 2011; Sundgren, 1998).

Liquidity measures are indicators of the firm's ability to fulfill its short-term obligations. Given that a firm with substantial liquid assets on its balance sheet, faces less difficulties in short-term repayment of its debt, we expect liquidity to be negatively related to the likelihood of a collective agreement, compared to the likelihood of an amicable settlement. In case sufficient liquid assets are available, financial difficulties can be resolved by negotiations with the most important creditors only. When looking at the other extreme, when liquidity is low, this might hamper drafting a feasible reorganization plan. Moreover, the probability of reorganization plan approval by the creditors further lowers with decreasing levels of liquidity (Fisher & Martel, 1995), which indicates that firms in poor financial shape are better off filing for a transfer under court supervision or formal bankruptcy. As a result, we expect the likelihood of a transfer under court supervision and the likelihood of bankruptcy to be inversely related to the liquidity position of the debtor (even more than for collective agreements), again compared to the likelihood of an amicable settlement. We apply two proxies for liquidity in our analyses. The first one follows existing research by Dewaelheyns and Van Hulle (2009) and Leyman et

al. (2011) by measuring liquidity through the quick ratio. As an alternative, we check the robustness of our results by using the current ratio (Leyman, 2012).

The firm's solvability forms the second aspect of financial health we take into account. Solvability ratios express the ability of a firm to meet its obligations in the long run. According to Huang, Huang, and Lin (2013), leverage reduces the likelihood of an informal renegotiation compared to formal reorganization. Similar to these conclusions, we expect a distressed firm with relatively high proportions of debt financing, measured relative to total assets, to be pushed towards a collective agreement rather than an amicable settlement. Nevertheless, we expect a seriously overleveraged firm to immediately file for a transfer under court supervision since it would be highly unlikely for a firm with a very complex debt structure to get approval by all of its creditor classes on a reorganization plan. Again, the latter firms may also opt for the formal bankruptcy procedure in the absence of any viable parts, which is assumed to cause the leverage ratio to lay even higher. The leverage ratio proxies the solvability of a firm and is computed as the ratio of total liabilities over total assets.

Finally, we also take operating profitability into account as a third aspect of financial health which might drive the reorganization procedure a firm opts for. In the case a distressed firm still manages to make a profit from its operations, creditors might benefit from the continuation of the firm since this positively affects the recovery rate they can obtain. This explains why creditors in such a situation are more willing to cooperate in the establishment of a reorganization plan, also supported by the fact that the incumbent management can demonstrate the feasibility of the restructuring by referring to their profit figures. Based on this rationale, we expect that the likelihood of a settlement increases as operating profits increase, whereas the likelihood of a transfer under court supervision is negatively related to operating profitability, just as the probability of liquidation through bankruptcy. While Huang et al. (2013) find results in line with these hypotheses, it may also be argued that the likelihood of a liquidation-like procedure increases with profitability, since it is easier to find a buyer for a firm that is still profitable. However, if we take into account that managers voluntarily file for reorganization, it is more likely that they prefer to file for a settlement procedure through which they might not lose their control over the firm compared to a liquidation-type reorganization in which they definitely lose their

job. Similarly, one does not expect firms filing for bankruptcy to be profitable when several reorganization options are available. The firm's gross operating income (*EBITDA*) serves as a measure for profitability. We scale the *EBITDA* by total assets in order to deal with differences in size between firms in the sample.

As an alternative to these three different dimensions of a firm's financial condition, we use an overall financial health proxy<sup>4</sup> as introduced by Altman (1968). This score incorporates four variables related to a firm's financial health such that a higher score reflects a better financial condition. We expect the Altman *Z''*-score<sup>5</sup> to be negatively related to the likelihood of a collective agreement and even more when the amicable settlement is compared to the transfer under court supervision or formal bankruptcy. In sum, we expect firms to opt for the reorganization procedure that best fits their financial condition, as reflected in hypothesis 1a.

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<sup>4</sup> More information regarding the computation of this score according to the original model for manufacturing firms can be found in Altman (1968). Altman (2000) consists of an update and an extension for non-manufacturing firms (the *Z''*-score we use) based on more recent insights and data.

<sup>5</sup> Corresponding to Altman (2000), we use the following formula to calculate the *Z''*-score for each firm in the dataset:

$$Z'' = 6.56 X_1 + 3.26 X_2 + 6.72 X_3 + 1.05 X_4$$

where  $X_1$  represents the ratio of working capital (computed as the difference between current assets and current liabilities) to total assets as a measure for liquidity,  $X_2$  is the ratio of retained earnings to total assets reflecting the cumulative profitability of the firm and implicitly takes into account the firm's age,  $X_3$  is calculated as earnings before interest and taxes (*EBIT*) over total assets measuring the productivity of the firm's assets and  $X_4$  the ratio of book value of equity to the book value of liabilities which gives an indication of how much assets can decline before the firm becomes insolvent (i.e. assets do not suffice to cover the liabilities).

**Hypothesis 1a** *For the subsample of reorganization cases, we expect a firm to file for the procedure that best matches their financial condition, i.e., relative to the amicable settlement we expect the likelihood of selecting the collective agreement to decrease and the likelihood of selecting the transfer under court-supervision to decrease even more with firm financial health.*

Furthermore, we expect the firms in a reorganization procedure to be in a better financial situation compared to firms in liquidation bankruptcy procedures, captured by hypothesis 1b.

**Hypothesis 1b** *For the full sample of insolvency cases, we expect the likelihood of reorganizing, relative to selecting bankruptcy liquidation, to increase with firm financial health.*

### 3.2. *Further refinements at firm-level*

Next to the financial characteristics of a distressed firm, other firm-specific characteristics might drive the selected reorganization procedure as well. A first firm-specific characteristic that we take into account is firm size. Several researchers have shown that larger firms more often file with the purpose of drafting a formal reorganization plan compared to smaller firms (Bris et al., 2006; Campbell, 1996; Hotchkiss et al., 2008). We expect a larger firm size to cause the likelihood of a court supervised transfer to decrease relative to the likelihood of an amicable settlement. A variety of arguments for this hypothesis can be formulated. A first one refers to the complexity of large cases, which makes the transfer of viable entities a rather expensive operation. Other reasons refer to the superior feasibility of reaching an agreement in case the firm has a considerable size. First, large firms are better able to cover the costs a restructuring involves thanks to their (relatively) deeper pockets and the better ability to divest business parts to collect some additional financing. Second, their bargaining position is stronger such that creditors are more willing to cooperate in the negotiations for the reorganization plan. It stands to reason that banks are not eager to lose large customers (Huang et al., 2013). Based on the preference of bankrupt firms, we will be able to derive which of both arguments applies in practice. From the point of view of smaller firms, it seems logical that they prefer the cheapest possible reorganization option. The amicable settlement might be the only affordable procedure for such firms, so we expect size to be

negatively related to the likelihood of a collective agreement relative to an amicable settlement. We employ the natural logarithm of total assets as measure for firm size (Campbell, 1996; Sundgren, 1998).

Dewaelheyns and Van Hulle (2009) discuss the role of group membership in restructurings, whereby they point to the distinction between financially well performing groups and those in a less favorable condition. In the former case, it is unclear which procedure the group prefers to restructure a distressed member firm. On the one hand, the group might turn to its network in order to attract buyers, which they can do more quickly compared to stand-alone firms and which allows the group to handle the case without too much publicity and the related loss of reputation. Following this rationale, we expect a group to push a member in difficulties to restructure through a court supervised transfer or immediately file for bankruptcy. However, on the other hand, in case the group itself performs well, the distressed member enjoys a relatively strong bargaining position over the parties involved in the restructuring (which might also be a supplier of other group members), such that it might be more feasible to reach an amicable or collective settlement as compared to a firm not belonging to a group. In contrast, if the group itself has only poor financial prospects, the rationale to exert pressure on a distressed member to file for a liquidation-like procedure weakens, since finding a buyer in this setting will be equally hard as it is for a stand-alone firm. In order to gain some time to shift the valuable resources to healthier group members, a distressed firm might be encouraged to file for a settlement procedure. To take this into account, we use an indicator variable to capture whether or not a distressed company is part of a group, in which case the indicator takes the value one, otherwise the indicator equals zero. The value of the indicator is based on the presence of corporate owners<sup>6</sup>. If such shareholders are absent, the firm is considered to be a standalone. Besides, we control for the financial condition of the group by including

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<sup>6</sup> Initially, we classify each firm for which a corporate owner is registered in BelFirst as a group member. Subsequently, we use a minimum ownership stake of 50% to verify the robustness of the results. The number of group members is lower for this alternative indicator, since the ownership share of the parent company is not known for each group member.

the Z"-score for the most important group member (i.e. the largest working company based on its turnover), which is used in an interaction term with the indicator for group membership<sup>7</sup>.

Finally, we account for a firm's asset structure by looking at asset specificity. The degree to which the assets a debtor owns are specialized is closely linked to the possibility to realize a transfer easily. If it turns out that a significant proportion of balance sheet items is only useful in a particular context, this limits the number of potential buyers<sup>8</sup> for those assets such that it is unlikely for the distressed firm to complete a transfer quickly without losing most of the items' going-concern value (Hotchkiss et al., 2008; Shleifer & Vishny, 1992). Hence, a debtor whose assets are tightly related to his specific operations is expected to file with the objective of reaching a settlement in an attempt to preserve as much of the going-concern value as possible (Baird & Morrison, 2005). To incorporate asset specificity in the model, we follow the definition used by Dewaelheyns and Van Hulle (2009)<sup>9</sup>.

### 3.3. *Debt structure*

In addition to the general debt level of a firm, which we account for using the leverage ratio, some more specific aspects of a firm's debt structure might be important determinants of the chosen insolvency procedure and are therefore explicitly included in the analysis. We hereby mainly focus on the preferences of different types of creditors. A first type of debt that deserves our attention is trade credit. This form of short-term financing is used extensively among firms next to long-term bank loans (Boissay & Monnet, 2003; McGuinness, Hogan, & Powell, 2018). In contrast to the secured claimants we describe next, trade creditors can benefit from successful procedures without being exposed to the risks. Caused by their weak position in the ranking order of claimants, there is not much chance for them

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<sup>7</sup> *This interaction has not yet been included.*

<sup>8</sup> As explained in Shleifer and Vishny (1992), the best buyers for such assets are participants in the same industry. However, these parties might not be able to buy a distressed competitor's assets since they themselves face financial difficulties (an external shock is likely to hit an entire industry rather than just one player) or because antitrust authorities prohibit them from buying to prevent the buyer from obtaining too much market power. The latter argument, however, is not very likely to apply in the context of our sample of predominantly SMEs.

