Effects of Bankruptcy Procedures on Firm Restructuring: Evidence from Italy

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Abstract

Bankruptcy procedures are an institutional feature that particularly affects firm survival, exit and restructuring and differs across countries. I focus on Italy, a civil law country, to highlight key aspects of bankruptcy law that affected firm use of formal bankruptcy procedures, versus out-of-court settlements, and firm outcomes, such as restructuring. The case of Italy is of interest as an example of civil law that is different to, for instance, the U.S. or U.K. I consider the evolution of bankruptcy procedures in Italy over six decades and provide case study evidence on the effect on firms under financial pressure. I highlight that Italian bankruptcy law strongly restricted out-of-court restructuring. Yet, formal procedures were unattractive and inefficient. The findings suggest heterogeneous effects across firms, depending on the type of assets and crisis faced by the firm. More affected were firms with assets of intermediate economic life and specific to the firm (e.g., machines) with less effect on firms with mostly fast rotating (e.g., trade debt) or long economic life (e.g., real estate) assets. Also, firms needing operational restructuring as well as financial restructuring were more restricted by the bankruptcy procedures. The findings are consistent with a main effect of the bankruptcy procedures to stall restructuring and exit in the most affected industries. Finally, over time, smaller firms faced much more persistent bankruptcy procedures than larger firms or firms of national interest. To conclude I discuss the extent to which these findings are likely to hold beyond Italy and in broader data sets.

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Introduction

Bankruptcy procedures have a direct effect on how firms resolve situations of financial distress. Clearly, the specific characteristics of the bankruptcy procedures affect the outcome for firms that enter formal proceedings. In turn, the characteristics and attractiveness of formal procedures influences which firms address their crisis out-of-court, as opposed to entering formal procedures, and how this crisis is resolved. Thus bankruptcy procedures are one factor shaping decisions over firm exit, survival, and restructuring.

Firm exit and restructuring are a core element for understanding industry dynamics and evolution (Decker and Mellewigt (2007), Ghemawat and Cassiman (2007) and Ketcher, Snow and Hoover (2004), Caves (1998), Anderson and Tushman (2001), Coucke, Pennings and Sleuwaegen (2007)). Indeed, there is substantial evidence that firm entry and exit occur concurrently (Dunne, Roberts and Samuelson (1988), Bartelsman et al. (2005)). Also, many characterizations of the entry process entail substantial selection and thus exit of the less successful entrants (e.g., Jovanovic (1982)).

Thus bankruptcy procedures potentially affect key aspects of firm and industry dynamics. This is consistent with the more general findings on the role of financial institutions in affecting firm dynamics. In particular, there is evidence consistent with credit constraints affecting firm size and growth (Beck et. al., 2005, Cabral and Mata (2003), Bottazzi et al. (2008) and Fagiolo and Luzzi (2006)). Financial institutions include capital markets and bank financing and thus bankruptcy procedures are an important element as these shape creditor and debtor rights and the exercise of those rights. Also, the financing of firms not in financial distress is also affected by bankruptcy procedures, as firms and creditors factor in the effects of bankruptcy procedures on the resolution of an eventual financial crisis (Lee, Peng and Barney (2007)).
There is substantial variation across countries in bankruptcy procedures (e.g., La Porta et al. (1998)). This raises the question of how these differences in bankruptcy procedures lead to differences in firm strategy, in particular firm survival, exit and restructuring. There has been a substantial literature on the effects of U.S. bankruptcy law but less on other jurisdictions: for instance, in the strategy literature Flynn and Farid (1991), Moulton and Thomas (1993), Daily and Dalton (1994a), Daily and Dalton (1994b), Daily (1996) discuss effects of U.S. bankruptcy law, whereas Hoskinsson et al. (2004) discuss restructuring in civil law countries.

However, a stream of literature on the effects of a broader set of institutions on strategy suggests the value of considering the effect of differences in bankruptcy law. There is evidence that local institutional factors substantially affect firms. For instance, to illustrate the range of issues considered: Thomas and Waring (1999) provide evidence of systematic differences in firm strategy across U.S., Germany and Japan; Makino, Isobe and Chan (2004) and Chan, Isobe and Makino (2008) document the effect of country factors on multinational subsidiary performance; and Schreper and Guillen (2004) provide evidence on differences in use of hostile takeovers. Not only, often emphasized is the heterogeneous effect across firms of institutions. In general, imperfections in factor markets are one potential source of firm heterogeneity, given differences in firm resources for addressing these imperfections (Olivier (1997)). A substantial stream of literature considers business groups, as these tend to be more prevalent in particular institutional settings, finding differences between firms affiliated versus non-affiliated with a business groups in terms of firm performance (Khanna and Rivkin (2001)), firm restructuring (Hoskinsson et. al. (2004)), and firm innovation (Mahmood and Mitchell (2004)). Also, heterogeneous effects arise across entrants and incumbents (Walker et al. (2002)), across foreign and domestic firms (e.g., Mata and Portugal (2002)), and across foreign firms within a country (Chan, Isobe and Makino.
In summary, not only do differences in institutions matter but also the impact tends not to be uniform across firms.

Turning to consider bankruptcy procedures, this suggests the value of understanding the effect of different bankruptcy regimes. Also this raises the issue of what aspects of bankruptcy law may lead to heterogeneity of effects across firms. Bankruptcy law typically comprises alternative procedures, not necessarily all available to all firms. Though creditor rights are fairly persistent and in part explained by legal origin (Djankov, McLiesh and Shleifer (2007) that expands on the La Porta et al. (1998) data set), there is evidence of reversals in relative degree of financial development across countries with the changes within countries consistent with pressure from particular interest groups on the political process (Rajan and Zingales (2003)). Also, the interpretation of the laws may change (Musacchio (2007)). Thus the variation across firms in available procedures may also change over time as procedures are adapted or their interpretation, use in practice, changed.

Considering the outcomes for firms in financial distress, there is evidence of variation across countries, with creditor rights and judicial efficiency influencing the use of formal bankruptcy procedures (Claessens and Klapper (2005)). One reason for the cross-country differences is how, from a creditor’s perspective, bankruptcy procedures differ in the treatment of the same assets (Davydenko and Franks (2006)). This indicates a key effect of bankruptcy procedures is in shaping which firms do enter formal procedures, and that the attractiveness of the bankruptcy procedures in part depends on the type of assets of the firm.

In a U.S. context, several issues have received particular attention. One issue is the choice of whether to trigger Chapter XI. This is recognized as an option for management (Flynn and Farid (1991)), however the costs of reorganization and the chances of success should be
weighed against the benefits (Moulton and Thomas (1993)). A second aspect considered has been the characteristics of firms most likely to restructure out-of-court, including governance and monitoring mechanisms (e.g., Daily (1996)), and types of assets and creditors (Gilson, John and Lang (1990)). A third concern has been the outcome for firms and managers of reorganization, out-of-court or within Chapter XI, for instance in terms of debt reduction (Gilson (1997)) and executive compensation (Gilson and Vetsuypens (1993)).

In this paper I consider the effect on firms of Italian bankruptcy procedures. I focus on understanding what features of the bankruptcy procedures affected how the situation of a firm in financial distress was addressed: within the bankruptcy procedures and, importantly, before entering formal procedures. I highlight sources of heterogeneous effects across firms due to: the evolution of bankruptcy law in Italy; and the variation in attractiveness of the bankruptcy procedures due to differences in type of assets across firms. In particular, I first consider the historical evolution of Italian bankruptcy procedures, and then illustrate the variation in effect across firms through selected case studies.

Why consider Italy? Italy is a representative example of a civil law country in terms of creditor rights: creditors generally have weak rights exercised within a slow-moving legal system (La Porta et. al. (1998), Djankov et al (2002)). Part of the debate on the effect of cross-country differences in financial institutions focuses on contrasting civil law to common law countries: hence the value of further evidence on a civil law country, not least as much of the empirical literature on bankruptcy procedures is focused on common law countries, as discussed above. In addition, Italy is also relatively economically developed and part of the European Union. Hence, as compared to poorer, less internationally integrated civil law countries, other institutional aspects that could be confounding constraints or interact with particular financial institutions
may be less severe thus aiding identification of the effect of bankruptcy law. Also, some of the findings of ‘fat-tail’ firm size distributions that have been linked to credit constraints are for Italy (Bottazzi, Cefis and Dosi (2002) and Fagiolo and Luzzi (2006)).

