

Questioni di Economia e Finanza

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BUSINESS CONTINUITY IN TIMES OF DISTRESS: DEBT RESTRUCTURING AGREEMENTS AND COMPOSITIONS WITH CREDITORS IN ITALY

by Alessandro Danovi^{*}, Iacopo Donati[°], Ilaria Forestieri[°], Tommaso Orlando[§] and Andrea Zorzi[°]

Abstract

The Italian insolvency framework makes several restructuring tools available to firms and their creditors, so that distress does not necessarily lead to liquidation. This paper analyses two such instruments: debt restructuring agreements (DRAs) and compositions with creditors (CCs), both commonly used to reorganize distressed firms and preserve their continuity. These procedures typically involve large firms, particularly in the case of DRAs where judicial control over negotiations is milder. Firms using DRAs are in less critical economic conditions when they file for restructuring, but they do so after longer periods of distress. Despite their declared aim, the effectiveness of these instruments in terms of business continuity is limited: many firms that use them end up exiting the market, in particular in DRAs. Firms that survive display only partial recovery, which is relatively more intense in CCs. However, the apparently superior performance of CCs is overshadowed by the long duration of restructuring, which may prevent us from observing definitive outcomes.

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1. Introduction¹

The Italian insolvency framework is the result of a several reforms that occurred over the past years. The major insolvency reform of 2005 (Law no. 80/2005) and additional legislative initiatives adopted in the subsequent years² amended a large part of the previous Italian Bankruptcy Law (Decree no. 267/1942), with the main goal of enhancing the use of contractual and quasi-contractual agreements between distressed debtors and creditors, entailing a reduced role for courts in managing business crises.

The social stigma associated with insolvency (Efrat, 2006; McGowan and Andrews, 2016)³ and the structural problems affecting the Italian judicial system⁴ are undoubtedly among the main reasons for involved parties to avoid formal bankruptcy procedures, which are traditionally lengthy and characterized by low recovery rates for creditors.⁵ As a consequence, the Italian legislator has tried to move away from these procedures, offering financially distressed firms the opportunity to restructure their debts without going to court. Businesses and their advisors can thus resort to various out-of-court procedures that allow debtors to conduct negotiations whilst protected from the risk of precautionary injunctions, enforcement actions and insolvency petitions (*moratorium* period). Although these procedures have different features, they all share flexibility in negotiation and a lower degree of procedural formalities – e.g., they are subject to different degrees of judicial control – as common elements. Out-of-court procedures are thus available also to solvent companies, as long they are pre-insolvent (the law refers to 'crisis')⁶ and may be used to implement a business restructuring, debt restructuring, a combination of both, or even the liquidation of the firm.

However, time is of the essence with regard to the negotiation of the agreement in these procedures, as the likelihood of recovering the business may be higher when debtors tackle distress at the early stages. Qualitative empirical evidence, gathered as a part of targeted interviews, confirms common wisdom that among the main hindrances to successful out-of-court restructuring is the fact that debtors often acknowledge and react to a crisis when it is too late (Stanghellini et al., 2018, p. 5). This may be due to various factors. First, in small and medium enterprises – which constitute the vast

¹ The opinions expressed in this paper are the authors' only and do not necessarily represent those of the Institutions they are affiliated with. The authors wish to thank Marcello Bofondi, Silvia Giacomelli, Cristina Nigro, Luca Serafini, Paolo Sestito, and Giacomo Rodano for their comments and suggestions; the E-lab Entrepreneurship Lab Research Center at the University of Bergamo, and all the members of the Co.Di.Re. research team (www.codire.eu) coordinated by Lorenzo Stanghellini (University of Florence) for their data collection efforts, conducted under a European Commission Grant (JUST/2014/JCOO/AG/CIVI 4000007627); Ivan Triglia for his research assistance activity.

² Prior to the most recent comprehensive reform, the Italian insolvency system was extensively revised over the past decade: in 2010 (Law no. 122/2010, by which the Italian Parliament converted Decree no. 78/2010 into law); in 2012 with extensive regulation (Law no. 134/2012, by which the Italian Parliament converted Decree no. 83/2012 into law); in 2013 with more limited rules (Law no. 98/2013, by which the Italian Parliament converted Decree no. 69/2013 into law); in 2015 (Law no. 132/2015, by which the Italian Parliament converted Decree no. 83/2015 into law); and in 2016 (Law no. 119/2016, by which the Italian Parliament converted Decree no. 83/2015 into law); and in 2016 (Law no. 119/2016, by which the Italian Parliament converted Decree no. 59/2016 into law).

³ The stigma associated to judicial insolvency procedures is still widespread in Italy. This has been confirmed by qualitative data gathered by the research team of the Co.Di.Re. project, especially during interviews conducted with judges and professionals assisting debtors: see Stanghellini et al. (2018).

⁴ In particular, the current malfunctioning of the civil judiciary has been linked by some to the lack of specialization of judges (e.g., see Coviello et al., 2018). Courts are also overburdened with hundreds of cases with no adequate administrative support, which may cause considerable delays. For more general discussions of the determinants of civil justice performance, see for instance Palumbo et al. (2013) and Voigt (2016).

⁵ According to the information published by the Italian Ministry of Justice, the average duration of bankruptcy procedures (*fallimenti*) ranged, in 2018, between 5.2 and 16.1 years, respectively in the best- and worst-performing courts. An analysis conducted on older insolvency procedures (concluded between 2000 and 2007; the information was provided by Istat) shows an average recovery rate of 26.5% for secured credits and 3.1% for unsecured credits.

⁶ In this paper, the term 'crisis' is used to denote any situation of difficulty that may be addressed using restructuring tools to restore debtor's viability and to preserve business continuity.

majority of firms in the Italian economy – there is often a total alignment between ownership and management, who therefore tend to postpone any intervention that may affect their equity. Second, these firms often lack the resources, competence, and experience needed to monitor the business and, consequently, to early detect the crisis. The debtor can overcome such deficiencies through the assistance of qualified professionals that would make a useful contribution to determining the right measures to tackle the distress. However, the possibility to receive such a qualified advice depends on the availability of financial resources to pay the expert's fees.⁷

The latest reform of the Italian insolvency system, which was initially scheduled to enter into force in August 2020 and recently postponed to September 2021,⁸ will introduce further changes to the legal framework, in line with the provisions of the recent EU Directive on restructuring and insolvency.⁹ One of the effects would be to incentivize debtors to timely access restructuring, increasing the role of out-of-court agreements between distressed businesses and their creditors, as well as developing a complete set of tools to identify financial or commercial triggers that could serve as early warning systems (Brodi, 2018).

In this context and in view of the upcoming implementation of the new rules, this paper contains an analysis of two procedures foreseen by the Italian law, whose main aim is to allow for credit restructuring while preserving firm integrity: the debt restructuring agreement (*accordo di ristrutturazione*, 'DRA') and the going-concern (judicial) composition with creditors (*concordato in continuità*, 'CC'). Both categories may be further split into *direct* and *indirect* procedures, depending on whether continuation of the business is foreseen to occur under the same or a different ownership.

Although these procedures share similar objectives, it is important to notice that DRAs and goingconcern CCs differ in several key aspects, most notably the degree of judicial involvement and the flexibility of the procedure. Their main features will be described in the next section. However, it should be noted that debtors and professionals do not see the two procedures as fully interchangeable. Viable companies may see DRAs as preferable: the debtor is left in full control, the plan can provide for any kind of measure with no regard to creditor ranking, equity is unaffected, and the uncertainty of the judicial confirmation phase is relatively small. On the other hand, CCs have a full-fledged cram down mechanism, both intra- and cross-class,¹⁰ and provisions allowing to terminate contracts, but commencing a CC impacts immediately on the debtor's credit relationship and puts the debtor at a serious risk of insolvent liquidation if something in the procedure does not go smooth.¹¹ It is possible

⁷ The costs associated with accessing insolvency proceedings may be particularly high in case of small- and medium-size businesses (Davis et al., 2016).

⁸ In January 2019 the Government definitively approved the new Business Crisis and Insolvency Code (Legislative Decree no. 14/2019). While most of its provisions were due to enter into force in August 2020, as a consequence of the Covid-19 pandemics, Law-Decree no. 23/2020 postponed this date to September 2021. See Zorzi (2019) for further details.

⁹ Directive (EU) 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 (Directive on restructuring and insolvency).

¹⁰ Since 2015, DRAs provide for intra-class cram down, limited to financial creditors, but these provisions are only marginally relevant for our sample, which spans from 2005 to 2016.

¹¹ Among the consequences of filing for a CC are various serious risks, apart from the automatic freezing of credit lines and a negative impact on reputation: the court-appointed insolvency practitioner can prove hostile (a quite common occurrence); the public prosecutor, to whom the petition must be notified, could take an active stance and file for involuntary liquidation; assets must be sold via public auctions; the debtor is subject to competing offers; the debtor must disclose possible civil liabilities of directors and officers; directors, officers and statutory auditors are subject, in case of malfeasance, to the same sort of draconian criminal liability that applies to firms in insolvent liquidation.

that firms whose characteristics allow them to ex-ante evaluate the likelihood of a successful DRA as high, will choose this option over a CC.

It is important to distinguish, within the two procedure types, among subtypes based on whether the intent of the debtor is to undergo a full restructuring while remaining in possession of the business, or dispose of its ownership without liquidating (e.g., by selling the firm as a going concern). This produces our distinction between *direct* and *indirect* procedures.

This paper provides an empirical analysis based on data collected at several Italian courts with the aim of evaluating the actual use of these restructuring tools. The research collects information from DRAs and CCs applications filed in Italy between 2009 and 2016 to compare certain elements, such as the content of the plans, the duration of procedures and their distribution among Italian courts, as well as the degree of judicial intervention. Moreover, using firm-level data on balance sheets and credit contracts, we compare the pre-procedure characteristics of firms entering DRAs and going-concern CCs and the post-procedure outcomes in terms of survival and recovered business activity.