<sup>9</sup> They compute the ratio of fixed assets minus land and buildings to total assets as a measure for asset specificity.

to receive substantial amounts of money when the firm opts for bankruptcy. As they have little to lose, these creditors are expected to support any effort of their customers to reorganize (Bergström, Eisenberg, & Sundgren, 2002; Franks & Sussman, 2005). Second, we make a distinction based on whether a claim is secured<sup>10</sup> or not. Analogous to Dewaelheyns and Van Hulle (2009) and Ayotte and Morrison (2009), we include the proportion of secured debt relative to total debt as an explanatory variable. Higher levels of secured debt might complicate negotiations between the firm and its (un)secured creditors. These coordination problems might push a distressed firm in the direction of more formal procedures (Bris et al., 2006). Due to conflicts of interest between the different classes of creditors, it might become impossible to reach a settlement (Jostarndt & Sautner, 2009). In addition, several papers point to the conclusion that secured creditors prefer a liquidation procedure over a reorganization procedure in case their debtor faces financial difficulties (Ayotte & Morrison, 2009; Bergström et al., 2002). This class of creditors does not have any incentive to cooperate in reorganization proceedings as the costs related to risky formal restructurings are most likely to lower their recovery rate. As mentioned earlier, unsecured creditors, and in rare cases also the firm's shareholders, are the main beneficiaries of a successful reorganization, since secured claimants are among the first to be repaid in a liquidation (Franks & Sussman, 2005). Moreover, the Belgian legislation offers a reorganizing firm a moratorium on its secured claims of up to 24 months to develop a reorganization plan. That means a secured creditor gets repaid three times faster if the distressed firm reorganizes through a transfer procedure, which takes in general not more than six months, making the procedure aimed at reaching a collective agreement even less appealing to secured creditors. A firm with a high level of secured debt is therefore expected to file for a liquidation procedure, anticipating that its secured creditors will use their bargaining power to block negotiations about the restructuring plan (Bergström et al., 2002; Campbell, 1996). The literature often uses the term liquidation bias of secured creditors to refer to this situation. In conclusion, we expect that a higher proportion of secured to total debt will increase the likelihood of a collective agreement as

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<sup>10</sup> Holders of secured claims precede unsecured claimholders when the absolute priority rule is followed. In case the debtor defaults on the repayments specified in the debt contract, they have the right to request a seizure after which the asset serving as collateral to the financing provided is sold publicly to reimburse the secured claimant.



compared to an amicable settlement, since the second option is more formal as compared to the more flexible amicable settlement. Following a similar reasoning, we expect that the amount of secured debt is positively related to the likelihood of a court supervised transfer and the likelihood of formal bankruptcy.

In the context of bank-oriented economies, like in Belgium, the liquidation bias of secured creditors might be overstated, since the majority of secured claims lays in the hands of banks, which do not just care about their recovery in times of financial difficulties, but which also try to preserve their relationship with the (hopefully only temporarily) distressed client. Therefore, the continuation of the firm is valuable to a bank, which reduces the overall tendency of secured creditors towards liquidation (Franks & Sussman, 2005; Huang et al., 2013; Mayr & Lixl, 2019; Rajan, 1992; Wang, 2012). Jostarndt and Sautner (2009) add to this argumentation that when a majority of claims is held by financial institutions, creditors face less coordination problems, which results in more efficient bargaining and, hence, a higher chance of success in reaching an agreement. Following this reasoning, the relationship between secured debt and the likelihood of a liquidation procedure compared to a settlement is expected to be negative instead of positive. Analogous to the results of Franks and Sussman (2005), we do not expect to find support for the lazy banking hypothesis<sup>11</sup> in the Belgian context, at least not for the largest cases. However, Helwege and Packer (2003) conclude that in their sample of Japanese cases, close bank-firm relationships cause the likelihood to file for a liquidation procedure to increase due to banks exercising their power to block a reorganization. Although this might seem disadvantageous, they denote that more firm value is preserved, since distress is handled at an early stage thanks to the closer monitoring by banks, as is also mentioned by Mayr and Lixl (2019). To verify whether banks respond

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<sup>11</sup> Given that banks' debt is in most situations fully covered by collateralized assets, this hypothesis implies that banks have little incentive to exert effort when one of their customers faces financial distress. This is referred to as lazy banking. We expect banks to show this kind of behaviour especially for their smallest customers, as their importance is rather marginal in the bank's entire customer base. However, small- and medium-sized companies form the majority of the population of reorganization cases, such that it is ex ante unclear to what extent secured bank debt will contribute in the procedure choice.

to distress by an attempt to rescue the firm, we include a variable to capture the proportion of secured claims in the hands of banks. Some researchers criticize the bank relationship arguments developed here. For example, Brouwer (2006) argues that in bank-oriented countries numerous informal reorganization options are available, through which a financial institution will (at least initially) try to negotiate with a distressed client, since these kind of private agreements entail much lower costs for both parties. As a consequence, when a firm enters a formal procedure under court supervision, this might indicate that a first attempt to reach an out-of-court settlement failed and the bank does no longer want to cooperate in the restructuring efforts. In practice, one can also question the motivation for a Belgian bank to be supportive in the reorganization of its distressed clients, as most of these firms are too small to be of real importance for the institution. Therefore, we verify whether a higher proportion of secured debt held by banks will decrease the likelihood of a collective agreement as compared to an amicable settlement, reflecting the so-called bank relationship effect.

Tax and social security authorities form a third class of creditors that might deter a firm from filing for a settlement procedure. Both have the reputation to block the approval of a reorganization plan by not making concessions towards a distressed debtor (Bergström et al., 2002; Brouwer, 2006; Fisher & Martel, 1995; Leyman, 2012). In the first place, the reluctance of those government bodies to approve reorganization plans might result in excessive liquidations of viable firms, but the rigid position of the government authorities might also discourage other creditors to cooperate in a reorganization. Since they will only be reimbursed after the tax and social security authorities have been repaid in full, they expect their recovery rate to decline. Unfortunately, the *LCE* does not include measures to reduce the privileges of those public claimants, even despite the potentially large impact such measures could have had according to judges of the commercial court (Dewaelheyns & Van Hulle, 2010). The firm's suppliers, for example, are aware of the tax and social security authorities' non existing leniency such that they might be less willing to provide trade credit, which even weakens the position of the debtor. Although Leyman (2012) suggested that reducing the government's privileges in reorganizations would be effective in increasing the success rates of Belgian restructurings, this was not implemented in the *LCE* when it replaced the *LJC*. If a firm has high outstanding claims with public authorities, it might

thus still be the best option to file for a liquidation procedure, anticipating the lack of forgiveness by these government bodies. Although we expect the direction of the effect to be the same for both types of claims, we distinguish between tax and social security claims to allow for differences in the degree of the effect.

Next to the potential impact different classes of creditors may try to exercise on the procedure choice of distressed firms, the availability of collateral in the form of additional debt capacity might form another debt-related determinant of the procedure choice. More additional debt capacity might increase the willingness of creditors to cooperate in the development of a reorganization plan and thus motivates a distressed firm to file for a settlement procedure (Bergström et al., 2002). Moreover, the firm is better capable of bearing the costs of the reorganization procedure, since there is some spare debt capacity left (Campbell, 1996). However, the exact opposite reasoning might apply as well. As mentioned earlier, secured creditors will not benefit from a reorganization procedure when they realize the firm will be able to repay their claims in full, given that there are additional assets available in case the going-concern value of the secured assets would fall below the value of their claims (Wang, 2012). By studying the ratio of total debt to the sum of book values of several asset items (including accounts receivable, inventory, land and buildings, machinery, furniture and vehicles), we get an idea about how many of the available assets are secured by existing debt contracts. This approach is similar to Leyman et al. (2011). Bergström et al. (2002) also mention this proxy to represent the value of collateral.

#### *3.4. Industry- and court-specific variables*

Next to aspects specific to a particular firm, its environment can also impact the reorganization procedure a firm files for, as the industry prospects might carry more information on the feasibility of the firm's desired method for restructuring. Economic conditions in fact do not just influence the behavior and expectations of the debtor, but also form the mindset of other stakeholders involved in the restructuring process, ranging from creditors and the bankruptcy courts to potential buyers. First, a flourishing industry climate will increase the likelihood that a debtor initiates a procedure with the purpose of reaching a settlement. Creditors might be more willing to cooperate when the industry is in a favorable condition, reflecting their increased belief in the firm's survival chances (Maksimovic &

Phillips, 1998). At the same time, favorable industry prospects are likely to result in a larger number of potentially interested buyers. This makes a liquidation-like procedure appealing, especially to secured creditors realizing that they are likely to be repaid in full given the higher selling price that can be obtained when selling the firm's assets (Shleifer & Vishny, 1992). In the Belgian context, however, we expect particularly the first consequence to play a role, since the debtor is fully responsible for the procedure its firm files for under the *LCE*. The second consequence might play a minor role in the Belgian setting. Nevertheless, we expect this effect to appear in cases where secured creditors have relatively strong bargaining power to steer towards a formal bankruptcy. We apply two proxies to account for industry conditions. First, we compute industry sales growth over three years before the reorganization filing. Industry profit margin is included as a second measure, which is calculated as the operating profit margin in the industry one year before the filing. We use industry dummies to control for remaining effects. Other researchers in this domain use similar measures (Dewaelheyns & Van Hulle, 2009; Leyman et al., 2011). Apart from the prospects of the industry, we control for uncertainty in the firm's sector as a second industry-specific determinant potentially underlying the procedure choice. Even in case an industry faces attractive prospects, secured creditors might try to exercise their bargaining power over the distressed debtor in pushing the case towards a procedure aimed at transferring (parts of) the business under court supervision. Uncertainty strengthens a secured creditor's preference for liquidation since it causes additional risks of losses which he would not face in a transfer-procedure (Morrison, 2007). To approximate industry uncertainty, we use the standard deviation of the industry profit margin over the last three years prior to the filing. We expect this measure to positively affect the likelihood that a firm files for one of both liquidation procedures.

To end, we use an indicator variable to distinguish between filings prior to the first major amendment of the original law dating from 2009 and those after the introduction of the more strict admission requirements in August 2013 for the regressions based on the subset of reorganization cases. The dummy equals one in case the firm entered a reorganization procedure after August 2013. Although we do not explicitly focus on the reform in this research, the differences compared to the original *LCE*

might cause the probability of choosing a particular procedure to change. An overview of the variables discussed above can be found in Table 2.

<<<<< Insert Table 2 about here >>>>>

#### **4. Data and sample**

We use a dataset of both reorganization and liquidation proceedings under the Belgian 2009 Law on the Continuity of Enterprises and the 1997 Bankruptcy Act, provided by private data vendor Graydon Belgium. Since the enactment of the new reorganization system in April 2009, they keep track of all reorganization cases throughout the entire procedure such that we have a unique dataset including the entire population of reorganizing companies in Belgium as of 2009. We extend this data by the population of bankruptcy cases in the same period, for which Graydon collects information in a similar manner, such that we are able to cover both formal mechanisms to handle insolvency for the entire Belgian population.