Considering the key features of the bankruptcy procedures, restrictions on out-of-court restructuring, rights within the formal procedures and efficiency of formal procedures, Italy is very different to, say, the U.S., U.K. or Germany. To what extent do these institutional differences matter to firms? Italy has very different restrictions on out-of-court restructuring. For a creditor in Italy, a key issue is the risk that after an out-of-court restructuring the firm subsequently enters formal bankruptcy procedures, with the consequent unwinding of the out-of-court settlement and additional penalties to the creditor. Also, Italian bankruptcy procedures tend to be lengthy and provide creditors with weak rights. The duration of bankruptcy procedures exacerbates the concern of creditors regarding the extent of asset value deterioration during bankruptcy procedures, for instance due to limited investment and maintenance, as, in Italy, creditors are generally not able to unilaterally seize their collateral.

My first contribution is to describe in detail Italian bankruptcy law, with emphasis on the most pertinent aspects that affect firm strategy, in particular in shaping restructuring and exit decisions. I highlight the restrictions on out-of-court procedures and the reasons for these restrictions. I then describe the alternative judicial and administrative procedures and how these evolved over time. Finally, I discuss the very slow speed of formal procedures. In particular, I provide a broad overview of bankruptcy procedures, both in terms of the alternative procedures and their evolution over time.

My second contribution is to highlight two dimensions that lead bankruptcy law to have heterogeneous effects across firms under financial pressure. Considering long run firm dynamics,
including exit and restructuring, and entry and growth, the effect of bankruptcy procedures in part depends on the persistence of these procedures. I highlight which procedures changed over time and which types of firms were most affected. The first is variation over time in bankruptcy procedures, with greater variation for larger firms. The second is variation across firms depending on the economic life of assets, with most effect on firms with assets of intermediate length economic life, similar to the duration of bankruptcy procedures.

To illustrate these issues I consider a set of case studies of firms under financial pressure. I compare the outcomes of four medium-sized firms on the brink of financial distress. This raises clear empirical challenges. First, identification of the firms as if these firms were classified as in trouble the firms would automatically enter formal procedures. Second, medium sized firms are typically private and bank financed (Cobham et al (1999)), making data access harder. However, at least as compared to small firms the financial aspects of firm and owners, often families, are less commingled. Hence I take a case study approach. The firms are in manufacturing industries that differ by type of assets and hence available collateral: kitchen cabinets, footwear, auto parts, and paper mills. In summary, the case studies indicate substantial heterogeneity in the impact of the bankruptcy procedures of firm outcomes. Cleariy, as based on case studies this illustrates the potential extent of variation in impact, not the relative frequency of occurrence.

I then consider how general the findings are likely to be, beyond the case of Italian bankruptcy law and the case studies to other jurisdictions and broader data sets. I summarize the discussion in a set of propositions to highlight potentially more general findings.

The remainder of the paper is structured as follows. The next section provides a comprehensive view of Italian bankruptcy law followed by a summary of the key features of
Italian bankruptcy law most relevant to firms heading towards financial distress. The subsequent section contains the case studies to contrast the effect of bankruptcy law on firms under financial pressure that differ in type of assets. This is followed by a discussion of findings and a final concluding section.

**Italian Bankruptcy Law: Persistence and Key Features**

Italy is generally representative of civil law countries in terms of bankruptcy law. To illustrate, four key creditor rights are (La Porta et al., (1998)): no automatic stay on assets; secured creditors paid first; restrictions for going into reorganization; and management does not stay into reorganization. Across these measures, Italy is similar to the average for civil law countries, in providing just two of these four rights. Hence, in Italy, as for civil law countries on average, creditors have weaker rights than in countries with common law, Germanic or Scandinavian legal systems (Table 1).

--- Table 1 about here ---

In this section, I outline key aspects of Italian bankruptcy law and which aspects were most persistent over time. Formal procedures for firms approaching insolvency or in a state of insolvency were of two types: judicial and administrative (Table 2), with each type encompassing a range of specific procedures. First, I discuss out-of-court procedures, the judicial procedures and finally administrative procedures: I provide a relatively detailed overview of Italian bankruptcy procedures as some aspects may be less familiar than for other jurisdictions, such as the U.S. or U.K.

--- Table 2 about here ---

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2 Becchetti and Serra (2003), footnote 8, pg. 2102; Cercone (2001), pg. 39
In summary, I document how Italian bankruptcy procedures discouraged banks from arranging out-of-court settlements, yet offered unappealing slow formal bankruptcy proceedings. In terms of persistence, I highlight that the core judicial procedures remained essentially unchanged for over 60 years. In contrast, there were major changes to administrative procedures that address the restructuring of large firms and firms of national interest. Hence, persistence of Italian bankruptcy procedures depended on the type of firm: in particular, more persistent for mid-size and smaller firms than for larger firms.

**Out-of-court versus in-court procedures**

Italian bankruptcy procedures discouraged banks from arranging out-of-court settlements, yet offered unappealing formal bankruptcy proceedings. The general stance of civil law favors in-court procedures, with penalties for unsuccessful out-of-court arrangements. The penalties were compounded in Italy by the risk of onerous claw-backs, if legal proceedings were subsequently entered into, especially for banks lending through current account overdrafts. However, the formal legal processes provided secured creditors with fairly limited rights, exercised within an extremely slow-moving legal system (La Porta *et al.* (1998), Djankov *et al.* (2002)). As a consequence, banks very rarely initiated formal bankruptcy proceedings. Most often these would be triggered by another creditor to the firm (e.g., suppliers).

The core 1942 Italian Bankruptcy Law remained essentially unchanged for over 60 years, until the reforms of 2005. The Italian Bankruptcy Law of 1942 drew upon the Civil Code of 1882. The influence of civil law tradition was reflected in how the law aimed to redress the

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3 In addition to the cited references, this section benefited from interviews of managers of the credit department at the Banca Marche, a regional Italian bank. The managers' roles spanned all aspects of credit management, for instance, granting of credit, monitoring of firms showing signs of potential financial difficulty, and managing legal procedures.
adverse situation caused by insolvency. Under civil law tradition, but not common law or Germanic law, bankruptcy is limited to firms engaged in commerce, not individuals, and the Bankruptcy Law of 1942 reflected this. The basic stance was that insolvency was a break by the debtor of an obligation undertaken with the creditor that not only harmed the creditor in question but, critically, was also detrimental to the interests of justice, the public at large, and of commerce in general. Consequently, even in non-fraudulent cases, debtors were punished with criminal sanctions, for instance, potentially including imprisonment: this element of the law drew directly upon the historic influence of the ancient Roman Laws. In addition, the procedures allowed for significant scope of judicial involvement and hence, in line with the goals of the Fascist government of 1942, potential control by the authorities of economic activity also through the judiciary.

This broad conception of insolvency resolution led to legal processes that addressed the interests of all creditors and occurred within the law, coordinated by judges, not in privately organized out-of-court settlements. Private work-outs involving a subset (or all) of the creditors were dissuaded based on concern for the respect of the priorities of the different classes of creditors, especially against opportunistic behavior by particular creditors (and the debtor) at the expense of the mass of creditors. Hence, creditors that aided a debtor in a state of distress so as

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4 Lordi (1946), pg. 102
5 Lordi (1946), pgs. 1-2, and 282-283
6 Annesi (1977), pg. 182-183; Mack Smith (1997), pg. 503.
7 Libonati (1997), pg. 98. Also, in the presentation of the 1942 Bankruptcy Law, one aim was explained to be to "eliminate those forms of extra-judicial arrangement that result in unequal distribution amongst creditors and often in a disaster for the debtor who with total sacrifice does not yet achieve freedom", of judicial release from obligations achieved by bankruptcy. (Author's translation of quote in Greco (1997), pg. 92: si vollero "eliminare quelle forme stragiudiziali di accomodamento che si risolvono
to avoid formal declaration of insolvency risked, if insolvency ensued, at best, revocation of the agreements reached, and, at worst, also criminal sanctions for having concurred in bankruptcy. The aim of the revocation ('revocatoria pauliana') was to reverse contracts that a creditor undertook that harmed the interests of other creditors. The part that went to the particular creditor (e.g., a payment made by the debtor) was reversed to provide satisfaction to the mass of creditors (i.e., the moneys paid went towards satisfying the claims of the mass of creditors, not back to the debtor). Hence, the law strongly dissuaded a creditor (or subset of creditors) from taking any out-of-court action towards a debtor heading towards distress that changed this (these) creditor's standing relative to other creditors: private work-outs were not encouraged.