We highlight important *ex ante* structural and contingent differences between firms entering either kind of procedure. Firms involved in DRAs are on average larger and show less critical symptoms of economic and financial distress. On the other hand, the duration of the financial distress spell that immediately precedes the initiation of the procedure is longer for DRA firms than for CC firms. Indeed, inspection into the dynamics of individual economic and financial characteristics before the procedure shows that CC firms fall into a deeper crisis, but do so much later, than DRA firms.

We also study the likelihood for a firm to attain judicial approval when submitting a restructuring plan of either type. CCs are characterized by lower rates of confirmation. Confirmation also takes longer in CCs, that require two rounds of judicial evaluation. The presence of 'bad loans' is associated with a smaller likelihood of approval. The duration of the financial distress period is related with lower chances of confirmation in CCs.

Finally, we turn to what happens after the procedure is activated. Within three years, almost 60% of DRA firms are extinct, either through a formal bankruptcy procedures or through other forms of liquidation (including voluntary ones). Only about 30% of firms involved in direct CCs cease to exist within three years, but 70% of those are still involved in the procedure, testifying to the long duration of restructurings. Over 40% of firms involved in indirect CCs, that should ultimately be sold, are still in place after three years, most of these not having completed the restructuring process yet. We observe an improvement in economic performance in both DRA and direct CC firms that are still active 3 years after the beginning of the restructuring. Direct CC firms, moving from worse conditions at the time of the procedure, quickly catch up with DRA firms. However, after three years neither group shows performances in line with the average 'healthy' firm. Their credit conditions show only slight improvements, consistently with the continuing classification of their credit relationships as non-performing. Forms of financing specifically designed to support companies undergoing restructuring are seldom used.

The rest of the paper is structured as follows. Section 2 briefly introduces the main features of the Italian regulatory framework concerning extra-judicial, hybrid and judicial restructuring models. Section 3 illustrates the available information and provides descriptive evidence of procedure-specific characteristics. Section 4 focuses on the comparison of pre-procedure firm characteristics across different procedure types and subtypes. Section 5 inspects the events linked to the approval phase, as well as the 'outcomes' of the restructuring in terms of firm survival and economic performance. Section 6 adds some concluding remarks.

2. Institutional framework: restructuring procedures in Italy

The Italian Bankruptcy Law currently provides for different tools for restructurings, that can take place totally or partially out of court:¹² certified recovery plans (*piani di risanamento attestati*; art. 67, par. 3, letter d of the Bankruptcy Law), debt restructuring agreements (*accordi di ristrutturazione dei debiti*; art. 182-*bis*),¹³ and judicial compositions with creditors (*concordati preventivi*; art. 160 *et seq.*).

All these instruments are plan-based restructurings. They can be divided into two main categories depending on certain characteristics of the process, such as the involvement of court or any public authorities, the need for creditors' approval, and the effects of the agreement on the involved parties. On the one hand, there are *informal* and *semi-formal* (hybrid) restructuring procedures with limited court involvement,¹⁴ that affect only creditors who have contractually agreed. On the other hand, *formal* restructuring procedures allow a majority of creditors to effectively overrule a minority. Thus, these procedures require some degree of court control over the content of the plan with a view to protect creditors or stakeholders.¹⁵

As mentioned earlier, a preference for either kind of instrument may depend on several factors: the state of the firm's distress when the need for restructuring emerges; the environmental economic and financial conditions faced by the firm; the characteristics of the credit relationships the firm is involved into. In the following subsections, we shall briefly present some of the most relevant parts of the current regulation.

2.1. Informal restructurings

Out-of-court restructuring of distressed debtors can be accomplished through a certified recovery plan ('CRP' in short). In this case, the plan is negotiated and implemented without any formal judicial control, thus having the main advantage of granting the debtor a considerable freedom of initiative (certified recovery plans are commonly labeled as 'informal restructuring procedures'). The law protects transactions carried out based on the plan through an exemption from avoidance actions in case of subsequent insolvent liquidations. Parties are also protected from civil and criminal liability.

A debtor can seek a CRP through the drafting of a plan whose feasibility is certified by a qualified professional. Furthermore, the debtor selects the actors to be involved in the restructuring and the operations to be implemented in the plan, that – as a matter of fact – may consist of a simple sale of non-strategic assets or of an injection of financial resources from new contributors.¹⁶ If an agreement

¹² In the Italian system, out-of-court restructurings may also be carried out through purely contractual agreements whose contents are free and flexible; these imply no court involvement and produce effects only for the parties who agreed, according to general contract rules. However, they pose significant risks (avoidance actions, civil and criminal liability) in case the situation deteriorates and the debtor finally enters insolvent judicial liquidation.

¹³ A second type of debt restructuring agreement with financial intermediaries (art. 182-*septies* of the Bankruptcy Law) has been introduced in 2015, which can be used by debtors whose financial debt amounts to at least 50% of their overall liabilities. This instrument is somewhat similar to a scheme of arrangement, in that it allows debtors to cram down a plan on dissenting financial creditors, provided that the plan has obtained the assent of least 75% of claims in the relevant class. Also secured creditors can form a class for this purpose. The debtor must request the court to make the agreement binding for dissenting financial creditors. Non-financial creditors that do not agree with the debtor's proposal must be paid in full, as well as financial creditors that are not included in the class.

¹⁴ See Garrido (2012).

¹⁵ For a comprehensive review of the restructuring instruments currently available under the Italian Bankruptcy Law, see Stanghellini (2015). These Guidelines are the result of a National Research Project conducted by a group of researchers from the University of Florence, which started in 2007 and is still ongoing.

¹⁶ The law only describes the purpose of the plan, while there are no legislative provisions regulating who should draw the plan and the type of measures that can be implemented to restructure the business.

is proposed to creditors, that agreement only binds creditors who voluntarily agree to engage with the debtor. Since there is no court confirmation, the plan may be vulnerable in an ex-post evaluation in case criminal or civil charges are brought against who designed or implemented the plan that eventually did not work out. It must also be noted that negotiations to seek a certified recovery plan are in their essence purely private and no disclosure is required by the law; therefore, the plan can be confidential.

2.2. Semi-formal restructurings (debt restructuring agreements)

To restructure a business out of court, debtors may also resort to a debt restructuring agreement ('DRA'). This can be labeled as a semi-formal (hybrid) restructuring procedure, since – unlike CRPs – the process includes a judicial phase aimed at examining whether the agreement meets certain legally established requirements (confirmation). Because of the ex-ante court control, debtors can benefit from a high degree of protection against ex-post avoidance actions. Priority can be given to new financing. The procedure also allows for a limited use of distinctive insolvency measures such as a moratorium (stay) on claim enforcement. The debtor can seek this protection already during the negotiation period, submitting a petition to the court to prove that negotiations to reach a debt restructuring agreement have been commenced. This submission is a formal requirement, and there is only a formal judicial control that the legal requirements are met (see art. 182-*bis*, par. 6, of the Bankruptcy Law). However, it should be noted that also DRAs are based on creditors' individual consent and, as mentioned, cram down provisions exist only since 2015 and only apply to financial creditors, who decide with a supermajority of 75% of the amount of claims (the number of cases in our dataset in which there was a cram down is minimal).¹⁷

In order to complete the process successfully, debtors have to submit a debt restructuring agreement with creditors accounting for at least 60 per cent of their debt exposure. The law also mandates that the plan be examined by an independent professional. Furthermore, the rules regulating debt restructuring agreements consider a different degree of privacy and publicity with respect to CRPs, since the former have to be published in the national Business Register.¹⁸ If approved by a court, the agreement is only valid towards participating creditors who gave their explicit consent, while full payment of claims must be guaranteed for non-participating creditors, who only suffer a 120-day moratorium.

Despite the process requiring a certain degree of court control, debt restructuring agreements grant debtors a considerable freedom of initiative: in particular, sophisticated debtors may benefit from the advantages of debt restructuring agreements to realize restructurings tailored to their specific needs, maximizing the probability of plan approval and successful implementation.

2.3 In-court judicial restructurings (compositions with creditors)

The current Italian insolvency system allows debtors to tackle business financial distress in court submitting a proposal for judicial composition with creditors ('CC'). This can envisage either liquidation (as do about 70% of all CCs in Italy – Danovi et al., 2018) or, as in all cases examined in this paper, the direct or indirectly (via a sale of the whole business as a going concern or its contribution in kind to another company) continuation of business. As mentioned above, CCs are formal procedures to be conducted in court, although the process inevitably includes a preparatory

¹⁷ As of the first half of 2017, only 10 cases were known (Zorzi, 2017).

¹⁸ According to art. 67, par. 3, letter d, of the Bankruptcy Law, the publication of CRPs is made only upon the debtor's request (as mentioned above, publication is necessary to enjoy certain tax advantages).

stage out of court.¹⁹ Normally, this phase is managed by the debtor and his advisors, whose main task is to prepare the restructuring or liquidation plan, to be evaluated by an independent professional chosen by the same debtor.

Once the petition is filed, the court opens the procedure and appoints an insolvency practitioner. The insolvency practitioner must check whether information submitted is accurate and the plan is feasible and must give its opinion to creditors, who are invited to vote on the plan. If the required majority is attained, the court will then hear any objections and, if no reason to the contrary exists, it will confirm the plan. The court has to check that the proposal previously agreed upon by debtor and creditors meets certain legal requirements (this would include, obviously, checking that the necessary majorities have been reached) and (with a more in-depth analysis) the viability of the plan. Plan confirmation is required to make the restructuring proposal effective even for creditors who did not participate to or opposed the proposed arrangement (*cram-down*). If confirmed by the court, the responsibility for implementing the plan is allocated to the debtor, under the supervision of the court (by means of a delegated judge) and of a judicial commissioner (when the plan provides for liquidation, implementation is made by a liquidator appointed by the court).