By December 2016, a total of 9 071 reorganization cases have been initiated by one of the courts in Belgium's twelve judicial districts. Especially the courts of Brussels (1298), Antwerp (908), Liège (771) and Charleroi (764) handled large amounts of cases. The *LCE* does not prevent companies which exit intact from a reorganization procedure to refile again (soon) after an earlier attempt. As a consequence, 428 firms appear twice in the dataset and are therefore removed from the data. For the purpose of this study, we extend the court information provided by Graydon with financial statement data from BelFirst<sup>12</sup> in order to assess the financial condition of the included firms. The Belgian legislator requires all limited liability companies to publish their statements to the public. We exclude 1 912 sole proprietorships and other corporate forms which are not subject to this obligation, since financial statements are not available for these cases. Furthermore, we only include unique cases in the dataset (Bris et al., 2006). Closely related firms regularly file for reorganization together. Researchers in this area remove those cases for various reasons. First, those firms might go through the entire

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<sup>12</sup> Bureau van Dijk's BelFirst database contains detailed information on numerous firm characteristics for all Belgian companies obliged to disclose their financial statements.

procedure together, which results in clustering of the dependent variable (Dewaelheyns & Van Hulle, 2009). Second, it is hard to separate both firms as individual cases such that we should evaluate those filings on consolidated accounts which would complicate the examination (Leyman et al., 2011; Morrison, 2007). Moreover, the limited availability of consolidated data would further impede the analysis. Therefore, we exclude 226 blocks of in total 564 cases. The size of these groups ranges from two to fifteen firms and a considerable proportion of these groups appears multiple times in the dataset. Although firms are asked to specify the initial goal for which they seek to enter a reorganization procedure, the goal was not explicitly stated in 1 953 of the remaining cases. Certainly in the first years after the introduction of the *LCE*, many firms did not specify the goal for their reorganization procedure (Van den Broele, 2011). Since this information is crucial to our analysis, we exclude these cases from the sample. It is common practice in corporate finance not to include insurance and financial service companies, holdings, utility and non-profit firms<sup>13</sup> in the analysis, which implies the exclusion of another 78 cases (Cirmizi et al., 2012; Dewaelheyns & Van Hulle, 2009). As a means to ensure the data is of sufficient quality, we exclude 367 firms for which financial statement data within eighteen months prior to the filing is not available (Dewaelheyns & Van Hulle, 2009; Leyman et al., 2011). Next, 778 of the reorganization procedures were not yet closed and therefore excluded from the dataset. Finally, we follow the literature by filtering out the micro-firms from the sample based on the European SME-definition<sup>14</sup> for reasons of comparability (Morrison, 2007). This results in the removal of 1 268

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<sup>13</sup> These firms are typically subject to separate legal regimes. The divergence in the composition of their balance sheet sometimes results in peculiar interpretations for traditional ratios. Therefore, we exclude cases with one of the following NACE codes: 35, 36, 42, 491, 492, 531, 64, 65, 66, 84 or 94.

<sup>14</sup> According to the European SME-definition, a firm is classified as a micro firm in case the workforce consists of less than ten FTEs and either a turnover of less than two million euros or a balance sheet total of less than two million euros (<https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition/>). In Belgium, data on turnover is only required for firms disclosing full statements. Hence, for most cases, turnover is not known and, as a consequence, only the criterion on balance sheet total is evaluated in addition to the requirement in terms of staff size.

reorganizations. After the various exclusions discussed above, we end up with a dataset of 1 723 reorganization cases, covering the entire country. We provide an overview of the several sample selection steps in Panel A of Table 3.

<<<<< Insert Table 3 about here >>>>>

The majority of cases aim for reaching a collective agreement (62%), whereas the alternative procedures are both much less popular. 25% initially tried to negotiate an amicable settlement while 13% of the firms immediately focused on transferring (viable parts of) their business under court supervision. When we look at the outcome of the reorganization efforts, just under 20% of the firms managed to exit the reorganization as a going-concern, while the remaining 1 381 cases (80.15%) were transferred to the formal bankruptcy procedure, reflecting the rather poor success rate of the Belgian reorganization procedures.

Table 4 contains summary statistics for the continuous variables used in the various analyses and reports their mean, median, minimum and maximum in Panel A. Subsequently, we include means for subsets based on procedure choice and outcome in Panel B and C, respectively. The average reorganizing firm's financial condition remains poor and has not evolved favorably compared to the situation under the former legislation (Dewaelheyns & Van Hulle, 2009). As one might expect, the average firm faces severe liquidity problems (average quick ratio far below 1), suffers from a high leverage ratio (on average 1.34, indicating that the assets do not suffice to cover the firm's total liabilities and, hence, that the equity is negative) and generates losses (average profitability ratio of -.08) in the year prior to the reorganization. The table also shows the evolution from the second year before the restructurings to the first year, demonstrating the quick deterioration of a firm's situation. Apart from considerable liquidity problems (average quick ratio of .78), the firm's assets almost cover the claims (average (median) leverage ratio of 1.09 (.93)) and the operating loss is limited (average profitability ratio around 0, at .03) two years prior to the reorganization, which might explain the late reaction of firms and their corresponding late entry to the formal reorganization procedure. An average reorganizing firm has 31.4% of its total amount of debt outstanding to its suppliers. The average proportion of debt that is secured lays at around 10% of which banks seem to hold the majority (average secured bank debt

ratio of 8.4%)<sup>15</sup>. This proportion is somewhat lower than what Dewaelheyns and Van Hulle (2009) found (although the median value for both samples equals 0). The limited level of secured debt might show the reluctance of creditors to provide additional credit to already heavily levered debtors and a lack of quality assets which can be put up as collateral. In addition, reorganizing firms cannot ignore public claimants either, as both the tax and social security authorities hold a considerable proportion of total debt (their respective claims amount, on average, 8.0% and 9.8% of total debt).

We split the sample according to the initial procedure choice in Panel B of Table 4. The financial dimensions provide a first indication of correct selection by reorganizing firms of the for them most suitable procedure, as both the quick ratio and profitability ratio have the highest mean for cases in the amicable settlement procedure and the average leverage ratio is the lowest for those cases. The differences are, however, not very large. Also in line with hypothesis 1a developed in Section 3, transfer cases are in the least promising shape and have the highest proportions of secured debt and debt held by the social security authorities. In contrast to the differences we obtain for the procedure options, we find no clear distinction when we divide the dataset based on the outcome of the reorganization procedure. Hence, it is not possible to state that successfully reorganizing firms outperform their failing counterparts prior to the start of the restructurings. The former even face significantly higher proportions of debt, both in general (average leverage ratio of 1.43 vs. 1.31) and for the different classes of (secured) claimants (although not significantly different), except for trade credit. However, these surviving firms do face slightly more attractive industry prospects vis-à-vis the firms which eventually go bankrupt.

<<<<< Insert Table 4 about here >>>>>

To complement the dataset, we extend the 9 071 reorganization cases with a total of 82 762 formal bankruptcies initiated during the same time period. After applying the same filtering criteria<sup>16</sup> as for the

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<sup>15</sup> We have to note that the definition of the secured debt ratio does not include debt outstanding to tax and social security authorities as a consequence of the separate reporting of these claims in the annual accounts.

<sup>16</sup> Except for the goal criterion, as there exist no different procedures within Belgium's 1997 Bankruptcy Act. Next, we are also not able to evaluate the criterion whether the procedure is closed, as these dates are not reported



restructurings (overview in Panel B of Table 3), our dataset covers 18 342 insolvency cases initiated between April 2009 and December 2016, covering each judicial district in Belgium. Hence, next to the 1 723 reorganizations, we are also able to study 16 619 liquidations. Panel A of Table 5 presents the summary statistics for the entire sample. The number of observations drops sharply from two to one year prior to the start of the insolvency procedure, indicating that most bankrupt firms simply stop updating and publishing their annual accounts. In comparison to the subset of reorganizations, the average leverage ratio is considerably larger when calculated over the entire sample, which may at least in part be caused by the shrinking balance sheet total of firms in bankruptcy, as they are significantly smaller than their counterparts in reorganization, as shown in Panel B of Table 5. Although the average restructuring firm seems to benefit from a significantly smaller leverage ratio and a slightly better operating profitability, the average bankrupt firm has significantly less debt outstanding to the different classes of important claimants, which counters the difference in the overall leverage ratio and suits the expectation that the difference in leverage ratio might be driven by considerably lower balance sheet totals, such that also the debt capacity is significantly lower for bankrupt firms, as the most valuable assets already have disappeared from the firms' balance sheets.

<<<<< Insert Table 5 about here >>>>>

It is worth to stress that we cannot take into account out-of-court settlements, since no data is collected for cases in which the court is not involved (Kaiser, 1996).

## 5. Methodology

We apply a multinomial logistic regression (*MNL*) to unveil the determinants underlying the reorganization procedure distressed firms select. The structure of the model is as follows:

$$CHOICE_i = \Phi(\alpha X_i + \beta Y_i + \gamma Z_i + v_i)$$

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in the Graydon file. Instead, we remove 678 withdrawn bankruptcy filings and assume the others to have been completed in practice. Panel B of Table 3 contains an overview of the different sample selection steps for the subset of bankruptcy cases.

where the dependent variable  $CHOICE_i$  is a categorical variable reflecting the initial goal for the reorganization procedure declared by debtor  $i$ . Four outcomes for this variable are possible: the three reorganization options, i.e. the amicable settlement (abbreviated as *AS*), collective agreement (*CA*) and court-supervised transfer (*TUS*, short for transfer under (court) supervision) and the formal bankruptcy procedure (*BR*, in the regressions within the full sample).  $X_i$  is the vector of the independent firm-specific variables that may affect the procedure choice, as described in Section 3. The coefficient estimates corresponding to these explanatory variables are captured by  $\alpha$  in this specification. Analogously,  $Y_i$  represents a vector of industry-specific explanatory variables and  $Z_i$  of court-specific variables whose coefficients are represented by  $\beta$  and  $\gamma$ , respectively. Finally,  $v_i$  represents the error term, which reflects all additional unobserved effects underlying the procedure choice.

The use of a multinomial logit model is appropriate in this context since we do not expect the regressors included in the proposed specifications to vary across the different alternatives for procedure choice<sup>17</sup>. Given that the assumption of case specificity is not violated in our context, we apply the multinomial logit model as it is the simplest unordered multiresponse model available (Cameron & Trivedi, 2009; Verbeek, 2012). Parameters must be interpreted in comparison to a base category. A positive coefficient indicates that, as the regressor increases, it is more likely that a firm opts for the alternative than that the base category is chosen. Following the *MNL* model, the probability of each procedure choice is modeled as follows:

$$\pi(CHOICE_i = l) = \frac{\exp(W_{il}\zeta^l)}{\sum_{j=0}^J \exp(W_{ij}\zeta^j)} \quad \text{for } l = 0, \dots, J$$

whereby the vector  $W$  represents the explanatory variables (i.e. the firm-, industry- and court-specific variables denoted formerly by  $X$ ,  $Y$  and  $Z$ ).  $\zeta$  contains the corresponding parameter estimates. The

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<sup>17</sup> An often cited example in the literature in which regressors are expected to vary across different alternatives comes from the transportation mode choice. It is likely that some of the regressors underlying the decision which transportation mode to select, like travel time or cost, differ depending on the chosen way of transportation (Cameron & Trivedi, 2009).

different possible reorganization procedures are represented by  $l$  in the model (Cameron & Trivedi, 2009; Davidson & MacKinnon, 2004).

## 6. Tests and results

In Table 6, we report the results of the multinomial logit models to analyze the determinants underlying a reorganizing firm's procedure choice (thus, only based on the observations of restructuring firms). Although the coefficient estimates for the liquidity dimension of financial health point in the expected direction, none of the specifications provide strong evidence that the collective agreement procedure attracts firms in a less favorable condition compared to the amicable settlement, nor for the expected difference between *AS*- and *TUS*-procedures. Nevertheless, the results show that firms reorganizing through a transfer under the supervision of the court are characterized by significantly higher leverage ratios and significantly lower operating profitability ratios compared to the amicable settlements. This matches the expectation that the more heavily a firm is indebted, the less likely it becomes to restructure through negotiating a settlement (Huang et al., 2013). A similar conclusion applies to the profitability measure. The parameter corresponding to the comparison between *AS* and *CA* is negative and weakly significant (except for Model 2), while the coefficient comparing the *AS* to the *TUS* is even more negative and significant at the 5%-level in most regressions, in line with hypothesis 1a and supporting the results of Huang et al. (2013). As a consequence, no evidence is found for the reasoning that firms use their better operating profitability to attract buyers through the transfer under supervision. These results remain similar when we simplify the model by excluding the industry-level variables as well as the sector and legal district fixed effects. The corresponding tables are available upon request.