In addition, claw-back procedures targeting lending through overdrafts on current accounts were particularly onerous ('revocatorie di conto corrente'). This aspect particularly affected Italian banks. In the 1942 bankruptcy law once a firm entered formal bankruptcy proceedings relevant transactions during the preceding one to two years were unwound to provide a level starting point from which to pay back all creditors. The treatment of a firm's payments and withdrawals from a current account in overdraft was ambiguous: for instance, did

in una sperequazione fra i creditori e spesso in un disastro per lo stesso debitore che non raggiunge col totale suo sacrificio la liberazione” Rel. n. 36).

8 Lordi (1946), pg. 300. Also, the law allows for automatic revocation of some specified acts committed two years before the start of bankruptcy proceedings. For all other acts in the year up to bankruptcy, the court may revocate them if the other party is proven to have know of the state of insolvency (PriceWaterhouseCoopers 2005).

9 Lordi (1946), pg. 144

10 Certain transactions occurring two years prior to the declaration of insolvency were automatically revoked, under the assumption that the mass of creditors suffered harm (e.g., new collateral guarantees, or prepayment of loans). In addition, for the year preceeding declaration of insolvency any transaction may be reversed if the court administrator can demonstrate that the counter-party knew of the debtors state of insolvency (Lordi (1946), pgs. 139-163; PriceWaterhouseCoopers (2005)).
each deposit represent a payment to the bank of credit extended to the firm, and hence subject to claw-back, or just the total outstanding overdraft, or the maximum overdraft over the claw-back period? Starting in 1982 a series of interpretations by the Italian Supreme Court (the Corte della Cassazione) dramatically expanded the potential claw-back from overdrafts on current accounts.\textsuperscript{11} In summary, the amount clawed-back could reflect credits received into the account (i.e., each credit to the account received by the bank could be interpreted as a payment to reduce loan exposure), and not, say, the level of overdraft during the claw-back period. As a consequence, for a bank to initiate bankruptcy procedures risked substantial claw-backs, as most firms had part of the borrowing through overdrafts on current accounts.

In summary, the law discouraged out-of-court procedures, favoring collective action involving all creditors, within the courts and administered by the courts. As discussed above, this followed from the general concern, in civil law\textsuperscript{12}, to ensure equitable treatment for all creditors, especially smaller creditors less able to enter into favorable private, out-of-court settlements. Creditors who re-negotiated with a firm (or received advantageous treatment relative to other creditors) risked that, were the firm to later become bankrupt, the work-out transactions would be unwound. In addition, as debtors formally declared bankrupt were subject to criminal sanctions (including for non-fraudulent bankruptcy), creditors that helped a debtor avoid declaring a state of bankruptcy were also at risk of criminal sanctions.\textsuperscript{13} As a consequence, the out-of-court financial restructuring of a troubled company was particularly risky for a bank.

\textsuperscript{11} Magaletti (1998).

\textsuperscript{12} The principle of revocation is based on the Italian Civil Code, article 2901. It is a broad principle that also applied in the case of bankruptcy. (Lordi (1946), pg. 142; PriceWaterhouseCoopers (2005))

\textsuperscript{13} Boccuzzi (1997), pg. 67; Cerccone (2001), pg. 46; Forestieri (1995), pg. 182; Lordi (1946), pgs. 283-328; Marcucci (2001), pg. 48 and 51.
Judicial procedures

Following a petition to initiate proceedings brought by creditors, the debtor, or the public prosecutor, the court decided if to initiate judicial procedures based on an assessment of whether the firm was insolvent. The definition of insolvency was not precise, but default on debt payments was not sufficient. In addition, the court could declare insolvency ex-officio, (i.e., without a petition).\textsuperscript{14} Once insolvency was declared, the bankruptcy procedure ('bancarotta') applied, unless this was preempted by a deed of arrangement ('concordato preventivo') or interrupted by a composition in bankruptcy ('concordato fallimentare'). If the bankruptcy procedure was completed (or a composition in bankruptcy was agreed), the debtor was declared to be bankrupt. Under this procedure, the debtor lost control of the firm (to a court appointed official receiver), temporarily lost certain civil rights (e.g., passport, privacy of correspondence, ability to manage a business), and may have faced criminal prosecution in cases of bankruptcy due to negligence (i.e., not just for bankruptcy caused by fraud). Creditors faced a stay on their claims: the creditors were dealt with as a group, with payment based on seniority.\textsuperscript{15}

Only the debtor could initiate the two procedures to preempt or interrupt the bankruptcy procedure. The debtor’s first option, at the start, was to propose a deed of arrangement ('concordato preventivo'). If successful, this procedure avoided the debtor being declared bankrupt (and the consequent severe penalties for the debtor described above). The key requirement was that the deed of arrangement plan had 100% satisfaction for secured creditors and at least 40% satisfaction for unsecured creditors (although on average actual realized rates of

\textsuperscript{14} Cercone (2001), pg. 40

\textsuperscript{15} Cercone (2001), pg. 40; General and Gobbi (1997), pg. 183.
satisfaction were lower than this). The plan had to be approved first by the court (e.g., to check expected payment levels and guarantees provided), and then by the unsecured creditors (by vote, requiring simple majority by number of creditors, and two-thirds majority by value of claims). The secured creditors did not vote, as the procedure was based on presumption of them receiving 100% satisfaction. If approved, then the debtor operated the firm under judicial supervision until the plan was completed.\textsuperscript{16} New financing could be raised with priority over existing financing: however, if the firm subsequently entered bankruptcy proceedings, the priority of the new financing was subject to review.\textsuperscript{17} The debtor's second option, available during the bankruptcy procedure, was to propose a composition in bankruptcy ('concordato fallimentare'). The proposal had to include 100% satisfaction for secured creditors, and other claims had to be dealt with in strict compliance with the pari passu principle.\textsuperscript{18}

The first reform of the 1942 Bankruptcy Code was in 2005. As the main focus of this paper is on the stability of the code up to the reforms, the reforms are briefly described. The reform focused on amending selected aspects of the bankruptcy law so as to facilitate restructuring agreements between creditors and firms, both extra-judicial and within the legal procedures, and to limit claw-backs, especially related to bank current account overdrafts.\textsuperscript{19}

\textsuperscript{16} Cercone (2001), pg. 41-42; Marcucci (2001), pg. 48.

\textsuperscript{17} Forestieri (1995), pg. 181-182.

\textsuperscript{18} Cercone (2001), pg. 41; Marcucci (2001), pg. 47.

\textsuperscript{19} The 2005 reforms, with legislation in May 2005 and December 2005, targeted several aspects of the bankruptcy procedures. Overall, the aim was to shift from a focus on liquidations and sanctions on the debtor, to an emphasis on restructuring. Hence, criminal sanctions were removed except for the cases such as fraudulent bankruptcy. Also, access to bankruptcy procedures was limited to firms above a minimum size threshold. The reforms focused the role of the judiciary on procedural matters, reducing involvement in decisions on the evaluation of restructuring proposals. For this purpose a committee of creditors is formed. Also, the criteria for minimum payment of creditors have been relaxed (e.g., there is no requirement for a plan to envision 40% or
Administrative procedures

There were three main administrative procedures: extraordinary administration ('amministrazione straordinaria'); administrative moratorium ('amministrazione controllata'); and compulsory administrative liquidation ('liquidazione coatta amministrativa'). These procedures involved non-judicial entities in the process and provided them with specific rights, for instance, the right to propose initiation of proceedings, or the right to manage (or to oversee management of) the firm.