Judicial involvement and, more in general, the degree of formalization is thus much higher in CCs than in DRAs. However, flexibility with respect to the contents of the plan characterizes CCs as well. CCs allow debtors to implement a wide range of financial and operational measures, including, for instance, the sale of non-strategic assets, termination of burdensome executory contracts, protection for interim and new financing, debt-equity swaps, and the division of creditors into different classes, each of which may be offered different treatment. All measures impinging on creditors' rights can be crammed down, based on simple majority, as opposed to the individual-consent requirement of the DRA.

The procedural aspects of CCs have been significantly amended from 2005 to 2015: originally, the reform tried to expand the scope of the instrument promoting its use for early reaction to financial distress. Law No. 134/2012, in particular, deeply affected the system by formally recognizing *going*-*concern judicial compositions* as a distinct subcase. In this regard it is necessary to distinguish between two types of procedures depending on which subject is entitled to continue the business. In judicial compositions with *direct managing of going concern* ('CC-Ds'), the firm continues to be carried on by the original entrepreneur from both an economic as well as a legal point of view. This is the 'classic' means of reorganization usually discussed in the literature (Madaus, 2013).²⁰ Conversely, in judicial compositions with *indirect managing of going concern* ('CC-Is') – which is the traditional way reorganization is carried out it Italy – the business is preserved as a unitary economic entity, but its ownership and management are transferred to another subject. In this case, the business may be rented by a third party (often before filing) and later sold (Danovi et al., 2016),²¹ while equity is completely wiped out because a distribution of proceeds follows the insolvent liquidation waterfall. As we illustrate in Section 3, going-concern judicial compositions constitute a minority of all compositions with creditors, the tool still being mainly use for liquidation purposes.

Law no. 134/2012 also introduced the possibility for debtors to seek protection before filing the plan, by filing a 'blank' petition for a CC. Such petition then translates into a formal insolvency procedure

¹⁹ In order to allow debtors to collect all the relevant documents in a protected environment, confidentiality of information is taken as a basis of negotiations.

²⁰ Whether or not the absolute priority rule applies in CC-Ds with regard to equity holders is debated, but the prevailing answer is that it does not. See Zorzi (2019) for a discussion on this point.

²¹ With decision n. 29742/2018, the Italian Supreme Court extended the application of art. 186-bis of the Bankruptcy Law to indirect restructuring procedures (CC-Is) realized through the lease of the business to third parties.

through the submission of a definitive proposal (i.e., debtors must submit not only a proposal but also a restructuring plan certified by an independent professional and other relevant documents) within a certain period of time set between 60 and 180 days (art. 161 of the Bankruptcy Law). As a consequence of this amendment, out-of-court and in-court restructuring procedures can overlap in significant ways: for instance, debtors may submit a blank CC and later decide to resort to a different instrument, typically a DRA, which is the hypothesis considered by the law. In theory, also a CRP could be used but this seldom happens as, after filing for a CC, the debtors is probably no longer in a position to use such a 'light' instrument. Other relevant changes have been introduced by Law No. 132/2015, increasing the influence of creditors in the process: creditors representing at least 10% of the total debt can now propose alternative plans or participate more actively in the sale of assets.

It should be noted that the reform of the Italian insolvency system reviewed the rules regulating CCs, in order to further restrict their scope almost exclusively to the implementation of financial and/or operational measures. As a consequence, from September 2021 CCs will be rarely applied to piecemeal liquidations of businesses, despite the instrument having been used so far mainly for liquidation purposes (see Section 3, as well as Danovi et al., 2018).

3. Data and procedure characteristics

3.1. Data and procedure taxonomy

Our analysis is based on data relative to DRAs and going-concern CCs filed at several Italian courts in the period 2009-2016. Together with certified recovery plans, these are the procedures the Italian law establishes for the restructuring of distressed firms in an attempt to preserve the business as a going concern. Despite their widespread use (see Carpinelli et al., 2016), our analysis does not consider CRPs and purely contractual agreements. Quantitative information regarding these instruments is very scarce, since they are neither subject to confirmation by the court, nor are they formally recorded (except for those published, at the debtor's will, in the Business Register).

Our analysis of going-concern CCs rests on quantitative and qualitative empirical researches carried out by an extended group of scholars and experts, in the context of the European Co.Di.Re. research project.²² These data were collected through a web platform ('FALLCO'), where court-appointed professionals could fill in questionnaires about in-court restructurings. They contain information on approximately 35% of all CCs initiated in Italy within the timeframe of the sample. According to Danovi et al. (2018), who carried out a thorough analysis of these data, almost 70% of all CCs aim at the liquidation of the firm, while the remaining 30% is based on going-concern plans. For the purpose of this work, we focus on 941 going-concern CCs, initiated in 47 Italian courts. Among these, 289 are CC-Ds, structured to promote business continuity without substantial changes in firm governance. The remaining 652 procedures are, on the other hand, CC-Is, as they allow the firm to be sold and undergo massive business reorganization, albeit as a unitary complex (see Section 2).²³

²² The Co.Di.Re. ("Contractualised distress resolution in the shadow of the law: Effective judicial review and oversight of insolvency and pre-insolvency procedures") project is the result of a partnership between several institutions: Università degli Studi di Firenze (Project Coordinator), Humboldt-Universität zu Berlin (Partner) and Universidad Autónoma de Madrid (Partner), supported by the Consejo General del Poder Judicial (Associate Partner), Banca d'Italia (Associate Partner), Entrepreneurship Lab Research Center at the University of Bergamo, Elab-OCRI, and University of Piemonte Orientale (Associate Partner). The *Centro studi sulle procedure esecutive e concorsuali* (CeSPEC) also contributed to the research endeavors.

²³ A formal distinction between CC-Ds and CC-Is was introduced in 2012. For CCs up to 2011, our classifications rests on the evaluation enclosed in the judicial commissioner's report pursuant to art. 172 and 173 of the Bankruptcy Law.

Data on DRAs were collected using information from the Online Services Portal of the Ministry of Justice (PST) and the national Business Registry. Moreover, researchers made personal access to courts to retrieve documental evidence on these procedures. In some cases, documents were only partially available: these procedures were not included in the sample. The sample consists of 577 DRAs, corresponding to approximately 37.5% of all DRAs filed in Italy during the relevant period, although it should be noted that the total number of DRA procedures is hard to quantify precisely.²⁴

The temporal distribution of our procedures within the period under analysis shows an increasing number of observations for all procedure types until 2013, and a decrease afterwards (Figure 3.1). This is line with the overall dynamics of restructuring procedures (and insolvencies in general), due to business cycle effects and the impact of the financial crisis, as documented by Danovi et al. (2018).



Figure 3.1. Procedures by year

The figure reports the numbers of procedures in our sample, by type and year.

While the law formalizes the distinction between direct and indirect CCs, the regulatory framework in force during the period we analyse considered DRAs as an essentially homogeneous procedure category. Nonetheless, information collected from court documentation concerning DRAs allows us to divide these procedures in a way analogous to that of CCs (Figure 3.2). Indeed, around 12% of DRAs in our sample indicate the sale of the whole firm or its merger within a new entity as the sole restructuring measure: mirroring the language used for CCs, we call these *indirect DRAs* ('DRA-Is'). The vast majority of DRAs (88%) are, in line with the instrument's design, *direct going-concern* agreements ('DRA-Ds').²⁵

²⁴ Indeed, the number of procedures resulting for each court from the PST does not always correspond to the number of procedures that were proved to exist at court records offices: some courts record DRAs under the inappropriate label (e.g., as procedures for consumers, professionals and non-commercial businesses) or record them twice (as preliminary filings and then, again, as final filings). Adjusting the numbers from the official Ministry of Justice reports (1,822 for the period 2005-2016) for the average over-estimation pattern we observe in sampled courts, we estimate the number of DRAs for the period under observation to have been approximately equal to 1,600. Our DRA sample represents approximately 37.5% of the total, as explained in the Italian National Findings report available at https://www.codire.eu/wp-content/uploads/2018/12/Italian-National-Findings.pdf.

 $^{^{25}}$ In fact, there may also be DRAs that aim at liquidating the firm, despite the tool being designed to guarantee continuity. An attempt at liquidation through a DRA would inevitably imply the sale of all assets or of all branches of the company to different buyers (otherwise, the procedure would maintain continuity and be classified as an indirect DRA). While we are unable to identify such cases in our sample, we can give an upper bound to their number: DRAs that foresee only the sale of assets *or* the disposal of branches amount to 6% of our sample.

Figure 3.2. Procedure sub-types



The figure reports shares of sub-types for each type of procedure. 'DIR' are direct procedures, 'IND' are indirect procedures.

3.2. Geographical distribution of the procedures

As mentioned before, part of our dataset is the result of a data collection effort that required the involved researchers to access court registries in person and to transcribe information from court documents. For this reason, our sample covers only a fraction of Italian courts (47 for CCs and 60 for DRAs, out of a total of 120 courts).



Figure 3.3. Geographical distribution of the procedures

The figure reports the geographical distribution of DRAs, CC-Ds, and CC-Is in our sample.

For logistic reasons, the selection of court was not random: courts in Northern regions were more likely to be selected for data collection. Consequently, our sample over-represents the North. For instance, around 75% of DRAs in our sample come from Northern courts (Figure 3.3), but only 58% of all DRAs are filed in the North. Conversely, only 6% of our DRAs are from Southern courts, whereas 22% of all DRAs are filed there. Similar trends are observed for CCs; the distribution of indirect CCs is particularly skewed in favor of Northern regions.