Second, we find a highly significant positive coefficient for size, both for the *CA* and the *TUS* relative to the *AS*. This indicates that the smallest firms indeed tend to prefer the amicable settlement, which is in line with the expectation that they reorganize through the cheapest available option. On the other hand, we find the largest firms to be more likely to file with the purpose of transferring relative to reaching an amicable settlement. This contradicts our expectation that larger firms use their reserves or their better ability to generate cash through divestures to bear the costs a reorganization entails, next to

their better bargaining position in negotiations with stakeholders (Campbell, 1996; Hotchkiss et al., 2008). Apparently, the higher degree of complexity of larger cases does not hamper their willingness to restructure through the transfer procedure. Concerning the other enrichments, none of the specifications shows an important influence on the procedure choice of firms at the start of their reorganization. Group members might be pushed towards the transfer procedure in order to restrict the time their reputation is at risk (Bianco & Nicodano, 2006; Dewaelheyns & Van Hulle, 2009), but none of the positive coefficients is statistically significant. We also do not find evidence for parent companies exercising their better bargaining position in negotiating an amicable settlement (Dewaelheyns & Van Hulle, 2009). Next, we do not observe the anticipated positive effect for the degree of specialized assets on the likelihood of filing for a settlement procedure in order to preserve going-concern value (Shleifer & Vishny, 1992). This lays in line with the view of Baird and Morrison (2005) that the going-concern surplus in the majority of cases only consists of the owner's human capital, as is confirmed by the relatively small share of specialized assets items shown in the descriptive statistics. None of these results change heavily in the simplified models.

Next, we focus on the role of different creditors in influencing their debtor's procedure choice. First, we verify the preferences of the suppliers to which the restructuring firm has debt outstanding. Following our expectations, the likelihood of selecting the *CA* relative to the *AS* increases with the amount of trade credit on the balance sheet prior to the start of the reorganization, since a larger number of involved claimants reduces the possibility to reach a settlement with a limited number of creditors. However, the results also indicate that, when distressed firms are still able to rely on trade credit, their chances to avoid the actual liquidation increase thanks to the willingness of their creditors to support the reorganization of customers owing them money, as the coefficient comparing the transfer procedure with the *AS*-reference category has a negative sign and is significant at the 10%-level. Given their position in the ranking order of claimants according to the absolute priority rule, these creditors benefit from the potential gains of a successful reorganization, while they do not face much additional risk, as their chance of receiving (parts of) their claims is rather low (Bergström et al., 2002). Subsequently, we verify whether cases suffer from a liquidation bias at the level of secured creditors. From the results, we

find no indications for such a bias (in contrast to e.g. Ayotte and Morrison (2009) and Bergström et al. (2002)), as the coefficient comparing the *TUS* to the *AS* in Model 4 is negative and insignificant. On the contrary, the significant negative coefficient comparing the *CA* to the *AS* reflects a debtor's preference for the latter procedure when there is more secured debt outstanding. Based on our findings, firms appear to prefer trying to reach an agreement with their secured claimants when they encounter difficulties and start a formal restructuring without involving other parties immediately. In that context, the amicable settlement is indeed the most suitable option. When we only consider secured debt held by financial institutions in Model 5, these findings remain similar. In Model 6, we verify the position of government bodies as creditors of a distressed firm. Whereas we do not find evidence for a liquidation bias at the level of the tax authorities, the social security authorities might indeed push restructuring debtors to the transfer procedure, although the positive effect is only significant in the unreported simplified regressions. Finally, the significant negative effect of debt capacity on the likelihood of opting for the *TUS* shows the benefits of having more spare debt capacity during restructurings. As assumed, the likelihood of reorganizing through a transfer procedure (relative to the *AS*) decreases with the possibility to attract additional credit as a result of the increased willingness of creditors to collaborate in the restructurings (Bergström et al., 2002) and the possibility to finance the reorganization using additional credit (Campbell, 1996).

Finally, we learn that industry prospects do not affect a distressed firm's procedure choice. While we argued that more favorable industry conditions would either increase the belief at the level of creditors in finishing the reorganization procedure as a going-concern (Maksimovic & Phillips, 1998) or attract a large number of buyers for the exiting firm's resources (Shleifer & Vishny, 1992), the results do not offer evidence for one of both patterns. To end, the Reparation Act of 2013 has not significantly changed the preferences of debtors when it comes to their procedure choice.

<<<<< Insert Table 6 about here >>>>>

Although the results from the procedure choice models for the subset of reorganization cases demonstrate that, once a firm has decided to reorganize, its restructuring is aimed at suitable goals, the low success rates remain unexplained. Therefore, we have to take into account the possibility that the

firms applying for reorganization might actually lack a reasonable potential to survive in the long run. In order to verify whether the financial situation of firms opting for a reorganization procedure is promising enough, we compare these firms to those which filed for bankruptcy immediately. Whereas one would expect the latter to be in significantly more favorable financial shape, the descriptive statistics in Table 5 and the results of the logit models including the fourth possible formal option to deal with financial distress in Table 7 show the exact opposite situation to hold in practice. Relative to firms opting for bankruptcy, which serve as the reference category in these regressions, each of the reorganization procedures is characterized by significantly lower quick ratios. In addition, firms in the *CA* and *TUS* procedure also suffer from significantly lower operating profitability, while firms in the *AS* do not differ significantly in terms of their operating profits. The negative effect of size on the likelihood of selecting the bankruptcy mechanism applies relative to each of the reorganization procedures, while the negative impact of group membership is absent for the amicable settlements. Parent firms might try to exercise their bargaining power in a reorganization and therefore stimulate distressed group members to apply for reorganization rather than filing for bankruptcy immediately.

To end, we zoom into the various elements of a firm's debt structure and find that the likelihood of firms to revise their situation through a *CA* procedure increases with increasing levels of trade credit, while the chance to opt for the *TUS* gets smaller (relative to bankruptcy). Furthermore, the results confirm that firms opting for the amicable settlement have significantly more secured (bank) debt compared to the bankrupt cases. Regarding the levels of government debt, we find that, while mainly firms in the *AS* have significantly more debt outstanding to the tax authorities, all reorganizing firms have to deal with significantly more social security claims. These counterintuitive results confirm that, even though within the subset of reorganization cases firms opt for the most appropriate procedure, the wrong firms end up restructuring under the *LCE*, which might be due to biased decision-making by the distressed firms (Brundin & Gustafsson, 2013; Kahneman & Tversky, 1973).

<<<<< Insert Table 7 about here >>>>>

Both the results from Table 6 and Table 7 remain robust with the use of the current ratio to replace the quick ratio as measure for liquidity, with the use of the Altman  $Z''$ -score to replace the combination

of liquidity, solvability and profitability measures as proxy for overall financial health and with the use of an alternative, more strict, indicator for group membership and when we measure the determinants of procedure choice two years prior to the filing instead of only one year beforehand.

## 7. Conclusion

We study a unique dataset of 18 342 Belgian insolvency cases. The sample includes 1 723 reorganization proceedings initiated under the 2009 Law on the Continuity of Enterprises and 16 619 liquidation filings under the 1997 Bankruptcy Act between 2009 (when the former Law on Judicial Composition was replaced by the new reorganization system) and 2016. Our main goal is to explore whether increased flexibility in the form of different available reorganization procedures next to liquidation bankruptcy contributes to the efficient functioning of the legal system. To assess the law's efficiency, we consider the degree to which reorganizing firms correctly self-select into the most suitable procedure. Next to alternative efficiency measures, the selection of a suitable procedure forms a prerequisite for flexible insolvency systems which grant distressed debtors a large degree of freedom throughout the process. At the same time, we investigate the decision-making process of managers once they take action in response to the deteriorating financial condition of their firms. Due to cognitive biases, they might depart from rational economic theory when making the procedure choice decision. Depending on the success measure used to classify the reorganizations, we find success rates from 15 to 20%. Although these results are consistent with an evaluation of the former reorganization legislation (Dewaelheyns & Van Hulle, 2009), the lack of evolution in these numbers provides a first indication that flexibility does not necessarily contribute to better outcomes for restructuring firms. Likewise, the small proportion of reorganization cases in the entire sample of insolvency cases (only 9.4%) shows that few firms make use of the more flexible available mechanisms to handle their distress. Hence, the *LCE* may still suffer from similar popularity concerns as those which have affected the reputation of the former *LJC* and eventually formed the reason for its replacement.

The results of the multinomial logit regressions show that firms generally self-select into the for them most appropriate reorganization procedure. A distressed firm is much less likely to file for a procedure aimed at transferring the firm (in part) under the supervision of the court if its financial

condition is more favorable in terms of solvability and profitability. Hence, firms facing the highest debt levels and the largest losses from their operations are significantly more likely to opt for the transfer procedure, relative to the amicable settlement, while the severity of their liquidity problems does not have a clear influence on their preferences. The distinction between both settlement procedures, however, is somewhat less obvious and only confirmed for the profitability dimension. Though the results for size indicate the usefulness of providing a low-cost alternative for smaller firms to resolve their difficulties, this questions the necessity of having different settlement procedures. The various aspects of a reorganizing firm's debt structure, however, may provide additional arguments in favor of offering separate settlement procedures. In case a debtor has large claims with secured creditors, the amicable settlement procedure might offer a useful and relatively cheap mechanism for renegotiating these contracts with a limited number of involved parties, while restructuring firms whose debt mainly consists of trade credit could be better off developing a reorganization plan. In practice, however, firms might enter a formal reorganization procedure in order to delay its liquidation after attempts to reach an out-of-court settlement with these secured creditors have failed. Hence, it might be doubtful whether it is worthwhile for policy makers to adopt procedure choice flexibility through different settlement options in a reorganization system, adding additional complexity to the insolvency system, in the absence of clear differences between the various possibilities.