In contrast to the judicial procedures, there were more changes in the administrative procedures over time, in particular to extraordinary administration and administrative moratorium. The main changes were instigated in the 1970s as one part of the response to the need for industrial restructuring. These changes in industrial policy in practice became employment preservation policies, not without criticism.  

For instance, Guido Carli, the Governor of the Bank of Italy from 1960 to 1974, throughout his tenure criticized, in the Annual Report of the Bank of Italy, the extent of support provided to struggling firms and the means

higher satisfaction of unsecured creditors) and restrictions removed on the design of restructuring plans, as the committee of creditors decides whether to approve a restructuring plan. The aim of these changes is to facilitate swifter restructuring while ensuring agreement by creditors. Finally, the scope of the claw-back clauses has been reduced. In particular, the claw-backs on bank current accounts have been capped and limited to the six month period prior to proceedings, as compared to the prior uncapped claw-backs based on a one year period. (Sperotti (2005))

For instance, in 1971 and 1972, three new laws were passed (184/1971, 1101/1971, 464/1972) for the purposes of favoring industry adaptation to new economic conditions: in fact, they became tools for survival of the largest firms in crisis (e.g., SNIA). In addition, GEPI was established, modeled on UK Industrial Reorganization Corporation and French Institut de Development Industriel, with the aim of transitioning firms that were facing temporary difficulty. However, rapidly, the additional objective of preservation of employment was given, rising to be the primary objective of GEPI. (Pent Fornengo (1986), pgs 34-35 and 49-54.)
used to provide support. The Law 675 of 1977 aimed to bring together all prior legislation on industrial policy and impose more coherence and discipline: for example, requiring development of sector plans and establishing objective criteria for intervention. In fact the main beneficiaries were a few sectors in crisis dominated by large firms, particularly the chemical, iron, and auto sectors. The underlying legal procedures were largely taken from prior legislation. In addition, the financing of troubled sectors became a focus, rather than the legislation framing a proactive strategy of sector development.

In part in response to these developments, extraordinary administration ('amministrazione straordinaria') was introduced into legislation by the law 95 of 1979 with the aim of providing a process for restructuring (as opposed to liquidating) insolvent firms of national interest. Under this procedure, the Ministry of Industry and Trade appointed a commissioner responsible for

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21 For instance, from the Annual Report of the Bank of Italy in 1972, pg. 452, "...... it will also be necessary to reduce the importance that has been given to interventions, such as the act for the textile industry which, as it worked out, has merely meant the indiscriminate allocation of subsidized resources, rather than selective support of the sectors more economically viable businesses; Law No. 1470, in various and even recent reincarnations, regarding the reorganization of small-sized industries, which, as experience has clearly shown, has had a long and negative record in serving to overcome crises; or in some was GEPI (the state industrial management and holding company) which, in our opinion, can hardly be allocated continually growing resources", and, "there is no escaping the fact that the tendency to keep the present situation alive is sanctioned by the politicians, entrepreneurs and trade unions. Underlying this behavior, legitimate motives of a social nature mingle with others, certainly less explicit but nevertheless present, based on defending outright positions of privilege", and in 1977 in Isveimer Bulletin no.2, pg. 18, "...the effective abolition of the “right to go bankrupt” for the larger companies, which was in part justified by the need to avoid further blows to the economy at a particularly difficult time, has made it impossible to use the instrument of debt cancellation."


24 Cercone (2001), pg. 44; Baglioni (1986), pg. 91-98. For example, the Parmalat bankruptcy was handled by a recent version of these procedures.
developing a restructuring plan.\textsuperscript{25} New financing could be raised with priority over existing creditors, and the priority was respected even if the firm subsequently entered into bankruptcy (unlike under other procedures that attempted to avoid bankruptcy, specifically the deed of arrangement and the administrative moratorium).\textsuperscript{26}

Turning to the administrative moratorium (‘amministrazione controllata’) procedure, starting in the 1970s the criteria for access to this procedure were re-interpreted by judges to allow firms in substantial difficulty to use this administrative procedure though originally intended just for firms in \textit{temporary} difficulty.\textsuperscript{27} By the 1980s there was a shift back towards the original interpretation.\textsuperscript{28} Administrative moratorium was by statute reserved for firms experiencing temporary financial difficulty that had prospects of returning to normal. However, this criterion was open to wide interpretation, ranging from liquidity issues through to economic loss due to poor business performance. Under the re-interpreted procedures the net effect was to keep moribund firms alive, postponing firm exit, with existing creditors bearing the brunt of the cost.\textsuperscript{29} Overall, this procedure had similar characteristics to the deed of arrangement: only the debtor could petition, with the judge deciding based on a detailed study of the firm's prospects; creditor's claims were stayed; and the management continued to operate the firm under the supervision of the court. In terms of funding, the procedure required that the plan had existing debtors fully paid at the end of the procedure (i.e., claims could not be negotiated): given this,

\textsuperscript{25} Cercone (2001), pg. 45.
\textsuperscript{26} Forestieri (1995), pg. 181-182.
\textsuperscript{27} Cercone (2001), pgs. 42-43; Generale and Gobbi (1997), pg. 186.
\textsuperscript{28} Greco (1997).
\textsuperscript{29} Cercone (2001), pgs. 43-44; Ciampi (1993), pg 12; Forestieri (1995), pg. 184.
the procedure allowed new funds to be raised with priority over existing financing. However, if the firm subsequently entered bankruptcy proceedings, the priority of the new financing was subject to review.

The third administrative procedure, compulsory administrative liquidation ('liquidazione coatta amministrativa') applied to specific types of firms and. For example, banks, with procedures initiated by the bank supervisory authority, firms owned by IRI, the large state holding company, or small and mid-sized firms funded by IMI, the Institute for Medium Term Industry financing.

**Slow procedures**

In practice, the in-court creditor rights were stifled by extremely slow formal legal procedures. On average liquidations took over five years, with legal costs absorbing 20% of bankruptcy assets, and many proceedings stopping for insufficiency of assets. More specifically, in a survey of banks covering the 1992-1993 period, out-of-court settlements took 19 months to complete. In contrast, legal proceedings took 72 months for bankruptcy, and 50

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32 Cercone (2001), pg. 39.
33 In particular, IRI was given the right to manage extra-judicially the financial distress of firms it owned or was a significant supplier to, for instance, with the power to keep the firm going or change management. IMI was given the right to ask the Treasury Minister to approve appointment of a commissioner to manage a firm that did not meet its obligations to IMI for funds lent through the Fund for Medium and Small Manufacturing Firms (FIM, “Fondo speciale per il finanziamento delle medie e piccole industrie manifatturiere”) set up in 1965. The commissioner, with IMI approval, had the power to initiate liquidation proceedings. (Annesi (1977), pgs. 181, 185-186, 195-196.)
34 Marcucci (2001), pg. 48.
35 Generale and Gobbi (1997), pgs. 192-197.
months for deeds of arrangement.\textsuperscript{36} There was variation across regions, but less than across procedures.\textsuperscript{37} In terms of satisfaction, the average across banks for loans with guarantees (e.g., collateral or personal guarantees) was around: 60\% for out-of-court, and around 48\% for bankruptcy and deed of arrangement procedures. For loans without guarantees, satisfaction rates were just under 60\% for out-of-court, and well below 40\% for in-court procedures (around 20\%-25\% for deeds of arrangement, and 10\%-15\% for bankruptcy).

The slow procedures were characteristic of the Italian legal system overall and not just bankruptcy procedures (e.g., time required to clear a bounced check or evict a tenant, Djankov et al (2002)). In this regard Italy had slow procedures even compared to other civil law countries.

\textit{Implications of bankruptcy procedures}

From the perspective of firms, the persistence and effect of the bankruptcy procedures was heterogeneous across firms. For most firms, in particular the smaller and mid-size firms, there was remarkably little change in the bankruptcy procedures over six decades. In contrast, for some firms, especially larger firms of national interest, new bankruptcy procedures were developed and existing procedures re-interpreted to address concurrent social and political pressures and concerns, such as job preservation.