3.3. Events preceding the restructuring attempt

Most going-concern CCs are first-line approaches to addressing firm distress: in the vast majority of cases (89% for CC-Ds and 85% for CC-Is) firms attempt a CC without having undertaken any other

type of procedure – including CRPs – beforehand (Figure 3.5). Around one half of our CCs originate as blank CCs, with a larger incidence among CC-Ds (62%) than CC-Is (50%).²⁶ On the other hand, DRAs are more likely to have been preceded by another procedure, in particular a – most commonly blank – CC (19%), but also a CRP (10%) or even a previous DRA (8%). The use of 'pre-DRAs' (which, in the same spirit as blank CCs, provide debtors with anticipated benefits prior to the actual presentation of the plan; see art. 182-*bis*, par. 6, of the Bankruptcy Law) is limited to 20% of cases.²⁷



Figure 3.4. Procedure history

The figure reports the frequency of specific events that occurred before the filing of the procedure under analysis, by procedure type. *First presentation* denotes cases in which no other procedure was recorded before the one under analysis.

3.4. Provisions of DRA plans

The practice shows that a wide range of measures can be proposed within a restructuring plan, potentially affecting both the assets and the liabilities side of the debtor's balance sheet. Empirical evidence indicates that an appropriate combination of both operational and financial restructuring is the best approach to make the business viable again (Stanghellini et al., 2018). Figure 3.6 reports the frequency of specific provisions among DRA-D plans²⁸.

Despite excluding DRA-Is plans, asset sales are still very common in direct DRAs (59%). The sale of non-strategic assets is indeed seen as the main way for debtors to secure liquidity in order to guarantee the survival of the firm's core business. Debt restructuring is present in ³/₄ of DRAs, with debt deferrals being the most frequent instance (59%), followed by write-offs, debt take-overs (by shareholders, participating or subsidiary companies), and swaps (to equity or to hybrid financial instruments).

²⁶ Blank CCs are present in 48% of all liquidatory CCs.

²⁷ Notice, though, that the frequency of pre-DRAs may be underestimated due to the degree of imprecision with which these events are recorded in many courts.

²⁸ Unfortunately, similarly detailed data are not available for direct CCs.



Figure 3.5. Contents of DRA-D plans

The figure reports the frequency of specific measures of DRA-D plans.

Around one half of the plans also include management or strategy changes. The majority of these (77%) involve financial management (e.g., share buy-backs and operations on participations). Around 60% of these interventions are directly related to business operations (e.g., product differentiation). Changes in the workforce are also common (21%), despite the risk of employee claims. Only 25% of interventions include changing the composition of the board of administrators.

Injection of new equity happens in 23% of cases, and new financing in 34% of plans. This evidence suggests that debtors tend to operate financial restructuring primarily through the sale of the assets or placing the burden of restoring the firm's viability on financial creditors. Conversely, new contributions by shareholders and third parties – either to increase the company's own resources or to decrease its debt load – are less often used in practice. Banks might be more proactive in refinancing large debtors, especially when collateral or additional guarantees are offered. The behavior of banks may be different toward small debtors that are perceived as too opaque and risky, and this decision may be influenced by the current banking regulatory framework (especially the obligation to provision the debts). Furthermore, restructurings of small and medium sized enterprises may be less appealing for banks, especially when their expectation that the plan will be adopted and implemented are low.²⁹

4. Pre-procedure characteristics of companies involved in restructurings

This section studies the pre-procedure characteristics of firms involved in DRAs and going-concern CCs. In the following analyses, data from court documents and registries are matched with firm-level data on balance sheets and credit relationships. Balance sheet data are managed by Cerved Group S.p.A. and include all yearly balance sheet information on companies, as well as an indication of their 'activity status' (such information is in turn derived from Business Register data managed by InfoCamere S.C.p.A.). Data on credit relationships are drawn from the Credit Registry (CR) managed by the Bank of Italy.

²⁹ For a detailed discussion of the relationships between firm restructuring and the banking sector, see Chapter 5 in Stanghellini et al. (2018).

In what follows, we first draw comparisons between all DRAs and all going-concern CCs, independently of their being direct or indirect procedures. When relevant, we specialize our analysis by comparing procedure subtypes. In reading these findings, one should nonetheless keep in mind that the number of DRA-Is (71 procedures, corresponding to around 12% of our DRA sample) is limited, both in absolute terms and relatively to the other sub-type categories considered here.

4.1. Balance sheet variables

Table 4.1 reports comparisons of balance sheet variables across firms involved in each type of procedure, while Table A.1 in the Appendix specializes the analysis to account for procedure sub-types. For each individual procedure, we compute the average value of each variable over a three-year period prior to the filing. We then compare the mean or median values of these averages across procedure type.

			(,
	DRA	CC	DRA vs. CC	All firms (avg. 2009-2016)
	тес	median		median
Tot. assets (mln€)	14.55	8.40	6.15***	0.73
Tot. debt (mln€)	11.29	7.11	4.18***	0.31
EBITDA (mln€)	-0.00	-0.24	0.23***	0.04
Lab. Productivity	0.95	0.72	0.23***	1.34
Return on assets	-0.00	-0.05	0.05***	0.06
Collateralization	0.31	0.31	0.00	0.18
FA intangibility	0.05	0.09	-0.04**	0.03
Leverage	0.83	0.89	-0.07***	0.55
Financial debt	0.54	0.54	0.01	0.17
Current ratio	1.00	1.16	-0.15***	0.58
	me	ean	diff. means	mean
Risky firms	0.89	0.95	-0.06***	0.32
Zombie firms	0.81	0.92	-0.10***	0.20
Negative equity	0.52	0.78	-0.26***	0.10

Table 4.1. Balance sheet variables (DRAs vs. CCs)

For each firm involved in restructuring, variables *Tot. assets – Current ratio* are measured by the average value in the 3 years prior to the procedure. Medians of these averages are then taken over the relevant population. Variables *Risky firms – Negative equity* are measured as the maximum value in the 3 years prior to the procedures: means of these maxima are then taken over the relevant population. Statistical significance for the difference of medians is obtained by quantile regression. The symbols ***, **, * indicate respectively 99%, 95%, and 90% significance. *Lab. productivity* is the ratio between value added and labor costs. *Return on assets* is the ratio of EBITDA and total assets. *Collateralization* is the ratio between total debts and total assets. *FA intangibility* is the ratio of bank debt to total debt. *Current ratio* is the ratio between short-term debt and current assets. *Risky firms* is an indicator for firms classified as 'high risk' according to the rating by Cerved Group S.p.A (score above 6). *Zombie firms* is an indicator for firms whose *Coverage ratio* is below 1. *Negative equity* is an indicator for firm whose equity is less than or equal to 0. Values labelled as '*All firms*' refer to all limited companies that satisfy the requirements for subjection to bankruptcy rules.

The most relevant difference between firms entering a DRA and firms entering any kind of goingconcern CC is size. Based on the total amount of assets, firms involved in DRAs are around 70% larger than firms involved in CCs, with no substantial variation between direct and indirect procedures. Total debt size compares accordingly, with DRA firms displaying a 60% larger debt mass with respect to CC firms. It must be noticed that all these firms are very large in comparison to the Italian standards: in the period 2009-2016, the median amount of total assets of Italian limited companies subject to bankruptcy rules was around \notin 730,000, so that the median sizes of firms involved in DRAs and CCs fall, respectively, around the 97th and the 92th centile of the overall size distribution.³⁰

Firms involved in DRAs tend to fare slightly better than CC firms in several indices of economic performance, such as labor productivity and return on assets. Again, most of the advantage of DRA firms comes from businesses in direct procedures, while the values for DRA-I firms are aligned with those of CC firms (Table A.1). Even though DRA firms display slightly better performance, their median gross margin (here measured by the EBIDTA) is nil. DRA-I and CC firms all show negative median operating margins.

There are no significant differences in the share of fixed assets owned by firms (collateralization). On the other hand, CC firms display higher values of fixed asset intangibility (the ratio of intangible fixed assets and total fixed assets), which is often considered an index of opacity and a factor hindering the conversion of fixed assets into means of payment for debt sustainment. With respect to the reference population of firms subject to bankruptcy rules, units in our sample display higher collateralization and higher intangibility.

CC firms are more indebted (in relation to their asset size) than DRA firms. In absolute terms, though, this difference is not large and both groups show very large leverage in comparison with the whole population. The share of financial debt is over 50% for both groups, while only 17% in the general population. Short-term debt is high in comparison with asset size, and more so for CC firms, denoting a state of borderline short-term insolvency for both groups.

Almost all firms in our sample are, due to their distress, considered risky by rating standards: the median individual Cerved score is above 7, on a 1-10 scale with 1 indicating the safest and 10 the riskiest firms. Around 90% of firms in our sample were at least once ranked above 6 – the 'riskiness' threshold – in the three years prior to the procedure. This value reaches 96% for DRA-I firms (Table A.1). More than 80% of DRA firms and over 90% of CC firms are 'zombie' firms, that is businesses for which the interest coverage rate took on a value below 1 in at least one of the three years prior to the procedure (this definition has been used by Rodano and Sette, 2019). Along both dimensions, CC firms appear to be worse off than DRA firms, but DRA-I firms show values aligned with those of CC firms (in particular, notice that *all* DRA-I firms in our sample are 'zombies' according to the previous definition). Finally, consistently with equity depletion during the period of financial distress, a relevant share of our firms display negative equity in at least one of the three years before the filing of the procedure. The difference between the DRA and the CC groups is again quite evident.