By adding the cases handling their distress through a formal bankruptcy procedure to the dataset, we uncover that problems arise prior to the choice of the reorganization procedure. Rather than incorrect self-selection within the *LCE*-framework, it are the wrong firms being attracted to the reorganization procedures that cause the poor success rates. Since bankrupt firms surpass their restructuring counterparts for the liquidity and profitability dimension of financial health and cope with lower levels of governmental debt, questions about the absence of a thorough pre-entry screening, the limited discriminatory power of judges and the independent decision-making by distressed firms' management arise. In the current legislative framework, policymakers have explicitly reduced the entry barriers to some minimal administrative requirements and restricted the role of the delegated judge to keeping the overview over the procedure. By allowing judges to use their experience in assessing an applicant's



viability and potential for rehabilitation, the legislator would be better capable of both preventing firms from abusing the court protection offered in a reorganization procedure and allocating the available resources to the most promising firms. Furthermore, the *LCE* does not manage to encourage distressed firms to enter a procedure sufficiently early in the process of deterioration. Although various professionals are legally obliged to inform the commercial court about clients when they detect financial difficulties and despite their excellent position in advising those firms, they are often reluctant to formally report on their clients to the court, such that this attempt to identify problems at an early stage turns out to be unrealistic. Similarly, the limited amount of time most courts devote to preventive trade inquiries, does not contribute to the early detection of distressed firms. Said otherwise, the mechanisms to prevent escalation of commitment behavior by entrepreneurs fail to speed up the initiation of a formal procedure and judges cannot prevent them from applying, even though these firms lack the necessary potential to survive. A final remark concerns the independence the law grants to applicants in choosing the procedure through which they wish to restructure. The large proportion of mistakenly chosen options are costly while they do not result in beneficial outcomes. This situation questions the abolition of the mandatory appointment of a trustee in bankruptcy procedures and maybe also raises doubts about incumbent management to stay in place during settlement procedures and in the majority of transfers within the *LCE*. In that respect, the low entry barriers might be misused by some firms, albeit not consciously. To avoid misuse of flexibility, there is a need to further refine the insolvency system. First, we suggest to reconsider the admission requirements and the role of the delegated judge in order to enable a decent screening of applicants prior to the start of a reorganization procedure. Second, the legislator must implement effective detection mechanisms and incentives for firms to take action sufficiently early in the evolution of their distress (Mayr & Lixl, 2019). Third, cognitive biases result in suboptimal decision-making by managers in case they do not collaborate with a judicial trustee if its appointment is not mandatory. As entrepreneurs are especially susceptible in case they started the firm themselves and given that such owner-managers often run smaller firms whose procedure is mainly aimed at reaching a settlement, providing mandatory assistance to firms in a *AS*- or *CA*-procedure as well would be justified, since external advice might improve decision-making and might be a cheaper and less complex alternative to replacing incumbent management by default (McCarthy et al., 1993).

Each of these suggestions aim at attracting the correct type of insolvent firms to the reorganization procedures. As long as this cannot be assured, formal reorganization will still not be seen as a viable option by creditors, regardless of the flexibility.

Although the literature and various policy recommendations make multiple arguments in favor of adding flexibility to a reorganization system, we find little evidence of its added value in the case of the Belgian insolvency system. Adding an alternative settlement procedure appears not to have much added value other than offering a less costly option for smaller firms. Moreover, questions can be raised regarding the usefulness of a reorganization procedure which shares many similarities to a formal bankruptcy process if the law, by design, does not assure a sufficient filtering of cases based on their viability. As long as firms do not act earlier in the process and without adequate pre-entry screening and sufficiently strict admission requirements, allowing distressed firms to reorganize without the mandatory assistance of an external professional remains doubtful given the considerable risk of irrational decision-making by incumbent management. An average success ratio of under 20% is not convincing given the resources that are consumed during a reorganization process and the lack of positive evolution compared to the straightforward dual-chapter reorganization system Belgium offered prior to the introduction of flexibility in procedure choice may raise the question whether a return to a low cost liquidation-only system would not make more sense in bank-oriented economies (Berkovitch & Israel, 1999; Hege, 2003).

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**Table 1**  
The Law on the Continuity of Enterprises: summary statistics

	Failure = bankrupt during the reorganization procedure			Failure = bankrupt during or within 2 years after the reorganization procedure	
	Failure	Number of cases	% of total cases	Number of cases	% of total cases
<b>Full sample</b>	<b>0</b>	<b>342</b>	<b>19.85%</b>	<b>251</b>	<b>14.57%</b>
	<b>1</b>	<b>1 381</b>	<b>80.15%</b>	<b>1 472</b>	<b>85.43%</b>
Amicable settlements ( <i>AS</i> )	0	58	13.68%	55	12.97%
	1	366	86.32%	369	87.03%
Collective agreements ( <i>CA</i> )	0	209	19.55%	176	16.46%
	1	860	80.45%	893	83.54%
Transfers under court supervision ( <i>TUS</i> )	0	75	32.61%	20	8.70%
	1	155	67.39%	210	91.30%

*Notes:* We use different two alternative indicators to classify a reorganization as successful. First, we consider a reorganization procedure failed when the restructuring firm went bankrupt prior to the end of its reorganization. To account for a potential bankruptcy after a reorganization procedure which might be the result of the same causes as those underlying the filing for reorganization, the second indicator also classifies successfully finished reorganizations of which the initiator went bankrupt within two years after the procedure as failures.

**Table 2**  
Definitions of variables

Variable	Description	Measure
Quick ratio <sup>a</sup>	Financial health measure for liquidity, capturing a firm's ability to fulfill its short-term obligations.	$\frac{\text{current assets} - \text{inventory} - \text{accruals}}{\text{current liabilities}}$
<i>Current ratio<sup>f</sup></i>	<i>Alternative financial health measure for liquidity.</i>	$\frac{\text{current assets}}{\text{current liabilities}}$
Leverage ratio <sup>a</sup>	Financial health measure for solvability, capturing a firm's ability to meet its obligations in the long run.	$\frac{\text{total liabilities}}{\text{total assets}}$
Gross operating income <sup>a</sup>	Financial health measure for the firm's profitability.	$\frac{\text{EBITDA}}{\text{total assets}}$
<i>Altman Z''-score<sup>e</sup></i>	<i>Alternative overall financial health measure covering various financial characteristics at firm-level.</i>	$\left(6.56 \times \frac{\text{working capital}}{\text{total assets}}\right) + \left(3.26 \times \frac{\text{retained earnings}}{\text{total assets}}\right) + \left(6.72 \times \frac{\text{EBIT}}{\text{total assets}}\right) + \left(1.05 \times \frac{\text{book value of equity}}{\text{book value of liabilities}}\right)$
Total assets <sup>a</sup>	Measure for the size of the firm.	ln(total assets)
Group membership <sup>a</sup>	Indicator variable to cover whether a firm belongs to a business group.	1 in case a firm belongs to a business group and 0 otherwise
Specialized assets ratio <sup>a</sup>	Measure for the specificity of the firm's assets, capturing the proportion of assets which is not or only limitedly useful outside the firm.	$\frac{\text{fixed assets} - \text{land and buildings}}{\text{total assets}}$
Secured debt ratio <sup>a</sup>	Measure for the firm's debt structure, capturing the proportion of claims held by secured creditors (i.e. claimants whose debt which is collateralized by assets).	$\frac{\text{secured debt}}{\text{total debt}}$
Secured bank debt ratio <sup>a</sup>	Measure for the firm's debt structure, capturing the proportion of secured claims held by financial institutions.	$\frac{\text{secured debt to banks}}{\text{total debt}}$
Tax debt ratio <sup>a</sup>	Measure for the firm's debt structure, capturing the proportion of claims owed to tax authorities.	$\frac{\text{expired} + \text{non expired} + \text{estimated taxes payable}}{\text{total debt}}$
Social security debt ratio <sup>a</sup>	Measure for the firm's debt structure, capturing the proportion of claims owed to social security authorities.	$\frac{\text{expired} + \text{other social claims}}{\text{total debt}}$
Debt capacity <sup>a</sup>	Measure for the proportion of assets <sup>1</sup> which can serve as collateral for future debt, capturing the firm's spare debt capacity.	$1 - \frac{\text{total debt}}{\text{sum of book values of specified assets}}$
Industry sales growth <sup>a</sup>	Measure for the condition of the firm's environment.	Sales growth in the industry over the three years before the filing
Industry profit margin <sup>a</sup>	Alternative measure for the condition of the firm's environment.	Operating profit margin in the industry one year before the filing
<i>Industry-dummies<sup>a</sup></i>	Indicator variables to cover to which industry the firm belongs. Measure for the remaining effects from the firm's environment.	1 in case the firm belongs to the industry and 0 otherwise
Industry uncertainty <sup>a</sup>	Measure for the risks apparent in the firm's environment.	Standard deviation of the industry profit margin over the three years before the filing
2013 Reparation Act <sup>a</sup>	Indicator variable to cover whether the firm's reorganization was subject to the 2013 amendment to the Law on the Continuity of Enterprises.	1 in case the firm entered reorganization after August 2013

*Notes:*

<sup>a</sup> Variables have been used in the reported analyses.

<sup>f</sup> Variables have been used in robustness checks (of which the results are available on request).

<sup>1</sup> These asset items include accounts receivable, inventory, land and buildings, machinery, furniture and vehicles.

**Table 3**  
Sample selection

<i>Panel A: Sample selection of the reorganization cases</i>										
Criterion	2009	2010	2011	2012	2013	2014	2015	2016	Total number of removals	Sample size (N)
<i>Graydon reorganization cases</i>	<b>633</b>	<b>1 253</b>	<b>1 389</b>	<b>1 538</b>	<b>1 460</b>	<b>1 117</b>	<b>878</b>	<b>803</b>		<b>9 071</b>
(1) Unique first attempt to reorganize	610	1 223	1 329	1 459	1 371	1 050	835	766	428	8 643
(2) Financial statement information available	502	977	1 027	1 144	1 045	822	641	573	1 912	6 731
(3) Standalone filing	444	913	930	1 048	975	751	592	514	564	6 167
(4) Goal declared	176	375	569	795	770	600	488	441	1 953	4 214
(5) Allowed company type	174	365	558	778	760	588	480	433	78	4 136
(6) Sufficiently recent financial statements	160	323	495	700	692	539	451	409	367	3 769
(7) Procedure closed	156	302	433	598	563	426	291	222	778	2 991
(8) No micro-firm	89	176	238	344	331	245	163	137	1 268	<b>1 723</b>
<i>Panel B: Sample selection of the bankruptcy cases</i>										
Criterion	2009	2010	2011	2012	2013	2014	2015	2016	Total number of removals	Sample size (N)
<i>Graydon liquidation cases</i>	<b>6 927</b>	<b>9 939</b>	<b>10 519</b>	<b>11 052</b>	<b>12 279</b>	<b>11 289</b>	<b>10 601</b>	<b>10 066</b>		<b>82 672</b>
(1) Unique first attempt to reorganize	6 856	9 826	10 401	10 947	12 151	11 188	10 526	9 973	804	81 868
(2) Financial statement information available	5 201	7 219	7 645	7 853	8 851	7 866	7 317	6 826	23 090	58 778
(3) Standalone filing	5 043	6 953	7 327	7 525	8 493	7 504	7 000	6480	2 453	56 325
(4) Allowed company type	4 982	6 863	7 218	7 401	8 369	7 393	6 876	6 362	861	55 464
(5) Sufficiently recent financial statements	1 895	2 623	2 622	2 877	3 155	2 956	2 747	2 391	34 198	21 266
(6) Procedure not withdrawn	1 835	2 561	2 522	2 807	3 044	2 881	2 652	2 286	678	20 588
(7) No micro-firm	1 326	2 114	2 059	2 246	2 465	2 367	2 155	1 887	3 969	<b>16 619</b>