\textsuperscript{36} For instance, this compares to two to three years in Germany for liquidation, and a few months in the UK for administrative receivership. The perspective of the banks surveyed was that the cause of the long proceedings was primarily that the judicial system was over-burdened with cases (for instance, as opposed to the degree of favor accorded the debtor by the proceedings), and that the bottlenecks in the process were the liquidation of assets and splitting of proceedings (as opposed to judgments at earlier stages in the process).

\textsuperscript{37} Variation in duration across regions was: 18 to 20 months for out-of-court settlements, 70 to 77 months for bankruptcy, and 45 to 58 for deeds of arrangement.
Also, Italian bankruptcy procedures were generally unappealing for firms and creditors. This should induce firms and creditors to restructure out-of-court. Yet Italian bankruptcy procedures severely restricted and discouraged out-of-court restructuring. The reasons related to procedures that reflected civil law principles and concerns, the inefficiency of the overall Italian legal system, and the particular evolution in Italy of the treatment of claw-backs on bank overdrafts. This raises the issue of what types of firms were most affected by these institutional constraints, and how firms addressed these constraints. The next section illustrates this issue through a set of case studies.

**Effects of bankruptcy procedures: Case study evidence**

I next highlight the effect of the bankruptcy law on the outcome for firms under financial pressure on the brink of formal bankruptcy proceedings. In particular, I compare four medium-sized firms in industries with different types of assets.

I consider mid-sized firms as bankruptcy law was most persistent for these firms. Also, mid-sized and smaller firms are most likely to receive a substantial part of their funding from banks, less so from capital markets, and hence bankruptcy law is more likely to matter. I focus on mid-sized firms as for the smallest firms the separation between family and firm finances may be very blurred. Nonetheless, most mid-sized firms are private, limiting data availability.

The prior discussion highlighted the difficulty of addressing firms heading towards financial distress but not yet in formal bankruptcy proceedings. If a firm is classified as officially in distress, the bank is obliged to start formal proceedings: this makes it difficult to identify firms under financial pressure but not in formal procedures. However, the benefit of analyzing firms at this key decision point for creditors is that outcomes may or may not be
affected by the bankruptcy procedures (as opposed to once in the formal procedures). Yet the possibility of bankruptcy is sufficiently high (in contrast to, say, financing of a firm not under financial pressure) that an effect of the bankruptcy procedures, if present, is more likely identifiable. As access to relevant situations is difficult, the firms are private and their situation is not officially in distress, I take a case study approach.

To illustrate the variation in impact across firms, I consider firms in four manufacturing industries: kitchen cabinets, footwear, automotive parts, and paper mills. These industries have differing types of assets and asset intensity and thus collateral. This variation in collateral changes the attractiveness of the bankruptcy procedures, as creditors have limited rights to safeguard the value of their collateral during the lengthy procedures.

To ensure that the firms under financial pressure are representative of similar firms in their industries, I first check that the firm under financial pressure is representative of its industry, in terms of types of assets and asset intensity (Table 3). I then compare the firm under financial pressure with a similar firm not under financial pressure, in terms of the strategy, asset composition and financing. I then consider the situation and outcome for the firm under financial pressure, focusing on the aspects of the firm situation and bankruptcy procedures that affected resolution of the financial crisis. I conducted a detailed analysis of these firms, based on interviews of the bank involved with financing these firms, managers at the firms, and third party information sources (e.g., industry associations). Six of the firms discussed are clients of one Italian bank, although typically not only of this bank.\footnote{The identity of the firms is disguised, as part of the information provided by the bank is confidential to the bank-client relationship.} The fact that most firms are served by multiple banks mitigates the risk that the particular cases are highly influenced by the approach taken by Banca Marche. Also, multiple bank relationships are typical for Italian firms (Cosci and Meliciani (2002)).
To set context, I provide a description of the firm not under financial pressure (Table 4) as these have a similar business to the firm under financial pressure, for instance in terms of scale, type of customers and production. For the firms under financial pressure I describe their business, the firm’s financial problems, how these were addressed, and what shaped the outcome (Tables 5a and 5b). I next highlight the main findings comparing across the case studies. I find a large variation in the extent to which the actions of bank creditors towards firms under financial pressure were shaped by aspects of the bankruptcy procedures. For the firms in the kitchen cabinet and footwear industries there was limited influence of the bankruptcy procedures as the value of the assets was less sensitive to the bankruptcy procedures. In the kitchen cabinet industry, a substantial part of the firm’s assets are real estate with a long economic life and value that is much less tied to the firm or to ongoing maintenance (as compared to, say, for machines). In the footwear industry, the bulk of firm’s assets are short-term trade receivables that rotate much faster than the duration of bankruptcy procedures or onset of financial distress, hence making use of the procedures highly unlikely.

In contrast, for the firms in the auto parts and paper mill industries the characteristics of the bankruptcy procedures directly affected the outcome of the firms under financial pressure. These firms’ assets were predominately machines with an intermediate length economic life: hence, there was substantial risk of deterioration of value of the machine during the lengthy bankruptcy procedures (e.g., due to the risk of poor ongoing maintenance and investment). In addition, the value of the machines declined with the onset of financial distress as the
characteristics of the machines were part of the reason for the poor performance of the firm (e.g., machines tailored to produce no longer profitable products). This was compounded by the requirements of the bankruptcy procedures for a restructuring to provide full payment of secured claims and 40% payment of unsecured claims. In effect, this made debt-overhang problems likely (e.g., Gertner and Scharfstein (1991), Asquith et al. (1994)), and all the more difficult to address as due to inflexible institutional arrangements. Thus use of the bankruptcy procedures was unattractive to the bank creditors. Also, these firms had operational problems, not just financial problems, in part as the assets are more specific to the firm. This increased the risk that an out-of-court refinancing could be unsuccessful and lead to subsequent entry into formal bankruptcy procedures. Hence, the bank creditors were reluctant to restructure the financing of these firms, as the refinancing ran the risk of being unwound had the firm subsequently entered bankruptcy procedures and creditors subject to additional penalties. Thus the bank’s focus was to maintain the firms alive with neither a major change to financing nor a restructuring. However, the bank was willing to support a major refinancing if subsequent bankruptcy was much less likely, for instance, due to a change of ownership that rendered subsequent bankruptcy much less likely.

The case studies indicate differences in the impact of bankruptcy law depended on two characteristics of the firm's assets, asset economic life and asset specificity, and whether the firm’s crisis was operational as well as financial (Table 6). Further, firms with assets more specific to the firm are more likely to have both operational and financial crises, as deterioration of a firm’s financial performance is likely to be accompanied by deterioration of the firm’s asset base.

- - Table 6 about here - -
The impact of the bankruptcy procedures is greatest for assets with an economic life of comparable duration to bankruptcy procedures. The direct issue is that the asset may materially depreciate in value just due to the passage of time. In addition, there is a substantial risk that the value could further materially deteriorate during long legal procedures if the asset does not receive due maintenance and ongoing investment. In contrast, assets that tend to liquidate rapidly reduce the importance of bankruptcy procedures. For these assets creditors focus more on monitoring and ongoing adjustment of terms based on business performance (as for the footwear manufacturer): the critical actions of the bank are at the onset of financial difficulty. Also, assets with particularly long economic lives, for instance real estate, have collateral values that are less sensitive to lengthy bankruptcy procedures. In addition, this enables the maturity of financial commitments to be adjusted to reduce the risk of near-term insolvency, which, as discussed above, is of particular relevance in Italy.

The relevance of asset specificity is in line with the emphasis placed in the literature (e.g., Hart and Moore (1994)). In addition, asset specificity tends to lead to the value of the asset and the value of the firm to be closely linked. Hence, firms under financial pressure are more likely to also have operational issues the more their assets are specific to the firm, requiring renewal of the firm’s asset base as well as refinancing. Indeed, the characteristics of the asset may have contributed to the crisis: for instance, in the case of the paper mill where the restructuring plan required investment in machines so as to serve a new market segment.