Figure 4.1 illustrates the evolution of some of the variables presented above throughout the three years preceding the restructuring plan. A common pattern emerges from these diagrams. Three years before restructuring is sought, DRA firms have slightly worse performances than CC firms: in particular, the shares of risky firms, 'zombie' firms and firms with negative equity are all significantly larger in the DRA group than in the CC groups (both direct and indirect). Balance sheet values tend to converge, with common worsening trends, around 2 years before the procedure. In the year prior to the procedure, CC firms often display significantly worse performance than DRA firms, driving many results in our previous comparisons. This seems to confirm our prior suggestion that DRA firms, possibly thanks to their larger size, are able to navigate through situations of distress for longer times before filing for a procedure, and are in general more resilient, while CC firms show more rapid

³⁰ Certified recovery plans are also used by firms whose dimensions far exceed the average size (Carpinelli et al., 2016).

and sudden deterioration. Their worse situation just before the procedure may indeed be conducive of their choice of seeking a CC rather than a 'lighter' DRA.



Figure 4.1 Evolution of balance sheet variables in DRA and CC firms

The figure displays the evolution of selected balance sheet variables in the three years prior to procedure opening. *Labor productivity, ROA*, and *Leverage* report population medians of individual measurements. *Risky, Zombie*, and *Negative equity* report population means of individual measurements.

4.2. Credit variables

The situation of firms in the three years prior to a restructuring tool already shows clear signals of business distress. In Table 4.2 we consider the pre-procedure status of credit relationships of firms based on data from the Italian Credit Registry managed by the Bank of Italy. As before, Table A.2 specializes the analysis to procedure subtypes.

As we have seen, DRA firms are larger (in terms of asset and debt size) than CC firms, and have a similar share of financial debt: consistently, the total debt exposure towards financial institutions is almost twice as large in DRA firms as in CC firms. On the other hand, CC firms entertain relationships with a larger number of credit suppliers. Consequently, DRA firms typically show larger values of credit concentration, here measured by the credit share of the largest creditor and by the Herfindahl index computed on credit shares (notice that the median share of the largest bank lies over 50% for DRA firms). Higher debt concentration is associated with an attenuation of the holdout problem highlighted by the economic literature, and that constitutes one of the main obstacles to efficient restructuring (see, for instance, Gertner and Scharfstein, 1991; Gilson et al., 1990). DRA firms, that have been shown to have a similar collateralization index (the ratio of fixed assets to total assets) but a larger tangibility of fixed assets (the ratio of tangible to total fixed assets), also display a larger share of collateralized debt.

According to the existing rules on the management of non-performing exposures, credit contracts are classified as 'bad loans' (*sofferenze*) if the likelihood of the debtor repaying the due amount is

considered low enough for the bank to flag the creditor as insolvent. 'Non-performing loans' (NPLs) include all bad loans, as well as credit contracts in relation to which the bank recognizes the debtor to be either overdue or unlikely to pay, but not definitively insolvent. Almost all firms in our sample had at least one credit relationship flagged as 'NPL' in the three years before the procedure, while the two procedure categories have different incidence of bad loans. Only one third of DRA firms experience a bad loan status before the restructuring, while this situation involved 75% of CC firms.

	DRA	CC	DRA vs. CC	All firms (avg. 2009-2016)	
-	median		diff. medians	median	
Tot. exposure (mln€)	7.58	3.84	3.74***	0.12	
Number of banks	4.51	7.28	-2.77***	1.47	
% largest bank	0.57	0.39	0.18***	0.93	
Credit concentration	0.47	0.26	0.21***	0.90	
% collateralized	0.37	0.11	0.27***	0.00	
Persistence bad loans (qs.)	5.00	2.00	3.00***		
Persistence NPL (qs.)	8.00	5.00	3.00***		
Interest rate on credit lines	8.36	9.46	-1.13***	8.45	
Interest rate on term loans	4.76	5.68	-0.91***	4.80	
	те	an	diff. means	mean	
Bad loans	0.33	0.75	-0.42***	0.24	
NPLs	0.95	0.98	-0.04***	0.71	
Active credit lines	0.88	0.95	-0.07***	0.41	
New term loans	0.56	0.75	-0.19***	1.00	

Table 4.2. Credit variables (DRAs vs. CCs)

For each firm involved in restructuring, variables *Tot. exposure* – % collateralized and Interest rate on credit lines (term loans) are measured by the average value in the three years prior to the procedure. Medians of these averages are then taken over the relevant population. Persistence bad loans (NPL) is measured by the number of consecutive quarters in which the firm has had, at the time of the procedure, at least one credit relationship classified as a bad loan (NPL). Variables Bad loans – New term loans are measures as the maximum value in the three years prior to the procedures: means of these maxima are then taken over the relevant population. Statistical significance for the difference of medians is obtained by quantile regression. The symbols ***, **, * indicate respectively 99%, 95%, and 90% significance. Credit concentration is the Herfindahl-Hirschman index of concentration applied to credit shares. Values labelled as 'All firms' refer to all limited companies that satisfy the requirements for subjection to bankruptcy rules.

Still, conditional on having at least one credit relationship classified as a bad loan, the *persistence*³¹ of such status (measured by the number of consecutive quarters in which the state of financial distress had been recorded at the time of the procedure) appears to be much larger for DRA firms. Among those with a bad loan status, the median persistence is 5 quarters for DRA firms and 2 quarters for CC firms. Similarly, the persistence of NPL status is 8 quarters (over 4 years) for DRA firms and 5 quarters for CC firms. This difference is consistent with our previous observations, based on balance sheet variables and their evolution, on DRA firms having a longer period of distress and stronger resilience. Moreover, the difference is driven by DRA-D firms, while DRA-I firms are in general aligned with CC firms (Table A.2), possibly due to the fact that indirect procedures respond to quick-onset and more serious financial difficulties, while direct procedures are the outcome of more gradual declines.

³¹ This definition of persistence of credit status was introduced by Danovi et al. (2018).

Due to their longer permanence in a status of financial difficulty, DRA firms are on average less likely to have been receiving credit in the three years prior to the procedure, especially as far as term loans are considered. Conditional on obtaining credit, though, the interest rates to which they are subject are lower to those applied to CC firms. This last evidence should be read in light of the fact that relationships between DRA firms and their creditors are more sizable, to the larger total exposure and the typically higher degree of credit concentration.

Figure 4.2 gives further support to our interpretation of the findings concerning balance sheet variables. The evolution in the incidence of bad loans and NPLs clearly shows the longer persistence of financial distress among DRA firms, and the rapid-onset and quick worsening of the crisis in CC firms. Furthermore, the first three panels show how access to credit declines starting around 6 quarters before the procedure: this is reflected both in the decline in the share of firms that have active credit lines and obtain new loans, as well as in the reduction in the number of credit suppliers. The last panel shows how, despite a longer permanence in a state of financial difficulty, DRA firms manage to keep their interest rates low up until the opening of the procedure, while rates applied to CC firms climb sharply in the 1.5 years prior to the initiation of the restructuring.



The figure displays the evolution of selected credit variables in the three years prior to procedure opening. *Number of banks* and *Interest rate on credit lines* reports population medians of individual measurements. All other variables report population means of individual measurements.

4.3. Pre-procedure characteristic and procedure type choice

Even conditioning on a wide set of variables, composed of pre-determined procedure and firm characteristics, firm size is a strong predictor of a firm entering a DRA rather than a CC (see Table A.3 in the Appendix). A strand of empirical literature shows, in a US context, that large firms are more likely to seek restructuring compared to liquidation (e.g., see Bris et al., 2006; Corbae and D'Erasmo, 2017; Blazy and Nigam, 2019). While in this paper we compare two forms of restructuring that do not aim at liquidating the firm, one should keep in mind that DRAs are considered as a 'lighter'

restructuring, while going-concern CCs are seen as more 'radical' interventions. It is therefore reasonable that similar patterns emerge when comparing DRAs and CCs as to those seen when comparing restructuring and liquidation. Indeed, one can also notice that liquidatory CCs involve smaller firms than going-concern CCs, with a median asset size of €5.2mln (Danovi et al., 2018).

Other characteristics that we find to be good predictors of the choice between DRAs and CCs have already been observed in the literature as differing between firms choosing restructuring and liquidation. For instance, Bris et al. (2006) document that a larger share of collateralized debt is associated with a larger likelihood of reorganization over liquidation. Furthermore, Helwege and Packer (2003) show that the share of firms with negative equity is smaller in reorganizations than in liquidations.

The analysis so far highlights the conjoint role of *size* and *persistence of distress* in predicting whether a firm meaning to undergo going-concern restructuring will enter a DRA or a CC. Two possible interpretations of this evidence may be advanced.

On the one hand, it is possible that – independently of their distress dynamics – DRAs suit larger firms better. This may occur for several reasons. For instance, in DRAs the firm has to manage complex and less formalized negotiations, while in CCs the burden of guiding the firm through the procedure is partially transferred to the judicial authority. Moreover the incentives leading to holdout problems are attenuated in CCs by the threat of a cram down. Larger firms may be better equipped with internal expertise for the management of more demanding negotiations. However, larger firms are also typically more resilient and can thus sail through a period of distress for a longer time than smaller businesses. This can generate the correlation between long distress spells and the choice of a DRA.

On the other hand, an indirect channel can rest on the direct relationship between the choice of a procedure type and the length of the distress spell. Such relationship may occur in two directions. First, we showed that DRA firms undergo a longer, steady decline, while CC firms display shorter but more dramatic deteriorations. The latter category may thus self-select into judicial restructurings, which are often seen as a more radical measure than out of court agreements. Conversely, it is plausible that pre-filing negotiations last longer in DRAs than in CCs (as DRA firms must go to court with an already-drafted plan including participating creditors, while CC firms may seek creditor approval after presenting a plan proposal to the judge; see Section 2). This is consistent with longer distress periods for DRAs due to such procedures reaching the formal filing stage later than CCs.³² Irrespective of the direction of causality, the correlation between choosing a DRA, distress duration, and size may then emerge from the fact that only larger firms may sustain protracted negotiation during a critical time without 'sinking' too rapidly.