**Table 4**  
Disruptive statistics for the subset of reorganization cases

		Panel A: General descriptive statistics						Panel B: Mean per possible goal			Panel C: Mean per possible outcome	
Variable	Year	Observations (N)	Mean	Median	Min	Max	Mean AS	CA	TUS	Mean Survived	Failed	
Financial health	Quick ratio <sup>w</sup>	<i>i-1</i>	1 226	<b>.661</b>	.524	.002	3.982	.738	.643**	.605*	.659	.662
		<i>i-2</i>	1 583	<b>.784</b>	.659	.007	4.474	.861	.770**	.709**	.780	.784
	Leverage ratio <sup>w</sup>	<i>i-1</i>	1 226	<b>1.340</b>	1.026	.398	5.365	1.332	1.335	1.381	1.430	1.312*
		<i>i-2</i>	1 585	<b>1.089</b>	.935	.369	3.526	1.128	1.065*	1.127	1.095	1.087
	Gross operating profit <sup>w</sup>	<i>i-1</i>	1 226	<b>-.076</b>	-.006	-1.999	.710	-.039	-.083*	-.109*	-.090	-.071
		<i>i-2</i>	1 585	<b>.030</b>	.054	-1.917	1.646	-.044	-.032	-.002	.007	.036
Further refinements	Total assets (ln)	<i>i-1</i>	1 226	<b>13.259</b>	13.292	2.565	18.273	12.626	13.321***	14.162***	13.447	13.202**
		<i>i-2</i>	1 585	<b>13.219</b>	13.189	5.050	19.274	12.594	13.273***	14.077***	13.637	13.114***
	Specialized assets ratio <sup>w</sup>	<i>i-1</i>	1 226	<b>.224</b>	.137	0	.962	.220	.224	.238	.208	.230
		<i>i-2</i>	1 585	<b>.238</b>	.157	0	.938	.232	.238	.248	.230	.240
Debt structure	Trade credit <sup>w</sup>	<i>i-1</i>	1 226	<b>.314</b>	.276	0	.923	.295	.330**	.261	.280	.324***
		<i>i-2</i>	1 583	<b>.318</b>	.286	0	.945	.303	.329*	.295	.277	.328***
	Secured debt ratio <sup>w</sup>	<i>i-1</i>	1 226	<b>.098</b>	0	0	.843	.100	.087	.147**	.100	.097
		<i>i-2</i>	1 583	<b>.091</b>	0	0	.857	.083	.086	.129**	.101	.089
	Secured bank debt ratio <sup>w</sup>	<i>i-1</i>	1 226	<b>.084</b>	0	0	.824	.090	.075	.121	.090	.082
		<i>i-2</i>	1 583	<b>.079</b>	0	0	.826	.072	.076	.107**	.096	.075*
	Tax debt ratio <sup>w</sup>	<i>i-1</i>	1 226	<b>.080</b>	.033	0	.633	.104	.075***	.061***	.084	.079
		<i>i-2</i>	1 124	<b>.073</b>	.029	0	.757	.094	.069***	.058**	.071	.074
	Social security debt ratio <sup>w</sup>	<i>i-1</i>	1 226	<b>.098</b>	.030	0	.805	.090	.091	.151***	.103	.096
		<i>i-2</i>	1 124	<b>.080</b>	.024	0	.716	.073	.072	.127***	.081	.079
Debt capacity <sup>w</sup>	<i>i-1</i>	1 222	<b>-1.204</b>	-.294	-14.698	.536	-1.235	-1.140	-1.476	-1.279	-1.181	
	<i>i-2</i>	1 579	<b>-.770</b>	-.148	-9.644	.567	-.822	-.699	-.994	-.782	-.767	
Industry	Industry sales growth <sup>w</sup>	<i>i-1</i>	1 720	<b>.012</b>	.014	-.060	.085	.018	.012	.011	.011	.012
	Industry profit margin <sup>w</sup>	<i>i-1</i>	1 720	<b>.033</b>	.031	-.032	.016	.031	.034	.034	.042	.031***
	Industry uncertainty <sup>w</sup>	<i>i-1</i>	1 720	<b>40.812</b>	35.566	24.659	80.585	41.519	40.780	39.652*	42.758	40.332***
Legal	Judicial experience <sup>w</sup>	<i>i-1</i>	1 617	<b>8.641</b>	3	0	89	10.130	8.580*	5.889***	6.818	9.080**

*Notes:* See Table 2 for the definitions of the variables. In Panel B, distinctions between the different reorganization options are based on the initial procedure choice. In Panel C, we distinguish between successful and failing reorganizations using the first indicator (see Table 1), which classifies reorganizations as failures when the reorganizing firm went bankrupt prior to the end of its reorganization. We abbreviate the amicable settlement procedure as AS, collective agreement procedure as CA and transfers under court supervision as TUS. The means for the different reorganization procedures were compared statistically using two sample T-tests for each procedure option relative to the AS-reference category. The means for the subsets of failed and successful reorganizations were compared statistically using two sample T-tests as well.

\*\*\* denotes significance at 1%, \*\* denotes significance at 5% and \* denotes significance at 10%.

<sup>w</sup> Variable has been winsorized at 2%-level (i.e. the top and bottom 1% of the values have been replaced to the value of the 1st or 99th percentile to reduce the influence of outliers).

<sup>w</sup> Variable has been winsorized at 5%-level.

**Table 5**  
Descriptive statistics for the entire sample of insolvency cases

		Panel A: General descriptive statistics						Panel B: Mean per possible goal				
Variable	Year	Observations (N)	Mean	Median	Min	Max	Mean AS	CA	TUS	Mean Reorganizations	Bankruptcies	
Financial health	Quick ratio <sup>w</sup>	<i>i-1</i>	6 778	<b>.829</b>	.477	.000	6.055	.756	.651**	.619*	.672	.864***
		<i>i-2</i>	17 378	<b>.892</b>	.575	.003	5.954	.880	.780**	.709**	.754	.902***
	Leverage ratio <sup>w</sup>	<i>i-1</i>	6 784	<b>2.798</b>	1.099	.296	20.992	1.552	1.476	1.441	1.490	3.087***
		<i>i-2</i>	17 457	<b>1.466</b>	.979	.287	6.270	1.189	1.095*	1.147	1.125	1.500***
	Gross operating profit <sup>w</sup>	<i>i-1</i>	6 078	<b>-.109</b>	-.016	-2.159	.985	-.034	-.084*	-.110**	-.075	-.116**
		<i>i-2</i>	15 506	<b>-.008</b>	.019	-1.439	1.195	.042	.033	-.007*	.029	-.012***
Further refinements	Total assets (ln)	<i>i-1</i>	6 784	<b>11.645</b>	11.637	0	18.272	12.626	13.321***	14.162***	13.259	11.289***
		<i>i-2</i>	17 457	<b>11.798</b>	11.772	0	19.274	12.594	13.273***	14.077***	13.219	11.656***
	Specialized assets ratio <sup>w</sup>	<i>i-1</i>	6 784	<b>.217</b>	.099	0	.953	.220	.224	.238	.224	.216
		<i>i-2</i>	14 457	<b>.240</b>	.135	0	.922	.232	.238	.248	.238	.241
Debt structure	Trade credit ratio <sup>w</sup>	<i>i-1</i>	6 798	<b>.298</b>	.227	0	.971	.296	.331**	.261	.314	.294**
		<i>i-2</i>	17 411	<b>.278</b>	.211	0	.927	.303	.329*	.295	.318	.274***
	Secured debt ratio <sup>w</sup>	<i>i-1</i>	6 798	<b>.053</b>	0	0	.682	.095	.085	.142**	.094	.044***
		<i>i-2</i>	17 411	<b>.047</b>	0	0	.636	.077	.081	.122***	.086	.043***
	Secured bank debt ratio <sup>w</sup>	<i>i-1</i>	6 798	<b>.044</b>	0	0	.624	.083	.072	.117*	.080	.037***
		<i>i-2</i>	17 410	<b>.040</b>	0	0	.588	.065	.071	.101**	.074	.037***
	Tax debt ratio <sup>w</sup>	<i>i-1</i>	6 798	<b>.101</b>	.025	0	.802	.107	.076***	.061***	.081	.105***
		<i>i-2</i>	6 054	<b>.087</b>	.023	0	.708	.093	.069***	.058**	.073	.090***
	Social security debt ratio <sup>w</sup>	<i>i-1</i>	6 798	<b>.050</b>	0	0	.490	.080	.084	.143***	.090	.041***
		<i>i-2</i>	6 054	<b>.044</b>	0	0	.420	.064	.068	.119***	.073	.037***
Debt capacity <sup>w</sup>	<i>i-1</i>	6 591	<b>-7.130</b>	-.424	-143.052	.839	-3.969	-2.005**	-3.320	-2.633	-8.154***	
	<i>i-2</i>	17 205	<b>-2.397</b>	-.274	-37.552	.842	-1.315	-.952	-1.738	-1.151	-2.522***	
Industry	Industry sales growth <sup>w</sup>	<i>i-1</i>	17 835	<b>.012</b>	.013	-.052	.070	.012	.012	.011	.012	.012
	Industry profit margin <sup>w</sup>	<i>i-1</i>	17 835	<b>.027</b>	.027	-.032	.015	.031	.034	.034	.033	.026***
	Industry uncertainty <sup>w</sup>	<i>i-1</i>	17 835	<b>39.752</b>	35.230	26.183	80.116	41.517	40.794	39.692*	40.825	39.637***

*Notes:* See Table 2 for the definitions of the variables. In Panel B, distinctions between the different reorganization options are based on the initial procedure choice. We abbreviate the amicable settlement procedure as AS, collective agreement procedure as CA and transfers under court supervision as TUS. The means for the different reorganization procedures were compared statistically using two sample T-tests for each procedure option relative to the AS-reference category. The means for the subsets of reorganizations and bankruptcies were compared statistically using two sample T-tests as well. Differences in averages for the various reorganization procedures compared to the results reported in Table 4 are due to the varying impact of winsorizing, which has been applied separately for both samples.

\*\*\* denotes significance at 1%, \*\* denotes significance at 5% and \* denotes significance at 10%.

<sup>w</sup> Variable has been winsorized at 2%-level (i.e. the top and bottom 1% of the values have been replaced to the value of the 1st or 99th percentile to reduce the influence of outliers).

<sup>w</sup> Variable has been winsorized at 5%-level.

<sup>w</sup> Variable has been winsorized at 10%-level.