Indeed, the impact of bankruptcy procedures is greater if the firm's crisis is not just financial (e.g., an imbalanced capital structure) but also poor operating performance. The difficulty of financial and operational restructuring increases the risk of subsequent bankruptcy during which the restructuring may well be unwound. Hence, Italian bankruptcy procedures
increase the difficulty of addressing poor operating performance by dissuading out-of-court restructuring of the stand-alone firm. This favors alternative approaches, for instance, to have the troubled firm restructured after being acquired (before entering formal procedures, as in the case of the automotive parts manufacturer) by a more financially stable owner, thus reducing the risk of subsequent bankruptcy. Otherwise for the bank creditors, relative to exercising weak rights within slow bankruptcy procedures, the option to keep the troubled firm alive is attractive. In practice, this favors banks keeping the firm going in the hope of an eventual turn-around, while taking actions to minimize the exposure to claw-backs (e.g., careful monitoring of current account transactions) and gradually increasing securities and guarantees. However, these firms are unlikely to be actively restructured and thus are likely to be barely competitive firms.

These case studies suggest that Italian bankruptcy law had a deep effect in some industries but not others. A key effect was to make restructuring of firms under financial pressure less likely: hence a stalling of the process of restructuring relative to what would occur without the constraints imposed by bankruptcy procedures. One implication is a likely consequent slowing of exit in the most affected industries.

**Discussion**

I next discuss how general are the findings for Italy likely to be, to other jurisdictions and broader data sets. The case studies illustrate the potential effects of bankruptcy law on firms but do not provide large-sample evidence on the frequency or extent of patterns. I summarize this discussion in a set of propositions, with the aim of formulating these to guide empirical research.

A key feature of Italian bankruptcy law was the strong dissuasion of out-of-court agreements for firms in financial distress combined with slow, unappealing formal procedures.
As discussed, this in part reflects the general stance of civil law countries. The case studies of firms in financial distress indicate that firms that also have operational issues are more affected. The need to both restructure the balance sheet and fix operating performance substantially heightened the risk of an out-of-court settlement not working and the firm subsequently entering bankruptcy. Clearly, within any jurisdiction a firm that has financial and operational problems is harder to address than one with just financial problems. However, this distinction is not often emphasized. In part this may reflect that this is less evident in other jurisdictions such as the U.S. where Chapter XI provides firms a chance to restructure operations with some protection from creditors (Mouton and Thomas (1993), Gilson (1990)), or the U.K. or Germany where creditors generally have much power and can thus step in to push forward a resolution that includes financial and operational restructuring (Franks, Nyborg and Torous (1996), Galanti (2000)). Also, the case studies indicate that in Italy in these difficult cases a likely option is for the firm to be kept going without major changes unless, for instance, a change of ownership occurs: this is consistent with the findings that business groups facilitate restructuring in civil law countries (Hoskinson et. al (2004)) and with the cross-country patterns in incidence of bankruptcy (Claessens and Klapper (2005)).

Proposition 1: For firms in financial distress, the likelihood of restructuring decreases with more restrictions on out-of-court procedures and more inefficient formal bankruptcy procedures. The likelihood is further reduced for firms in need of operational restructuring as well as financial restructuring, with a corresponding increase in the likelihood of survival as is, as poorly performing firms.
This suggests there is value in distinguishing between firms that have just financial issues versus firms that also need to fix operational performance, the more so if bankruptcy procedures are unappealing to firms and creditors.

The aggregate implication for a country such as Italy is that bankruptcy procedures may slow down or reduce exit and restructuring. This raises the more general question of whether a key effect of poor financial development is to limit, more so in some industries, the role of financial institutions in facilitating the ‘destructive’ part of the process of ‘creative destruction’. Thus bankruptcy procedures are an institutional barrier to exit, especially in countries such as Italy, related to broader discussions of firm exit (Decker and Mellewigt (2007)). In particular, this provides a potential explanation for the findings of ‘fat-tail’ firm size distributions (Bottazzi, Cefis and Dosi (2002) and Fagiolo and Luzzi (2006)), in particular the survival of poor productivity firms. Also, this suggests the value in analyzing firms in financial distress but not yet in formal bankruptcy procedures, especially in jurisdictions where the legal procedures are generally unappealing.

A second feature suggested by the case studies is that the economic life of assets matters, in addition to asset specificity. Asset specificity has often featured in discussions of bankruptcy (e.g., Hart and Moore (1994)): hence I will discuss the more novel aspect relating to economic life of the assets. The case studies suggest that in Italy asset economic life matters given the long duration of procedures and the inability of creditors to seize their collateral. In particular, machines with intermediate economic life and asset specificity are less valuable as collateral and thus hamper restructuring. This pattern is likely to hold in other jurisdictions with a stay on creditors seizing assets, with increasing relevance as duration of procedures increases. Also, the heterogeneity of effects dependent on the firm’s type of assets is consistent with and supports
large-sample empirical evidence. The greater sensitivity of industries with machine intensive assets to development of financial institutions is indicated as a potential channel of impact in large sample studies (e.g., Alfaro and Hammel (2006), Becker and Sivadasan (2006)). More generally, financial development affects the growth of industries most reliant on external finance (Rajan and Zingales (1998)) and within-country liberalization of bank lending most affects industries most dependent on bank finance (Bertrand et. al. (2004)). These empirical results rely on an interaction between technological features of an industry and characteristics of the financial system, although this link has not been without criticism (Fisman and Love (2004)). The case studies provide evidence in support of this interaction effect: industries with high machine asset intensity are more sensitive to financial institutions.

**Proposition 2**: Firm’s ease of restructuring is U-shaped with respect to the life of assets, hardest for firms with assets of intermediate economic life, of similar duration to that of bankruptcy procedures, and easiest for firms with assets of shorter or longer economic life. The effects increase with more firm-specific assets, in the presence of a stay on creditors seizing assets, and as bankruptcy procedures increase in duration.

For firms the implications of this proposition may also be evident in the choice of assets used, with a skew towards more easy to finance assets, and access to sources other sources of finance, such as vendor financing. Thus a financial friction emanating from bankruptcy procedures may be reflected in the type of investments chosen by the firm, not just the quantity of investment, and changes in trade relations due to the increased importance of trade finance.

The heterogeneous effects across firms of bankruptcy law also points to a limitation of country-level fixed effects as control variables, as the effectiveness of the control relies on the uniformity of the effect across the sample of firms analyzed. In turn, this suggests value in
considering the heterogeneous effects of institutions across firms, not least as a central concern in strategy is explaining the variation across firms in performance.

Finally, in Italy, for firms of large size or national interest the evolution of bankruptcy procedures and industrial policy was closely tied, reflecting broader political and social pressures. There was less evolution of bankruptcy procedures for smaller firms. This suggests that the evidence on financial institutions, including bankruptcy procedures, to have a persistent component (due to legal origin, La Porta et. Al. (1998)) and a changing component (due to political economy pressures, Rajan and Zingales (2003)) may in part be reconciled by considering the heterogeneity in institutions across firms, in particular large versus small firms.

**Proposition 3:** Over a given time frame, smaller firms tend to face more persistent bankruptcy procedures, whereas larger firms and firms of national interest face bankruptcy procedures more likely adapted to concurrent political and social pressures.

An implication of this proposition is that from the perspective of a larger firm bankruptcy policies are, to some degree and over a sufficient timescale, endogenous with respect to the broader social and political context and, potentially, endogenous with respect to actions of the firm (in line with view of institutions in Aoki (2001), Greif (1994)). In contrast, for a smaller firm bankruptcy procedures are much more likely exogenous constraints. This distinction may be of relevance in empirical tests, based on the set of firms analyzed and the time frames considered.

**Conclusion**

I provide evidence on Italian bankruptcy procedures, including the evolution of the procedures. I document that Italian bankruptcy law strongly restricted out-of-court restructuring,
yet the formal procedures were unattractive and inefficient. I present case study evidence that suggests heterogeneous effects across firms, depending on the type of crisis faced by the firm and the firm assets. The case of Italy is of interest as the broad features of the bankruptcy law are in line with other civil law countries, and are very different to other jurisdictions, such as the U.S. and U.K.. I highlight three findings for Italy that are potentially more general. Restructuring is less likely to occur speedily if the firm is in need of not just financial restructuring but also operational restructuring, when, as in Italy out-of-court restructuring is restricted and in-court procedures are unappealing to firms and creditors. The effect of the bankruptcy procedures depends on the economic life of the firm’s assets, as well as asset specificity, the more so where the duration of procedures is long and creditor rights weak, as in Italy. Also, over the course of six decades, small and medium-sized firms faced much more persistent bankruptcy procedures than large firms or firms of national interest as for the latter concurrent social and political pressures shaped procedures. Overall, the findings suggest a main effect of the bankruptcy procedures being to stall the restructuring and exit of firms, with heterogeneous effects across industries.