5. Confirmation and procedure outcomes

5.1. Confirmation

In this paragraph, by confirmation we are referring to court approval (*omologa*) of a plan previously agreed upon by the debtor and its creditors. As explained in Section 2, both DRAs and going-concern CCs are plan-based restructurings and thus both procedures require some sort of control by the judicial authority over the content of the plan in order to ensure that the interests of minority

³² Unfortunately, we do not have reliable information on the duration of negotiations taking place before the filing date.

participating parties (bound and non-bound creditors) are protected. Hence, the two instruments are very different in terms of judicial involvement.

In DRAs, confirmation directly follows the presentation of the plan to the court (which is already approved by consenting creditors), with no intermediate evaluation steps. The role of the court is limited to a formal check of the legal requirements, leaving the analysis on the merits to an independent expert to ensure that the plan is feasible. Again, as mentioned, DRAs do not bind dissenting creditors who, apart having to tolerate a 120-day moratorium, must be paid in full.

CC petitions, on the other hand, need first to be allowed by the court in order for creditors to be called to participate to the agreement. After the opening of the procedure and the appointment of an insolvency practitioner (judicial commissary), court control focuses not only on the material aspects of the formation of creditor consent, but also on more complicated aspects such as the adequate formation of voting classes and – if requested by creditors with certain requirements – on whether the plan satisfies the best-interest-of-creditors test. Confirmation only occurs after creditor participation and plan viability are ascertained.

As a consequence, the total length of judicial phases is much larger for CCs than for DRAs (see Figure 5.1). The first evaluation is rather quick, and lasts longer in DRAs (around 2 months) than in CCs (around 1 month). The second phase, which only exists in CCs, in which the judicial commissioner performs his activities, creditors vote and, finally, the court holds a confirmation hearing in which it hears all objections and hands down a decisions, requires around 7-8 months. Procedures are typically shorter in northern Italy: CCs filed at northern courts reach confirmation in around 7 months, while those in central and southern regions have median durations hovering around 9 months.



Figure 5.1. Duration of judicial phases

The figure reports the median durations of judicial phases for DRAs and CCs at the national level (left panel) and by macro-area (right panel). Median duration of the first evaluation phase is represented by the blue bars, while the duration of the second evaluation phase (for CCs only) is represented by the red bars.





The figure reports the frequency of confirmed agreements over the total number of procedures, by procedure sub-type, at the national level (left panel) and by macro-area (right panel).

The fact that most of negotiations concerning DRAs take place before submission to courts, as well as the lesser depth of judicial involvement and especially that DRAs only bind consenting creditors, justifies the fact that DRAs display larger rates of confirmation than CCs (see Figure 5.2, left panel). Specifically, 78% of DRAs are confirmed, whereas around 57% of CCs (both direct and indirect) receive confirmation. Confirmation is also less frequent in central and southern regions than in the North (see Figure 5.2, right panel).

There is a degree of variation in whether an agreement is confirmed depending on the firm's credit status before filing. For instance, firms with a record of bad loans in the three years preceding the filing are less likely to receive confirmation across all procedure types (Figure 5.3, left panel). Furthermore, in CCs the rate of confirmation decreases as the persistence of financial distress increases (Figure 5.3, right panel). This pattern, though, does not emerge in DRAs, in line with the previous observation that long distress periods are better managed by DRA firms.



Figure 5.3. Rate of confirmation and credit status

The figure reports the frequency of confirmed agreements, by procedure sub-type, over a binary indicator of whether each firm has experienced at least one bad loan in the 3 years prior to the filing (left panel) and over the persistence of financial distress, measured by the number of years of continuous classification of the firm's credit status as 'non-performing loan' at the time of the filing (right panel).

5.2. Firm survival and economic outcomes

The following paragraphs analyse the events that characterize the firm's existence and evolution after the confirmation decision by the court. We track firms, whenever possible, for three years after the confirmation date. For the purpose of the following analyses, each firm is assigned an 'activity status' in each year. Activity statuses are based on data from the Italian Business Register included in the information provided by Cerved Group S.p.A.. We distinguish three activity statuses. In any year, a firm can be found to i) be in activity; ii) have ceased operations in absence of bankruptcy or any other formal liquidatory procedure; iii) have gone out of business following one such procedure. Firms belonging to categories (ii) and (iii) are labelled 'extinct'. As a matter of fact, active firms include those involved in a restructuring procedure.³³ Furthermore, notice that firms that keep operating under a different identity or are merged with another firm are classified in group (ii). The analysis is limited to firms for which the activity status is observed over the relevant time horizon.

A first important consideration concerns the confirmation event itself. Having attained judicial confirmation strongly affects the likelihood that a firm is going to survive over any time horizon. Among DRA firms that do not receive confirmation for their plan, around 40% are bankrupt – and 67% extinct – within 3 years. Among CC firms – smaller, less resilient, and often in a deeper crisis – non-confirmed agreements are associated with a 3-year bankruptcy rate of approximately 66%, and an extinction rate of 83% over the same horizon. Thus, confirmation of the restructuring process really does change the possibility for the business to continue its activity as a going concern, especially when the firm lacks the means for an independent recovery.

Figure 5.4 displays the rate of bankruptcy and extinction of firms involved in *confirmed* direct DRAs and CCs.³⁴ The 3-year bankruptcy rate is quite low – especially if compared with the numbers referring to non-confirmed agreements – at slightly over 10% for both DRA-Ds and CC-Ds. The likelihood of extinction over a three-year horizon is almost twice as large for DRA-D firms (56%) than for CC-D firms (31%). However, most of the eventually extinct DRA-D firms cease their activity within the first year after the procedure, while the rates of bankruptcy and winding-up of CC-D firms increase over time. Furthermore, around 70% of CC-D firms that are still active after 3 years are classified as involved in restructuring. Thus we cannot exclude that, over a longer horizon, the share of extinct CC-D firms keep increasing (as suggested by Castelli et al., 2016).

³³ We do not consider being involved in a restructuring procedure as a separate activity status as DRAs are seldom detected in these data. Consequently, almost all firms involved in DRAs are classified as 'active' when the procedure begins, while almost all firms involved in CCs are (correctly) classified as involved in restructuring.

³⁴ The extinction rates of firms involved in restructuring in the United States are only slightly smaller than the ones we observe in Italy. See Bris et al. (2006) and Bernstein et al. (2019).



Figure 5.4. Activity status of DRA-D and CC-D firms

The figure reports the evolution of the shares of firms in each activity status in the three years following the beginning of the procedure. 'ACT' denotes active firms, 'CEA' indicates firms that ceased operations, and 'BAN' stands for firms that were liquidated through a bankruptcy procedure.

The interpretation of activity statuses and survival is more complicated in the case of indirect CCs. In principle, confirmed CC-Is should lead to the sale of the firm. This may happen through the firm being preserved in its current configuration and undergoing a change in ownership; or, alternatively, through the firm being merged with or acquired by another entity. In the first case, the firm is classified as 'active', provided it resumes operations. In the second case, however, the original firm would appear as ceased or bankrupt, even though its assets and workforce may have become productive again under a different corporate identity.

Figure 5.5 shows the evolution of activity statuses for firms involved in a CC-I (DRA-Is are discarded due to the small number of observations). Three years after the filing, over 40% of these firms are still active. However, this evidence cannot be interepreted as a failure of CC-Is. Indeed, around 85% of firms that remain active are still classified as involved in restructuring, and may therefore be on their way towards extinction. The remaining 15% is constituted by firms that have presumably completed the restructuring process and resumed operations under a different ownership. As one can notice, the likelihood of bankruptcy is very low in CC-Is. Indeed, bankruptcy after a (confirmed) CC-I may occur only when the implementation of the plan is unsuccessful.

The large number of firms that are still undergoing restructuring three years after the beginning of the procedure makes it impossible to interpret the higher survival rate of CC-Ds relative to DRAs as a positive outcome, or the relatively large suvival rate of CC-Is as a misapplication of these plans. On the other hand, these figures testify to the long time that is often necessary to complete the implementation of restructuring plans (see also Danovi et al., 2018).





The figure reports the evolution of the shares of firms in each activity status in the three years following the beginning of the procedure. 'ACT' denotes active firms, 'CEA' indicates firms that ceased operations, and 'BAN' stands for firms that were liquidated through a bankruptcy procedure.

We also conduct a regression analysis on the association between the 2-year³⁵ likelihood of bankruptcy and extinction of firms involved in confirmed *direct* restructurings and the usual set of procedure and firm characteristics (results are reported in Table A.4 in the Appendix).

Family businesses are more likely to go bankrupt in the aftermath of a DRA, while family-owned CC firms are – if anything – slightly less likely to meet this ending. In terms of procedure-specific characteristics, we see that the outcomes of direct CCs appear to be more sensitive to procedure history: having had a prior insolvency claim or having attempted a CRP is associated with a larger likelihood to meet bankruptcy.

Ceteris paribus, larger firms are more likely to suffer bankruptcy or extinction after a DRA, while the survival of CC firms is correlated with performance indexes such as productivity and ROA. Among financial variables, being classified in the 'bad loan' group is associated with a larger likelihood of extinction in DRAs, but not in CCs.

In the case of DRAs, we use additional controls conveying information on the provisions of the plan (for CCs, we only have an indicator for whether the agreement specifies a provision for new financing). Interestingly, the presence of management and/or strategic interventions (such as changes in the board of directors and reorganization of the workforce) is the only variable that stably and positively correlates with the likelihood of both bankruptcy and extinction in the broader sense.

For direct DRAs and CCs, Figure 5.6 displays the evolution of selected³⁶ balance sheet variables within a 6-years window around the year in which the restructuring procedure is initiated. The exercise is conducted for firms that survive for at least three years after this date, and for procedures that receive confirmation. A common pattern emerges. Consistently with the findings of Section 4, DRA firms are in worse conditions at the beginning of the period of observation, but CCs firms fall into a deeper crisis just before the opening of the procedure. After confirmation, and conditionally on

³⁵ The 2-year horizon was chosen to meet the trade-off between a sufficiently long post-procedure period and the reduction in the number of available observations when farther horizons are used.