**Table 6**

Determinants of procedure choice (including industry- and law-specific determinants as well as additional sector and legal district fixed effects)

Variable	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	CA vs. AS	TUS vs. AS	CA vs. AS	TUS vs. AS	CA vs. AS	TUS vs. AS	CA vs. AS	TUS vs. AS	CA vs. AS	TUS vs. AS	CA vs. AS	TUS vs. AS	CA vs. AS	TUS vs. AS
Quick ratio <sup>w</sup>	<b>-0.208</b> (.127)	<b>-0.046</b> (.209)	<b>-0.197</b> (.131)	<b>-0.011</b> (.215)	<b>-0.227*</b> (.123)	<b>-0.159</b> (.203)	<b>-0.233*</b> (.123)	<b>-0.175</b> (.208)	<b>-0.239**</b> (.123)	<b>-0.180</b> (.210)	<b>-0.192</b> (.126)	<b>-0.125</b> (.214)	<b>-0.205</b> (.126)	<b>-0.060</b> (.211)
Leverage ratio <sup>w</sup>	<b>.050</b> (.108)	<b>.442***</b> (.161)	<b>.047</b> (.108)	<b>.439***</b> (.161)										
Gross operating profit <sup>w</sup>	<b>-0.437*</b> (.260)	<b>-0.474</b> (.374)	<b>-0.428*</b> (.261)	<b>-0.455</b> (.373)	<b>-0.434*</b> (.245)	<b>-0.926***</b> (.351)	<b>-0.433*</b> (.244)	<b>-0.796**</b> (.350)	<b>-0.428*</b> (.244)	<b>-0.788**</b> (.350)	<b>-0.475*</b> (.247)	<b>-0.770**</b> (.359)	<b>-0.435*</b> (.250)	<b>-0.636*</b> (.362)
Total assets (ln)	<b>.285***</b> (.056)	<b>.784***</b> (.091)	<b>.278***</b> (.056)	<b>.767***</b> (.092)	<b>.271***</b> (.050)	<b>.678***</b> (.086)	<b>.293***</b> (.051)	<b>.681***</b> (.088)	<b>.290***</b> (.051)	<b>.685***</b> (.087)	<b>.244***</b> (.052)	<b>.667***</b> (.090)	<b>.270***</b> (.055)	<b>.768***</b> (.090)
Group membership			<b>.448</b> (.416)	<b>.577</b> (.490)	<b>.466</b> (.419)	<b>.721</b> (.489)	<b>.510</b> (.421)	<b>.682</b> (.491)	<b>.517</b> (.421)	<b>.692</b> (.492)	<b>.409</b> (.414)	<b>.559</b> (.486)	<b>.505</b> (.434)	<b>.557</b> (.506)
Specialized assets ratio <sup>w</sup>			<b>.173</b> (.365)	<b>.442</b> (.542)	<b>.204</b> (.366)	<b>.314</b> (.538)	<b>.207</b> (.366)	<b>.369</b> (.539)	<b>.159</b> (.366)	<b>.361</b> (.539)	<b>.070</b> (.370)	<b>.351</b> (.547)	<b>.068</b> (.385)	<b>-0.295</b> (.597)
Trade credit ratio <sup>w</sup>					<b>.773**</b> (.367)	<b>-1.089*</b> (.615)								
Secured debt ratio <sup>w</sup>							<b>-0.953**</b> (.400)	<b>-0.227</b> (.569)						
Secured bank debt ratio <sup>w</sup>									<b>-1.026**</b> (.429)	<b>-0.342</b> (.627)				
Tax debt ratio <sup>w</sup>											<b>-1.265*</b> (.687)	<b>-1.707</b> (1.325)		
Social security debt ratio <sup>w</sup>											<b>-0.809</b> (.581)	<b>.979</b> (.791)		
Debt capacity <sup>w</sup>													<b>-0.021</b> (.036)	<b>-0.143***</b> (.051)
Industry sales growth <sup>w</sup>	<b>-0.002</b> (.043)	<b>.032</b> (.062)	<b>-0.002</b> (.043)	<b>.031</b> (.062)	<b>-0.003</b> (.044)	<b>.022</b> (.062)	<b>-0.004</b> (.044)	<b>.024</b> (.062)	<b>-0.003</b> (.044)	<b>.024</b> (.062)	<b>-0.003</b> (.044)	<b>.019</b> (.062)	<b>-0.003</b> (.043)	<b>.043</b> (.063)
Industry profit margin <sup>w</sup>	<b>.012</b> (.039)	<b>.027</b> (.057)	<b>.014</b> (.039)	<b>.030</b> (.057)	<b>.017</b> (.039)	<b>.024</b> (.057)	<b>.017</b> (.039)	<b>.025</b> (.057)	<b>.018</b> (.039)	<b>.027</b> (.057)	<b>.014</b> (.039)	<b>.029</b> (.057)	<b>.013</b> (.039)	<b>.013</b> (.058)
Industry uncertainty <sup>w</sup>	<b>-0.011</b> (.012)	<b>-0.025</b> (.018)	<b>-0.011</b> (.012)	<b>-0.025</b> (.018)	<b>-0.011</b> (.012)	<b>-0.021</b> (.018)	<b>-0.011</b> (.012)	<b>-0.021</b> (.018)	<b>-0.011</b> (.012)	<b>-0.022</b> (.018)	<b>-0.013</b> (.012)	<b>-0.020</b> (.018)	<b>-0.011</b> (.012)	<b>-0.024</b> (.018)
2013 Reparation Act	<b>.421</b> (.423)	<b>.489</b> (.585)	<b>.421</b> (.424)	<b>.488</b> (.586)	<b>.420</b> (.425)	<b>.495</b> (.582)	<b>.438</b> (.424)	<b>.509</b> (.584)	<b>.446</b> (.424)	<b>.504</b> (.584)	<b>.453</b> (.426)	<b>.495</b> (.587)	<b>.415</b> (.424)	<b>.506</b> (.587)
Year fixed effects	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Sector fixed effects	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Legal district fixed effects	Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Number of observations (N)	1 123		1 123		1 123		1 123		1 123		1 123		1 120	
Pseudo-R <sup>2</sup>	.1517		.1529		.1565		.1522		.1520		.1545		.1548	

Notes: Multinomial logit models whereby the amicable settlement serves as the reference category. Estimates are based on the subset of reorganization cases. See Table 2 for the definitions of the variables. Standard errors are reported in parentheses.

\*\*\* denotes significance at 1%, \*\* denotes significance at 5% and \* denotes significance at 10%.

<sup>w</sup> Variable has been winsorized at 2%-level (i.e. the top and bottom 1% of the values have been replaced to the value of the 1<sup>st</sup> or 99<sup>th</sup> percentile to reduce the influence of outliers).

<sup>w</sup> Variable has been winsorized at 5%-level.

**Table 7**

Determinants of procedure choice (including industry- and law-specific determinants as well as additional sector and legal district fixed effects)

	Model 1			Model 2			Model 3			Model 4			Model 5			Model 6			Model 7		
Variable	AS vs. BR	CA vs. BR	TUS vs. BR	AS vs. BR	CA vs. BR	TUS vs. BR	AS vs. BR	CA vs. BR	TUS vs. BR	AS vs. BR	CA vs. BR	TUS vs. BR	AS vs. BR	CA vs. BR	TUS vs. BR	AS vs. BR	CA vs. BR	TUS vs. BR	AS vs. BR	CA vs. BR	TUS vs. BR
Quick ratio <sup>w</sup>	<b>-.177**</b> (.075)	<b>-.336***</b> (.063)	<b>-.298**</b> (.136)	<b>-.194**</b> (.078)	<b>-.356***</b> (.066)	<b>-.308**</b> (.142)	<b>-.165**</b> (.074)	<b>-.342***</b> (.065)	<b>-.299**</b> (.137)	<b>-.159**</b> (.074)	<b>-.335***</b> (.064)	<b>-.318**</b> (.140)	<b>-.155**</b> (.074)	<b>-.334***</b> (.064)	<b>-.317**</b> (.140)	<b>-.196**</b> (.079)	<b>-.332***</b> (.066)	<b>-.295**</b> (.148)	<b>-.170**</b> (.075)	<b>-.355***</b> (.066)	<b>-.327**</b> (.142)
Leverage ratio <sup>w</sup>	<b>-.036</b> (.030)	<b>-.035</b> (.024)	<b>.053</b> (.051)	<b>-.039</b> (.031)	<b>-.040</b> (.024)	<b>.049</b> (.051)															
Gross operating profit <sup>w</sup>	<b>.118</b> (.183)	<b>-.256**</b> (.117)	<b>-.488**</b> (.245)	<b>.132</b> (.183)	<b>-.226*</b> (.118)	<b>-.449*</b> (.248)	<b>.169</b> (.179)	<b>-.159</b> (.115)	<b>-.587**</b> (.240)	<b>.168</b> (.179)	<b>-.178</b> (.114)	<b>-.521**</b> (.241)	<b>.166</b> (.180)	<b>-.179</b> (.114)	<b>-.518**</b> (.242)	<b>.216</b> (.178)	<b>-.142</b> (.116)	<b>-.374</b> (.253)	<b>.147</b> (.182)	<b>-.222*</b> (.115)	<b>-.502**</b> (.246)
Total assets (ln)	<b>.306***</b> (.040)	<b>.510***</b> (.028)	<b>.844***</b> (.062)	<b>.296***</b> (.041)	<b>.488***</b> (.028)	<b>.817***</b> (.063)	<b>.321***</b> (.036)	<b>.508***</b> (.026)	<b>.809***</b> (.060)	<b>.299***</b> (.038)	<b>.513***</b> (.027)	<b>.781***</b> (.061)	<b>.299***</b> (.037)	<b>.511***</b> (.027)	<b>.785***</b> (.061)	<b>.321***</b> (.038)	<b>.500***</b> (.027)	<b>.811***</b> (.063)	<b>.322***</b> (.038)	<b>.494***</b> (.027)	<b>.826***</b> (.061)
Group membership				<b>.502</b> (.403)	<b>.862***</b> (.208)	<b>.861***</b> (.309)	<b>.478</b> (.403)	<b>.845***</b> (.208)	<b>.920***</b> (.309)	<b>.452</b> (.405)	<b>.847***</b> (.208)	<b>.885***</b> (.308)	<b>.457</b> (.404)	<b>.847***</b> (.208)	<b>.891***</b> (.308)	<b>.483</b> (.404)	<b>.835***</b> (.208)	<b>.796**</b> (.313)	<b>.313</b> (.425)	<b>.827***</b> (.208)	<b>.756**</b> (.313)
Specialized assets ratio <sup>w</sup>				<b>-.233</b> (.275)	<b>-.175</b> (.185)	<b>-.071</b> (.380)	<b>-.223</b> (.274)	<b>-.118</b> (.186)	<b>-.183</b> (.379)	<b>-.235</b> (.274)	<b>-.148</b> (.185)	<b>-.116</b> (.381)	<b>-.214</b> (.273)	<b>-.155</b> (.185)	<b>-.088</b> (.380)	<b>-.069</b> (.279)	<b>-.081</b> (.187)	<b>.148</b> (.396)	<b>-.147</b> (.279)	<b>.031</b> (.193)	<b>-.024</b> (.400)
Trade credit ratio <sup>w</sup>							<b>-.177</b> (.265)	<b>.335*</b> (.178)	<b>-1.249***</b> (.443)												
Secured debt ratio <sup>w</sup>										<b>.782**</b> (.353)	<b>-.165</b> (.265)	<b>.664</b> (.451)									
Secured bank debt ratio <sup>w</sup>													<b>.963**</b> (.289)	<b>-.109</b> (.295)	<b>.705</b> (.505)						
Tax debt ratio <sup>w</sup>																<b>1.097***</b> (.400)	<b>.373</b> (.334)	<b>-.284</b> (.953)			
Social security debt ratio <sup>w</sup>																<b>2.414***</b> (.552)	<b>1.584***</b> (.388)	<b>4.242***</b> (.696)			
Debt capacity <sup>w</sup>																			<b>.003</b> (.004)	<b>.015***</b> (.005)	<b>.002</b> (.006)
Industry sales growth <sup>w</sup>	<b>.005</b> (.037)	<b>-.003</b> (.025)	<b>.024</b> (.048)	<b>.006</b> (.037)	<b>-.002</b> (.025)	<b>.026</b> (.048)	<b>.006</b> (.037)	<b>.002</b> (.025)	<b>.012</b> (.048)	<b>.007</b> (.037)	<b>-.000</b> (.025)	<b>.021</b> (.048)	<b>.006</b> (.037)	<b>.000</b> (.025)	<b>.020</b> (.048)	<b>-.006</b> (.038)	<b>-.008</b> (.025)	<b>.004</b> (.048)	<b>.010</b> (.037)	<b>-.001</b> (.025)	<b>.033</b> (.048)
Industry profit margin <sup>w</sup>	<b>.011</b> (.034)	<b>.010</b> (.024)	<b>.043</b> (.048)	<b>.012</b> (.034)	<b>.013</b> (.024)	<b>.048</b> (.048)	<b>.009</b> (.034)	<b>.012</b> (.024)	<b>.055</b> (.048)	<b>.008</b> (.034)	<b>.011</b> (.024)	<b>.047</b> (.048)	<b>.006</b> (.034)	<b>.011</b> (.024)	<b>.047</b> (.048)	<b>.004</b> (.034)	<b>.010</b> (.024)	<b>.051</b> (.048)	<b>.010</b> (.034)	<b>.021</b> (.024)	<b>.051</b> (.048)
Industry uncertainty <sup>w</sup>	<b>-.007</b> (.010)	<b>-.017**</b> (.007)	<b>-.036***</b> (.014)	<b>-.007</b> (.010)	<b>-.016**</b> (.007)	<b>-.036***</b> (.014)	<b>-.007</b> (.010)	<b>-.016**</b> (.007)	<b>-.039***</b> (.014)	<b>-.007</b> (.010)	<b>-.016**</b> (.007)	<b>-.036***</b> (.014)	<b>-.007</b> (.010)	<b>-.016**</b> (.007)	<b>-.036***</b> (.014)	<b>-.004</b> (.010)	<b>-.014**</b> (.007)	<b>-.029**</b> (.014)	<b>-.008</b> (.010)	<b>-.017**</b> (.007)	<b>-.038***</b> (.014)
Year fixed effects		Yes		Yes			Yes			Yes			Yes			Yes			Yes		
Sector fixed effects		Yes		Yes			Yes			Yes			Yes			Yes			Yes		
Legal district fixed effects		Yes		Yes			Yes			Yes			Yes			Yes			Yes		
Number of observations (N)		5 782		5 782			5 782			5 782			5 782			5 782			5 782		5 649
Pseudo-R <sup>2</sup>		.1737		.1764			.1775			.1767			.1767			.1839			.1750		