Acknowledgements

Omitted for review process. All remaining errors are mine.

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Table 1  
Comparison of creditor rights for Italy versus other countries and legal systems.  
Score is one if have credit right, zero otherwise.  From La Porta et. al. (1998).

<table>
<thead>
<tr>
<th>Legal family</th>
<th>Country</th>
<th>No automatic stay on assets</th>
<th>Secured creditors first paid</th>
<th>Restrictions for going into reorganization</th>
<th>Management does not stay in reorganization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil</td>
<td>Italy</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Civil</td>
<td>Belgium</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Civil</td>
<td>France</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Civil</td>
<td>Greece</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Civil</td>
<td>Netherlands</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Civil</td>
<td>Portugal</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Civil</td>
<td>Spain</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Civil</td>
<td>Average for Europe</td>
<td>0.29</td>
<td>0.71</td>
<td>0.29</td>
<td>0.14</td>
</tr>
<tr>
<td>Civil</td>
<td>Average</td>
<td>0.26</td>
<td>0.65</td>
<td>0.42</td>
<td>0.26</td>
</tr>
<tr>
<td>Common</td>
<td>Average</td>
<td>0.72</td>
<td>0.89</td>
<td>0.72</td>
<td>0.78</td>
</tr>
<tr>
<td>Germanic</td>
<td>Average</td>
<td>0.67</td>
<td>1.00</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td>Scandinavian</td>
<td>Average</td>
<td>0.25</td>
<td>1.00</td>
<td>0.75</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Table 2
Summary of evolution of bankruptcy procedures from 1942 Bankruptcy Law to 2005

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Evolution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Judicial procedures</strong></td>
<td></td>
</tr>
<tr>
<td>Deed of arrangement ('Concordato preventivo')</td>
<td>No major changes to 1942 Bankruptcy Law until reform of 2005</td>
</tr>
<tr>
<td>Bankruptcy ('Bancarotta')</td>
<td></td>
</tr>
<tr>
<td>Composition in bankruptcy ('Concordato fallimentare')</td>
<td></td>
</tr>
<tr>
<td><strong>Administrative procedures</strong></td>
<td></td>
</tr>
<tr>
<td>Extraordinary administration ('Amministrazione straordinaria')</td>
<td>Introduced in 1979 for restructuring of very large firms</td>
</tr>
<tr>
<td>Administrative moratorium ('Amministrazione controllata')</td>
<td>Criteria for admission to the procedure from the 1942 Bankruptcy Law re-interpreted in the 1970s, though with return towards original interpretation in the 1980s</td>
</tr>
<tr>
<td>Compulsory administrative liquidation ('Liquidazione coatta amministrativa')</td>
<td>Applies to certain sectors and firms, including banks and firms part of state holding company (IRI) or receiving certain types of state funding (FIM funds from IMI)</td>
</tr>
</tbody>
</table>
Table 3
Comparison of asset intensity for firms in case studies and industry average in 2004

Industry definition NACE v. 1.1, with firm classified based on primary line of business. NACE industry codes are: 3613 Kitchen Cabinets; 1930 Footwear; 3430 Automotive Parts; and 2112 Paper Mills. Industry value is average for the industry. Firms are labeled K1, K2 etc.: K1 is the firm not under financial pressure, K2 is the firm under financial pressure. For firms, except in Paper Mills, to aid comparability all leases capitalized in relevant asset category and receivables sold to factoring financiers are included with Trade Debtors. Data from Amadeus Dataset and Annual Reports, for firms in Kitchen Cabinets, Footwear, and Automotive Parts, and Amadeus financial data for firms in Paper Mills.

<table>
<thead>
<tr>
<th>Industry and Firm</th>
<th>Kitchen Cabinets</th>
<th>Footwear</th>
<th>Automotive Parts</th>
<th>Paper Mills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Industry</td>
<td>K1</td>
<td>K2</td>
<td>Industry</td>
</tr>
<tr>
<td>Assets as % of Revenues</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible Fixed Assets</td>
<td>20%</td>
<td>23%</td>
<td>26%</td>
<td>11%</td>
</tr>
<tr>
<td>Land and Buildings</td>
<td>19%</td>
<td>19%</td>
<td>na</td>
<td>4%</td>
</tr>
<tr>
<td>Plant and Machinery</td>
<td>5%</td>
<td>6%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Stocks</td>
<td>17%</td>
<td>8%</td>
<td>25%</td>
<td>17%</td>
</tr>
<tr>
<td>Trade debtors</td>
<td>22%</td>
<td>33%</td>
<td>25%</td>
<td>17%</td>
</tr>
<tr>
<td>Assets per employee, Euro ’000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible Fixed Assets</td>
<td>46</td>
<td>63</td>
<td>54</td>
<td>24</td>
</tr>
<tr>
<td>Land and buildings</td>
<td>50</td>
<td>41</td>
<td>na</td>
<td>16</td>
</tr>
<tr>
<td>Plant and machinery</td>
<td>13</td>
<td>13</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>Stocks</td>
<td>39</td>
<td>21</td>
<td>54</td>
<td>37</td>
</tr>
<tr>
<td>Trade debtors</td>
<td>50</td>
<td>89</td>
<td>52</td>
<td>37</td>
</tr>
</tbody>
</table>
### Table 4
Summary description of firms not under financial pressure that have similar business to firms under financial pressure

<table>
<thead>
<tr>
<th>Element</th>
<th>Kitchen cabinet manufacturer</th>
<th>Footwear manufacturer</th>
<th>Automotive parts manufacturer</th>
<th>Paper mill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Production is primarily assembly of made-to-order fitted kitchens. The physical bulk of kitchen cabinets leads to large manufacturing plants (around 880,000 sq. ft., with around 300 production workers). Most sales, 80%, to around 2000 domestic retailers, with trade payment terms used to stimulate sales. Most kitchens sold under one of three brands, with some private label for large kitchen manufacturers.</td>
<td>Firm designs and produces footwear for women, men and children, and some accessories. Build up of sales and marketing capability as sales focus shifted from wholesalers to end retailers. The firm has outsourced some production to lower labor cost countries and to other local firms. Recently established own retail stores.</td>
<td>Production of stamped metal products primarily for OEM suppliers to large automotive assemblers, with additional sales to white goods and electronics industries. Machine intensive production, with large metal presses plus ancillary machines for computer-aided design and development of stamps for stamps produced in house. The main input is steel.</td>
<td>Production of various types of paper board from waste paper. One paper machine, originally installed in 1962 with ongoing rebuilding and investment leading to a doubling of capacity. Paper mill wider than industry standard (4 meters versus 2.2-2.8 meters standard width) giving the firm more flexibility to serve customers, thus in part explaining continued use over long period of time.</td>
</tr>
<tr>
<td>Assets</td>
<td>Over three quarters of fixed assets are real estate, with current assets primarily trade credit. Relatively few machines, mostly adapted to integrate with the production line.</td>
<td>Around 90% current assets, of which 60% trade debtors, and 10% fixed assets.</td>
<td>Machine intensive production. Most equipment purchased second-hand. Costs of refurbishment and installation substantial, at around a third of the purchase cost.</td>
<td>Main assets are fixed assets, the paper mill, and trade receivables.</td>
</tr>
<tr>
<td>Financing</td>
<td>Expansion in buildings funded through mortgages. Investment in machinery mostly funded internally, as adaptation of machines to production line means leasing generally not an option. Working capital funded through factoring, lines of credit or internal funds, depending on relative cost.</td>
<td>In general limited use of debt, at under 10% of revenues, due to preference of owners not lack of funding from bank. Financing for sales and marketing activities through internal funds. Recent investment in retail an exception, as the real estate investment is funded through a mortgage.</td>
<td>Metal presses primarily financed through five year leases, with purchase funded more easily than the refurbishment and installation. Receivables readily financed, primarily through short-term bank debt, as most customers are large, stable firms.</td>
<td>Investment typically in one component of paper mill at a time, financed through a lease on the new component. Management considers access to finance eased by long history of family ownership. Gradual investment reflects desire to limit shut-down to one week at a time, and as cost of new paper mill deemed prohibitive. Financing for working capital readily available.</td>
</tr>
</tbody>
</table>
### Table 5a
Case studies of firms under financial pressure