³⁶ The evidence for other variables not shown here is qualitatively similar.

3-year survival, CC firms appear to recover quickly. At the 3-year mark, CC firms have taken over DRA firms in most dimensions. Interestingly, leverage is greatly reduced in CCs with respect to DRAs, consistently with the latter being characterized by a relatively limited frequency of debt write-offs. Despite an evident improvement in performance with respect to the year in which the procedure is initiated, firms undergoing restructuring do not catch up with the economic conditions of the average firm in the reference population (Table 4.1).

Figure A.1 in the Appendix shows how the situation for CC-I firms is very different. Those that are still active 3 years after the opening of the procedure mostly remain in the same conditions. As seen before, most of these firms are still involved in restructuring, and very few have resumed operations regularly after a change in ownership. This evidence testifies that firms to be sold/merged do not improve their performance before the process is complete.



Figure 5.6. Evolution of balance sheet variables among surviving firms

The figure displays the evolution of selected balance sheet variables in a six-year window around the year in which the procedure was initiated, for the subset of firms that are still in a state of regular economic activity 3 years after the procedure. *Labor productivity, ROA*, and *Leverage* report population medians of individual measurements. *Risky, Zombie*, and *Negative equity* report population means of individual measurements.

Figure 5.7 summarizes the evolution of credit conditions for surviving firms involved in direct DRAs and CCs. There is a substantial difference in the incidence of credit deterioration after the opening of the procedure. In particular, only 30% of DRA firms have a 'bad loan' credit status, while around 90% of CC firms do. These values remain stable up to the 3-year mark. Mirroring the incidence of credit deterioration, DRA firms are more likely to maintain active credit lines and to receive new term loans, even if this occurrence is relatively uncommon for both groups. The provision of credit under specific conditions of priority, as envisioned by the legislator as a means for firms undergoing restructuring to obtain new credit, is rare. Only 6% of firms involved in direct CCs and 1% of those involved in DRAs obtain credit in this form within 3 years from the beginning of the procedure. As

shown by Figure A.2 in the Appendix, the different situation of CC-Is firms emerges from the much smaller likelihood to have active credit line in the 3 years after the procedure starts.

This evidence points to two factors. First, the recognition by the banking system that CCs as more formalized and, therefore, more 'radical' procedures than DRAs: indeed, banks are almost automatically required to classify credit relationship with CC firms as deteriorated, while this happens less often with DRA firms. Second, although we have no specific information on the duration of DRA restructurings, it is likely that CC-based restructuring lasts longer, with firms remaining in a semi-bankruptcy status for years on end,³⁷ while DRA are – if successful – quicker at re-establishing profitability and, consequently, sound credit relationships.



Figure 5.7. Evolution of credit conditions among surviving firms

The figure displays the evolution of selected credit variables in a six-year window around the year in which the procedure was initiated, for the subset of firms that are still in a state of regular economic activity 3 years after the procedure. All panels report population means of individual measurements, corresponding to shares of the population displaying the relevant characteristics.

6. Concluding remarks

This paper provides an empirical analysis of restructuring tools aimed at preserving business continuity, focusing in particular on debt restructuring agreements and going-concern judicial compositions with creditors in the Italian case. The analysis is carried out using data collected from Italian courts, as well as firm-level data on balance sheets and credit contracts. We compare the preprocedure characteristics of firm entering DRAs and CCs, and the post-procedure outcomes in terms of survival and recovered business activity.

³⁷ According to Danovi et al. (2018), the median foreseen time to completion for going-concern CCs is 4 years.

Firms involved in the two types of procedures display important *ex ante* structural and contingent differences. In particular, firms involved in DRAs are typically larger and better-performing, but they also show a longer financial distress spell before the procedure starts. On average, CC firms fall into a deeper crisis, but experience a shorter financial distress.

CCs are also characterized by lower rates of confirmation, and the likelihood of confirmation decreases when the length of the financial distress spell increases. Direct CCs (those that provide for the continuation of the firm under the debtor's control) are associated with smaller rates of firm extinction than DRAs in the first 3 years after the procedure is initiated. However, many firms involved in a direct CC are still undergoing restructuring at the 3-year mark.

Conditional on survival over this horizon, business performance of CC firms catches up with that of DRA firms, despite being inferior around the time the procedure starts. Conversely, financial conditions are not seen to improve for either group of firms within the first 3 years, remaining particularly critical for CC firms.

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Appendix

	DRA-D	DRA-I	CC-D	CC-I
		тес	lian	
Tot. assets (mln€)	14.55	14.18	9.38	7.96
Tot. debt (mln€)	11.26	13.96	7.08	7.14
EBITDA (mln€)	0.01	-0.21	-0.14	-0.28
Lab. productivity	1.02	0.82	0.82	0.67
Return on assets	0.00	-0.02	-0.04	-0.07
Collateralization	0.30	0.40	0.34	0.31
FA intangibility	0.06	0.04	0.10	0.08
Leverage	0.81	0.85	0.84	0.92
Financial debt	0.54	0.58	0.53	0.54
Current ratio	0.98	1.26	1.08	1.20
		me	ean	
Risky firms	0.88	0.96	0.95	0.96
Zombie firms	0.79	1.00	0.91	0.92
Negative equity	0.51	0.56	0.70	0.81

Table A.1. Balance sheet variables (DRAs vs. CCs, by subtype)

See notes to Table 4.1

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	DRA-D	DRA-I	CC-D	CC-I
-		тес	lian	
Tot. exposure (mln€)	7.58	8.09	4.52	3.73
Number of banks	4.31	6.13	6.87	7.38
% largest bank	0.58	0.46	0.44	0.38
Credit concentration	0.48	0.32	0.30	0.25
% collateralized	0.39	0.18	0.13	0.09
Persistence bad loans (qs.)	6.00	2.00	2.00	2.00
Persistence NPL (qs.)	8.00	8.00	5.00	5.00
Interest rate on credit lines	4.71	5.15	5.66	5.72
Interest rate on term loans	8.47	7.89	9.24	9.60
		me	ean	
Bad loans	0.34	0.28	0.62	0.81
NPLs	0.94	0.99	0.99	0.98
Active credit lines	0.88	0.93	0.96	0.95
New term loans	0.54	0.69	0.74	0.75

See notes to Table 4.2

Dep. var: DRA	OLS	OLS	OLS	Logit	Logit	Logit
	(1)	(2)	(3)	(4)	(5)	(6)
Srl	0.232***	0.155***	0.180***	1.648***	0.978**	1.049***
	(0.039)	(0.039)	(0.040)	(0.328)	(0.397)	(0.397)
Spa	0.221***	0.142***	0.173***	1.381***	0.846**	0.960**
	(0.041)	(0.040)	(0.041)	(0.333)	(0.405)	(0.410)
Family business	-0.214***	-0.165***	-0.159***	-1.537***	-1.429***	-1.400***
	(0.021)	(0.020)	(0.020)	(0.165)	(0.201)	(0.206)
First presentation	-0.151**	-0.073	-0.080	-0.671	-0.600	-0.715
	(0.071)	(0.067)	(0.066)	(0.645)	(0.753)	(0.787)
Insolvency claim	-0.186***	-0.126*	-0.132**	-0.969*	-1.188*	-1.332*
	(0.070)	(0.066)	(0.065)	(0.578)	(0.678)	(0.706)
CRP	0.086	0.130**	0.126**	1.205*	1.203	1.160
	(0.067)	(0.064)	(0.064)	(0.673)	(0.776)	(0.815)
DRA	0.043	0.090	0.075	0.544	0.422	0.259
	(0.072)	(0.068)	(0.068)	(0.659)	(0.786)	(0.827)
CC	0.110	0.154**	0.144**	1.290**	1.510**	1.448*
	(0.068)	(0.064)	(0.064)	(0.630)	(0.725)	(0.758)
Total assets	0.001***	0.000***	0.000***	0.006***	0.004***	0.005***
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.002)
Productivity	-0.025***	-0.016***	-0.013***	-0.149***	-0.103**	-0.090**
	(0.005)	(0.005)	(0.005)	(0.037)	(0.041)	(0.042)
ROA	0.136*	0.052	0.011	0.701	-0.032	-0.330
	(0.073)	(0.068)	(0.071)	(0.642)	(0.736)	(0.780)
Collateralization	-0.264***	-0.207***	-0.184***	-1.781***	-1.809***	-1.691***
	(0.058)	(0.055)	(0.058)	(0.458)	(0.544)	(0.589)
FA intangibility	-0.130***	-0.117***	-0.109***	-0.828**	-0.921**	-0.955**
	(0.043)	(0.041)	(0.041)	(0.355)	(0.412)	(0.429)
Leverage	-0.083***	-0.082***	-0.074***	-0.664***	-0.848***	-0.873**
	(0.029)	(0.027)	(0.027)	(0.240)	(0.271)	(0.291)
Financial debt	0.040	0.071	0.074	0.345	0.397	0.539
	(0.054)	(0.051)	(0.052)	(0.435)	(0.521)	(0.543)
Current ratio	0.035***	0.031***	0.029***	0.247***	0.294***	0.298***
	(0.009)	(0.008)	(0.008)	(0.077)	(0.105)	(0.108)
Risky	0.073	0.077*	0.077*	0.515	0.643	0.627
	(0.048)	(0.046)	(0.046)	(0.353)	(0.451)	(0.473)
Zombie	-0.098**	-0.080**	-0.077**	-0.713**	-0.685*	-0.708*
	(0.039)	(0.037)	(0.037)	(0.297)	(0.355)	(0.363)
Negative equity	-0.131***	-0.109***	-0.112***	-0.981***	-1.010***	-0.992**
· · ·	(0.028)	(0.026)	(0.027)	(0.217)	(0.262)	(0.271)
Credit concentration	0.134***	0.160***	0.136***	0.790**	1.426***	1.297***
	(0.049)	(0.047)	(0.047)	(0.372)	(0.470)	(0.490)
% collateralized	0.096***	0.079**	0.067*	0.477*	0.640*	0.497
	(0.036)	(0.034)	(0.034)	(0.274)	(0.329)	(0.340)