Notes: Multinomial logit models whereby the bankruptcy procedure serves as the reference category. Estimates are based on the entire dataset of insolvency cases. See Table 2 for the definitions of the variables. Standard errors are reported in parentheses.

\*\*\* denotes significance at 1%, \*\* denotes significance at 5% and \* denotes significance at 10%.

<sup>w</sup> Variable has been winsorized at 2%-level (i.e. the top and bottom 1% of the values have been replaced to the value of the 1<sup>st</sup> or 99<sup>th</sup> percentile to reduce the influence of outliers).

<sup>w</sup> Variable has been winsorized at 5%-level.

<sup>w</sup> Variable has been winsorized at 10%-level.

## Appendix

### A.1. Flexibility in reorganization procedure choice under the Belgian Law on the Continuity of Enterprises (*LCE*)<sup>18</sup>

The success rates of the 1997 Law on Judicial Composition were rather poor. Dewaelheyns and Van Hulle (2009) concluded that nearly 80 percent of the cases accepted for reorganization eventually ended up in liquidation. To find out which aspects or features of the law causes cases to fail, Pauwels and van Der Elst (2009) studied the *LJC* in some more detail. Their results stress that the procedure was not designed for most firms in financial distress. The majority of firms facing difficulties appeared to be small and lacked the resources to bear the costs entailed by a formal reorganization procedure. Next to this issue, the authors also noticed that the length of the moratorium period was too short for more complex cases to restructure thoroughly. Finally, large debt outstanding to tax and social security authorities did not help in reaching an agreement, since these bodies were unwilling to renegotiate their prioritized claims. The lack of achievement of the goals for which the legislation was designed resulted in the *LJC* to cope with a negative image, which was not very helpful to increase its usage (Pauwels & van Der Elst, 2009; Van den Broele, 2011). Therefore, the introduction of an entirely new legal system in 2009 to replace the *LJC* formed a logical consequence.

Next, we provide an overview of the main features and the different steps a firm must undertake according to the 2009 Law on the Continuity of Enterprises based on Geens et al. (2017), Zenner (2009) and Pauwels and van Der Elst (2009). Although the law provides support for extra-judicial possibilities to handle distress, mainly through investigations by chambers of trade inquiry and out-of-court amicable settlements, the core of the *LCE* consists of the three possible reorganization options. Each firm whose continuity is threatened as well as those firms qualifying for bankruptcy can file a petition for a judicial reorganization procedure. In contrast to the recommendation by the World Bank (World Bank, 2015),

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<sup>18</sup> For the full law text, see. <http://www.ejustice.just.fgov.be/eli/wet/2009/01/31/2009009047/justel#hit1>.

other involved parties do not have the right to initiate procedures such that the possibility to enter reorganization lays exclusively with the debtor. The Belgian system is designed as an open portal whereby debtors can choose from a series of solutions, according to what they consider feasible in their context. The first possibility consists of an amicable settlement (*AS*). The main difference compared to the extra-judicial settlement lays in the involvement of the delegated judge, which might increase the creditors' willingness in the negotiations, and in the protection the debtor enjoys from the court-supervision, which comes at a cost resulting from the requirements that need to be fulfilled in order to formally file under the *LCE*. In accordance with the amicable settlement outside the court, the semi-formal settlement also provides a safe harbor to creditors once the terms of the agreement have been filed with the court. When all parties manage to reach an agreement, the court will validate the settlement, which will also close the procedure. A second option consists of the collective agreement (*CA*). This procedure constitutes a modified version of the replaced Judicial Composition. During the temporary moratorium, the debtor prepares a reorganization plan which the firm must implement within five years after approval from its creditors and homologation by the court. After the reorganization plan is established, it needs to be approved by double majority<sup>19</sup> of the firm's creditors. If the plan is approved, the court will homologate the plan, which ends the procedure. In contrast to the amicable settlement, the plan binds upon all claims in moratorium. Each creditor and the public prosecutor may ask the court to revoke the approval if the plan is not implemented properly. As mentioned before, the implementation of the plan cannot cover a period of more than five years. In contrast to the suspension period, this term cannot be extended. The transfer under court supervision (*TUS*) forms the final reorganization option and is especially targeted at firms facing more severe financial difficulties. Once more, the aim of the *LCE* to preserve viable (parts of) firms is reflected in this procedure. Although the court-guided transfer resembles liquidation to a large extent, the focus in this alternative procedure lays explicitly in safeguarding sufficiently viable business activities or, if possible, the business in its entirety. A court representative will be assigned the task of selling at the best price, but he also needs to take into

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<sup>19</sup> The reorganization plan must receive approval from the majority of unsecured creditors present at the voting (1), who should represent at least half of the value of the claims involved in the reorganization plan (2).

account the main objective of the *LCE*. The latter means that in case he receives comparable offers, priority should be given to the largest preservation of employment.

Next to the selection of one of the reorganization procedures, a debtor needs to provide the court with its two most recent financial statements, a complete list of its creditors and must demonstrate that its employees or their representatives were informed of the filing. These admission requirements are rather limited in order to attract as many firms as possible, in line with recommendations from the European Commission (European Commission, 2003). Once the petition is complete, the court appoints a delegated judge to evaluate its compliance with the conditions specified in the law. Besides the appointment of the delegated judge, who is mainly responsible for the follow-up of the reorganization within the court, any stakeholder can request the court to appoint a court representative whose task is to advise and support the firm during the restructurings. In case the firm is allowed to enter the reorganization procedure, the court grants the debtor a moratorium period, which protects the distressed firm from any enforcement of its movable or immovable goods by secured creditors. Although initially the moratorium cannot last more than six months, the delegated judge has some discretion in determining the exact duration. Up to a maximum of eighteen months, courts can grant extensions to the suspension throughout the reorganization process. In case the initial procedure appears unfeasible, debtors have the possibility to change the purpose of their restructurings at any time. However, the law imposes restrictions on the possible switches such that it is possible to turn an amicable settlement into a collective agreement or a court-supervised transfer, but not to apply the opposite modification from transfer to settlement. In contrast to the Belgian liquidation procedure, the *LCE* does not require the management to be replaced by a (costly) insolvency representative. The responsibility of the judicial trustee referred to above is limited to an advisory role. The legislator considers the debtor to provide the

firm with better survival chances in the long run such that they stay in place during the reorganization, supervised by the court through the delegated judge<sup>20</sup>.

In the first years after the introduction of the new *LCE*, several of its features appeared not to have the desired effect (VBO - Réseau CAP - CAP Netwerk Vlaanderen, 2012). In an attempt to correct for these aspects, a first major amendment came into effect in August 2013<sup>21</sup>. With this Reparation Act, the legislator aimed to increase efficiency by preventing abuse through a more thorough screening of a filing firm's viability. Therefore, the 2013 amendment includes different provisions. First, in order to increase the impact of the trade inquiries by commercial courts in the prevention and detection of vulnerable firms, the law now also requires other specialists<sup>22</sup> to inform the debtor when they discover transactions or operations which might threaten the firm's continuity. Furthermore, they are encouraged to inform the commercial court in case the firm does not react to their warnings by taking actions to improve its situation. As a final measure in this respect, judges receive more discretionary power in the filtering of filing firms in an attempt to make this process more efficient. Secondly, the Reparation Act includes measures to prevent the reorganization procedures from being abused by unviable firms by the introduction of more strict admission requirements. Firms are no longer offered a term of two weeks to provide their petition with the necessary documents. At the moment of filing, the petition must be complete in order for the case to qualify for admission to the procedure. In addition, as of January 2015, each firm must pay a fee of 1000 euros at the moment of filing as a sign of their willingness to restructure. Consequently, one would expect the number of filings to fall back, but the quality of the filings to increase. The focus of the *LCE* now explicitly turns to firms suffering from temporary rather than

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<sup>20</sup> In case managers appear to have committed severe mistakes or seem to behave out of bad faith, however, the court is able to appoint an interim director to replace the firm's management upon request of the public prosecutor or any involved stakeholder (Geens et al., 2017).

<sup>21</sup> For more information w.r.t. the content of the first amendment of the *LCE*, see Van den Broele (2015) or Vercauteren (2016). For the full law text, see

[http://www.ejustice.just.fgov.be/cgi\\_loi/change\\_lg.pl?language=nl&la=N&table\\_name=wet&cn=2013052715](http://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=nl&la=N&table_name=wet&cn=2013052715).

<sup>22</sup> A firm generally maintains contacts with a variety of specialists, like external accountants, tax consultants,...



structural difficulties. Finally, the legislator acknowledged the weak position of a reorganizing firm's creditors. From 2013 onwards, reorganization plans need to provide reimbursements to all creditors of at least fifteen percent of their claim and it is no longer possible to reduce claims from labor performed prior to the start of the reorganization procedure. As prescribed by international recommendations, employees constitute a vital part of a firm whose rights deserve considerable attention (World Bank, 2015). An early evaluation by Van den Broele (2014) shows that although the *LCE* indeed attracts less but larger firms, their financial health remains poor<sup>23</sup>.

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<sup>23</sup> This conclusion is repeated in a similar report published one year later, see (Van den Broele, 2015), and two years later (Vercauteren, 2016). A quick investigation of the different dimension of financial health taken into account in this paper also shows that the financial shape of reorganizing firms has not evolved favorably.