<table>
<thead>
<tr>
<th>Element</th>
<th>Kitchen cabinet manufacturer</th>
<th>Footwear manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td>Primarily real estate and large non-specialized factory buildings, thus most assets with long economic life</td>
<td>Current assets account for 80% of assets, around 60% of which are trade receivables. The firm is in the initial stages of developing a brand.</td>
</tr>
<tr>
<td><strong>Operational performance</strong></td>
<td>Poor most recent year poor performance, with loss of -12% of sales, due to extraordinary charge and lower than usual operating profits. Historically operating profits at around 5-6% of sales</td>
<td>Reasonable profitability, with current focus on developing own brand and necessary sales and marketing capabilities.</td>
</tr>
<tr>
<td><strong>Financial situation</strong></td>
<td>Need for recapitalization as losses wiped out shareholder equity on the balance sheet. Two thirds of borrowing as short-term overdraft (€20m), and one third as mortgage (€10m)</td>
<td>Relatively high leverage, with short-term loans in the 12% to 29% of revenues over the past five years. Interest payments loans accounting for one quarter to two thirds of operating profit over past five years.</td>
</tr>
<tr>
<td><strong>Resolution</strong></td>
<td>Two step resolution. First, an immediate infusion of equity (€1m) and raising of unsecured medium term loan (€6m). However, the high interest costs meant this was a temporary solution. Next, the firm restructured the debt maturity by raising a mortgage (€11m), in part to extinguish the unsecured loan, conditional on a pledge by owners for further equity infusions. In addition, the firm raised cash by selling off some excess real estate and changed some of the management team, in particular the CFO.</td>
<td>Bank performs tight monitoring of several aspects of the firm: Payment by customers of receivables due, as this is the bulk of assets and have short economic life; total loan position including to other banks, monitored through the Bank of Italy Public Credit Register of loans; and personal financial situation of owner (e.g., personal assets that may be used for personal guarantees of company loans).</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>The historic operating profitability and real estate assets facilitated resolution. The recent poor performance was viewed as not likely to persist. The use of long term mortgages meant lower annual interest charges. In addition, the interest payments for the first three years were ammortized to further reduce near term cash needs. This meant the firm was unlikely to end up in bankruptcy procedures in the near term (e.g., due to non-payment of suppliers), and thus the bank had limited risk of an unwinding of the recapitalization.</td>
<td>Bankruptcy procedures deemed by bank as not so relevant as the bulk of assets has a very short economic life, and would deteriorate very quickly in value if the firm’s customers were not to pay. Thus were performance of the firm to start to deteriorate the bank would rapidly step in to collect on current short-term loan and review whether to provide new credit.</td>
</tr>
</tbody>
</table>
Table 5b
Case studies of firms under financial pressure

<table>
<thead>
<tr>
<th>Element</th>
<th>Automotive parts manufacturer</th>
<th>Paper mill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>Primarily comprised of machines (€7m), trade debt (€15m) and real estate and buildings (€3m). The machines are metal stamping machines and related machines, such as for testing. The machines are not specific to the firm, except that costs of installation are substantial.</td>
<td>Primarily paper mill machines and trade receivables. The paper mills tend to be tailored to serve particular market segments, such as packages for food, and have a fairly long economic life. Over the previous ten years capacity was doubled.</td>
</tr>
<tr>
<td>Operational performance</td>
<td>Net losses due to poor operating performance (low operating gross margin, relative to other firms in industry) and substantial financing charges. Dependence on few customers, who in turn are OEMs for few major automotive manufacturers.</td>
<td>Decline in profitability in 2004 and 2005, due to a decline in prices in its main market segment.</td>
</tr>
<tr>
<td>Financial situation</td>
<td>Two years after the firm became independent through a management buyout, the firm was struggling with poor profit performance and need to restructure operations. Primary financing through short-term bank loans (€7m) and factored receivables (€6m).</td>
<td>The firm in 2005 entered bankruptcy procedures, under the administrative moratorium procedures with a plan to restructure the firm within two years. However, performance further deteriorated. The firm closed down some capacity and was in the process of converting a paper mill to serve a new market segment.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Restructuring of finances was only completed once the firm was acquired by a financially sound firm. The new financing involved a long-term loan (€9m) to replace part of the short-term loan (€4m) and to payoff taxes due, trade credit, and restructuring costs.</td>
<td>In early 2006 the firm took advantage of the flexibility of the new bankruptcy procedures to have the bankruptcy court agree to a plan for a trade sale.</td>
</tr>
<tr>
<td>Comment</td>
<td>The firm needed to restructure finances and operations. The bank was not willing to re-finance the firm while it remained independent, as the bank considered the likelihood of subsequent entry into bankruptcy high. Yet precipitating bankruptcy was also not viewed as attractive given the duration of proceedings and lack of creditor influence. However, once the firm was part of a profitable group, even though the acquirer was a smaller firm, the risk of subsequent bankruptcy was not deemed material and the restructuring could proceed.</td>
<td>The firm’s management felt that under the previous bankruptcy rules the most likely outcome would have been a slow liquidation, not a successful restructuring. A trade sale was not feasible as the acquirer would have to payoff all secured debt and at least 40% of unsecured debt. Given the deterioration in performance the value of the remaining business was not sufficient to cover these institutionally mandated minimum debt repayments. Thus a potential acquirer would wait until liquidation proceedings started, as then there were no debt repayment requirements. In contrast, the new bankruptcy procedures enabled acquisitions as long as the creditors agreed, without the prior debt payback requirements.</td>
</tr>
</tbody>
</table>
### Table 6
**Summary of case studies**

The table compares the eight firms profiled in the case studies in terms of the main types of assets of the firms, the type of crisis the firm experienced. The qualitative assessments are based on Tables 3, 4 and 5.

<table>
<thead>
<tr>
<th>Financial pressure</th>
<th>Industry</th>
<th>Main assets</th>
<th>Degree to which specific to firm</th>
<th>Economic life</th>
<th>Type of crisis</th>
<th>Change of ownership as part of resolution of crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Kitchen Cabinets</td>
<td>Real estate</td>
<td>Low</td>
<td>Long</td>
<td>No crisis</td>
<td>-</td>
</tr>
<tr>
<td>No</td>
<td>Footwear</td>
<td>Receivables</td>
<td>Low</td>
<td>Short</td>
<td>No crisis</td>
<td>-</td>
</tr>
<tr>
<td>No</td>
<td>Automotive Parts</td>
<td>Machines</td>
<td>Medium</td>
<td>Medium</td>
<td>No crisis</td>
<td>-</td>
</tr>
<tr>
<td>No</td>
<td>Paper Mills</td>
<td>Machines</td>
<td>High</td>
<td>Medium</td>
<td>No crisis</td>
<td>-</td>
</tr>
<tr>
<td>Yes</td>
<td>Kitchen Cabinets</td>
<td>Real estate</td>
<td>Low</td>
<td>Long</td>
<td>Financial crisis</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>Footwear</td>
<td>Receivables</td>
<td>Low</td>
<td>Short</td>
<td>Financial crisis</td>
<td>No</td>
</tr>
<tr>
<td>Yes</td>
<td>Automotive Parts</td>
<td>Machines</td>
<td>Medium</td>
<td>Medium</td>
<td>Financial and operational crisis</td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>Paper Mills</td>
<td>Machines</td>
<td>High</td>
<td>Medium</td>
<td>Financial and operational crisis</td>
<td>Yes</td>
</tr>
</tbody>
</table>