 Table A.3. Correlation between procedure type choice and pre-procedure characteristics

Bad loans	-0.282***	-0.228***	-0.227***	-1.879***	-1.857***	-1.853***
	(0.026)	(0.025)	(0.025)	(0.206)	(0.248)	(0.252)
NPLs	-0.089	-0.057	-0.068	-0.420	-0.501	-0.546
	(0.059)	(0.058)	(0.058)	(0.423)	(0.574)	(0.582)
Active credit lines	0.049	-0.010	-0.011	0.418	0.161	0.089
	(0.043)	(0.041)	(0.041)	(0.325)	(0.390)	(0.400)
New term loans	-0.014	-0.009	0.001	-0.151	-0.114	-0.082
	(0.025)	(0.023)	(0.023)	(0.199)	(0.235)	(0.242)
Persistence bad loans	0.015***	0.013***	0.013***	0.098***	0.088**	0.096**
	(0.004)	(0.004)	(0.004)	(0.031)	(0.036)	(0.037)
Persistence NPL	0.006***	0.006***	0.006***	0.040***	0.054***	0.053***
	(0.002)	(0.002)	(0.002)	(0.014)	(0.018)	(0.018)
North	-0.028			-0.142		
	(0.026)			(0.198)		
Court FE		Х	Х		Х	Х
Industry FE			Х			Х
Obs.	1446	1445	1445	1446	1228	1228
Adj. R ²	0.454	0.542	0.546			
Pseudo R ²				0.427	0.494	0.505

The dependent variable in an indicator of whether the firm acceses a DRA (versus a CC). *Srl* (limited liability company) and *Spa* (joint stock company) are binary indicators for juridical status. *Family business* is an indicator for firms in which members of a single family own a control share of equity. *Industry FE* are dummies for a 10-sector classification of economic activity. Standard errors are clustered at court level. The symbols ***, **, * indicate respectively 99%, 95%, and 90% significance.

		DR	A-Ds			C	C-Ds	
Dependent variable	BAN	EXT	BAN	EXT	BAN	EXT	BAN	EXT
	OLS	OLS	OLS (Lasso)	OLS (Lasso)	OLS	OLS	OLS (Lasso)	OLS (Lasso)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Srl	0.156	-0.002			-0.017	0.382		
	(0.110)	(0.192)			(0.125)	(0.298)		
Spa	0.133	0.025		-0.053	0.043	0.362	0.041	
	(0.115)	(0.201)		(0.061)	(0.130)	(0.311)	(0.026)	
Family business	0.121***	0.022	0.102***		-0.079*	-0.080	-0.048*	
	(0.041)	(0.072)	(0.033)		(0.043)	(0.102)	(0.029)	
First presentation	-0.078	-0.178			0.352**	0.177		
	(0.102)	(0.178)			(0.160)	(0.382)		
Insolvency claim	-0.117	0.010			0.426***	0.213	0.168***	
	(0.122)	(0.214)			(0.136)	(0.324)	(0.053)	
CRP	-0.122	-0.158	-0.045		0.828***	0.664	0.491***	0.444**
	(0.092)	(0.161)	(0.045)		(0.199)	(0.474)	(0.091)	(0.222)
DRA	-0.014	-0.385**		-0.175*				
	(0.095)	(0.166)		(0.092)				
CC	-0.104	-0.278			0.303**	-0.083	0.060	
	(0.098)	(0.171)			(0.141)	(0.337)	(0.053)	
Pre-DRA/Blank CC	0.116**	0.101	0.086**		-0.002	-0.046		
	(0.050)	(0.088)	(0.037)		(0.037)	(0.089)		
Asset sales	-0.087**	-0.012	-0.042					
	(0.041)	(0.071)	(0.030)					
Debt swap	-0.015	-0.185						
	(0.071)	(0.124)						
Debt take-over	0.029	0.135						
	(0.061)	(0.107)						
Debt deferral	-0.101***	-0.070	-0.081***					
	(0.038)	(0.067)	(0.029)					
Debt write-off	-0.012	0.059						
	(0.040)	(0.071)						
Management/strategy	-0.096**	-0.181**	-0.072**	-0.131**				
	(0.041)	(0.072)	(0.029)	(0.055)				
New equity	-0.057	-0.054						
	(0.045)	(0.079)						
New financing	0.008	-0.010			0.103*	-0.035	0.080**	
	(0.042)	(0.074)			(0.053)	(0.127)	(0.038)	
Total assets	0.000***	0.001**	0.000***	0.000**	-0.000	0.000	-0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)
Productivity	0.004	0.011		-0.002	-0.012*	-0.035**	-0.011**	-0.018*
	(0.008)	(0.014)		(0.009)	(0.007)	(0.016)	(0.005)	(0.011)
ROA	-0.038	0.267			-0.033	-0.608*	-0.041	-0.475**

 Table A.4. Predictors of bankruptcy and extinction (within 2 years, confirmed restructurings)

	(0.148)	(0.259)			(0.138)	(0.328)	(0.088)	(0.194)
Collateralization	-0.068	-0.259			-0.121	-0.548**	-0.101	-0.075
	(0.102)	(0.179)			(0.112)	(0.267)	(0.067)	(0.135)
FA intangibility	0.112	-0.040	0.067		0.001	0.093		
	(0.080)	(0.141)	(0.057)		(0.081)	(0.192)		
Leverage	0.028	0.197***		0.162***	0.066	-0.037	0.058	0.110
	(0.040)	(0.071)		(0.047)	(0.065)	(0.156)	(0.038)	(0.087)
Financial debt	-0.077	-0.246			-0.018	0.293		
	(0.087)	(0.152)			(0.097)	(0.232)		
Current ratio	-0.002	0.016			-0.017	0.080*	-0.010	
	(0.012)	(0.021)			(0.018)	(0.042)	(0.011)	
Risky	0.054	-0.076			0.170*	-0.081	0.129**	
	(0.077)	(0.135)			(0.095)	(0.227)	(0.055)	
Zombie	-0.045	0.112		0.096	0.078	0.093		
	(0.068)	(0.119)		(0.087)	(0.097)	(0.232)		
Negative equity	0.020	0.162*		0.163***	-0.074*	-0.068	-0.056*	
	(0.052)	(0.092)		(0.060)	(0.043)	(0.101)	(0.030)	
Credit concentration	-0.028	0.150		0.082	0.122	0.301	0.074	0.235
	(0.073)	(0.128)		(0.097)	(0.102)	(0.242)	(0.055)	(0.145)
% collateralized	-0.031	0.167*	-0.050	0.183**	-0.032	-0.135		
	(0.053)	(0.093)	(0.038)	(0.073)	(0.070)	(0.166)		
Bad loans	0.060	0.240**	0.085***	0.184***	0.016	0.051		0.054
	(0.054)	(0.095)	(0.033)	(0.060)	(0.041)	(0.098)		(0.061)
NPLs	0.090	0.133	0.060		0.007	0.238		
	(0.070)	(0.122)	(0.057)		(0.179)	(0.426)		
Active credit lines	0.019	-0.176		-0.083	0.053	0.083	0.160**	
	(0.061)	(0.107)		(0.083)	(0.120)	(0.286)	(0.072)	
New term loans	0.013	0.040			0.047	-0.064		-0.055
	(0.039)	(0.068)			(0.060)	(0.144)		(0.083)
Persistence bad loans	-0.002	0.003	-0.002		0.002	-0.000		
	(0.003)	(0.005)	(0.002)		(0.004)	(0.010)		
Persistence NPL	0.003	-0.015			-0.010	0.000	-0.011**	
	(0.006)	(0.011)			(0.010)	(0.024)	(0.005)	
Obs.	321	321	321	321	144	144	144	144
Adj. R ²	0.099	0.232	0.207	0.266	0.221	0.108	0.431	0.290

The dependent variables are an indicator for whether the firm is subject to a bankruptcy (BAN) or exits the market (EXT, including through bankruptcy) within 2 years from the beginning of the bankruptcy procedure. *Srl* (limited liability company) and *Spa* (joint stock company) are binary indicators for juridical status. *Family business* is an indicator for firms in which members of a single family own a control share of equity. Macro-area and industry fixed effects are included in all specifications. The variable selection of columns 3,4,7,8,11,12 is obtained through an AIC-minimizing LASSO procedure on the full set of variables. Notice that this two-step procedure does not necessarily lead to unbiased estimators of the individual coefficients. Here, though, we are only interested in an indication of the sign of such coefficients, not their relative magnitude. The presented estimates should be interpreted only as confirmatory evidence for full-model inference. Standard errors are clustered at court level. The symbols ***, **, * indicate respectively 99%, 95%, and 90% significance.



Figure A.1. Evolution of balance sheet variables among surviving firms

The figure displays the evolution of selected balance sheet variables in a six-year window around the year in which the procedure was initiated, for the subset of firms that are still in a state of regular economic activity 3 years after the procedure. *Labor productivity, ROA*, and *Leverage* report population medians of individual measurements. *Risky, Zombie*, and *Negative equity* report population means of individual measurements.



Figure A.2. Evolution of credit conditions among surviving firms

The figure displays the evolution of selected credit variables in a six-year window around the year in which the procedure was initiated, for the subset of firms that are still in a state of regular economic activity 3 years after the procedure. All panels report population means of individual measurements, corresponding to shares of the population displaying the relevant characteristics.