Bankruptcy Efficiency and Indirect Costs in Italian SMEs: a Temporal Approach

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Abstract
The aim of the paper is to analyze the main goals of bankruptcy procedures and the different facets of their efficiency, which can be investigated according to an *ex-post* or *ex-ante* perspective.

Unlike previous literature, which has mainly hypothesized a contrast among these two viewpoints, in this paper we assume a strong interdependence among *ex ante* and *ex post* perspectives, combining them in a wider and inclusive temporal approach.

We investigate this approach by referring to indirect costs of bankruptcy, a variable that affects both perspectives, highlighting the temporal and logical continuity between *ex-ante* and *ex-post* viewpoints. Starting from the empirical results of a recent study on Italian SMEs, we argue that an efficient procedure should be able to find a good balance between two perspectives, on the ground that the maximization of the outcome available for the creditors (*ex post* efficiency) is affected by the willingness and timing of filing for bankruptcy (*ex ante* efficiency): delaying this moment would generate the indirect costs analyzed in the paper, leading to a decrease in the overall value of the firm and damaging its stakeholders.

**Keywords:** bankruptcy procedures; bankruptcy efficiency; indirect costs; completion rate; SMEs

1. Introduction
The recent acute economic crisis has emphasized the role of bankruptcy procedures and the importance of their efficiency, which have been investigated by both lawyers adopting a law & economic approach and economists interested in legal matters. Many studies have focused on the functioning of existing bankruptcy procedures as well as on the evaluation of their quality through the analysis of bankruptcy legislation.

From this angle, it is important to clarify the possible goals of a bankruptcy law, both in an *ex-post* and in an *ex-ante* perspective.

Regarding the *ex-post* perspective, a bankruptcy procedure can be considered efficient when it allows maximizing the outcomes available to be divided between all the creditors and the shareholders. In more general terms, whatever procedure is adopted (the firm could be reorganized, sold as a going concern, liquidated through a dismantlement of its assets), it is reasonable to assume that the common objective should be obtaining the greatest total value (more or less preferred). In this case, the main goal of the legislation (maximizing the value of an insolvent firm) can be reached through a reduction of the length and costs of a bankruptcy procedure as well as by maximizing the percentage of claims reimbursed to the creditors, safeguarding also other stakeholders, which hold non-financial interests (Biondi, 2012). As a consequence, the legislation

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1 If the procedure takes longer, the value of the assets could reduce.
should provide tools that affect variables such as costs and length of bankruptcy procedures, as well as the average rate of claims reimbursed to the creditors.

Regarding the *ex ante* perspective, the main factor to take into consideration is that the procedure should start in "good" time, avoiding useless and harmful delays. For this purpose, a bankruptcy procedure should guarantee the rights of the creditors by providing a system of penalties (for the managers) and/or incentives (for the managers and the creditors) (Cornelli and Felli, 1996), in order to achieve a timely filing as well as to allow the court to promptly order relief. In this way, the procedure can better protect the value of the firm. Additionally, in an *ex-ante* perspective, an efficient bankruptcy procedure should also avoid opportunistic behavior, such as strategic defaults (Berglöf et al., 2000), in which the debtor decides to stop its payment, even if he has the required financial resources; in this situation, shareholders can manage to pay less than their dues but an amount sufficient to persuade creditors to accept their proposals without liquidating the firm (Anderson et al., 1996).

Generally, a contrast between these two perspectives could be assumed (Caprio, 1997); however, this way of reasoning risks to postulate a clear-cut separation between the periods preceding and following the bankruptcy, while it is reasonable to assume a strong interdependence among them.

However, it is unlikely that an ultimate efficient procedure exists: both the theoretical and the legal debates on bankruptcy do not seem to agree on which procedure is best (Galletti, 2006). This implies adopting a different approach which, going further about this contrast, aims to combine both *ex-ante and ex-post* perspectives in a wider and inclusive temporal approach.

This viewpoint needs to be investigated by referring to a variable that, potentially, could affect both perspectives, being able to highlight the temporal and logical continuity between *ex-ante* and *ex-post* viewpoints. As we better explain later, we will refer to indirect costs of bankruptcy. From this angle, focusing on indirect costs, the paper will also try to contribute to the existing literature which has mostly focused on the direct costs of bankruptcy procedures (Warner, 1977; Betker, 1997; Lubben, 2000; Bris et al., 2006), i.e. all expenses paid for lawyers, accountants, financial advisors and other professionals incurred as a direct result of entering the formal bankruptcy process. As stated by some studies on the topic (Hotchkiss et al., 2008; Pham and Chow, 1989), indirect costs can actually be substantially higher than the direct ones, also being much harder to estimate.

Additionally, our study aims to contribute to previous literature (which has mostly analyzed the US common law context, i.e. Chapter 7 and Chapter 11 procedures and pre-packaged bankruptcies) by focusing on the Italian environment (see section 2), as a representative case of the European civil law-based countries, about which we do not have an extensive knowledge. We think that the Italian case is of high interest essentially for two reasons: i) the Italian ancient, medieval statutes influenced the old US and UK bankruptcy acts (Rossi, 1956); ii) classical Roman law inspired current civil law approaches, so Italy can be considered as one of the founding fathers of the modern legislation of the continental European countries.

Consistent with these premises, from a methodological point of view, we refer to the empirical results of previous studies, especially those based on Italian non-listed firms (i.e. small and medium enterprises which represent a key driver for growth and innovation in Europe; European Commission, 2007).

The paper is structured as follows. The next section illustrates the characteristics of the Italian context; section 3 provides a general scientific background regarding the efficiency of bankruptcy procedures, focusing the attention on the specific topic of the indirect costs of bankruptcy; in section 4 we investigate all aspects of the proposed temporal approach, combining both *ex ante* and *ex-ante* perspectives.
post perspectives; finally, the last section provides some concluding remarks.

2. The Italian Context

The Italian original bankruptcy act was promulgated in 1942 and only recently (from 2005 onwards) it has been modified. The need for improvement arose from the perceived inadequacy of previous bankruptcy procedures, considered to creditor oriented and basically interpreted as a mere vehicle to liquidate inefficient firms, pushing them out of the market. More specifically, according to the Italian literature (Marcucci, 2000), the main drawbacks of the previous legislation were:

a) Limited protection of the value of the firm;
b) Disproportionate penalties and sanctions for debtors, which reduced the incentives to start the procedure on time;
c) Complexity, excessive length and high costs of the procedures.

Due to these characteristics, the debtor did not play an active role, and the average reimbursement rates were generally quite low. Thus only a small percentage of the claims of creditors were satisfied. The recent reforms of the Italian bankruptcy act (Decrees no. 35/2005, no. 5/2006, no. 169/2007 and no. 83/2012) have tried to improve the efficiency of the procedure, pursuing the objectives summarized below.

The first objective, which concerns the ex-ante perspective, is to avoid the inopportune liquidation of firms, in order to best safeguard their value. As a consequence, the initial punitive aspect of the bankruptcy law was abandoned, with the default being considered as a physiological stage in the life cycle of business; moreover, if there is a concrete possibility of re-starting the activity, legislation should help firms managing this phase, considering liquidation only as an extreme solution. Consequently, the new law has modified reorganization procedures, which are now closer to the US Chapter 11.

The second objective is to reduce the time of liquidation: if a firm is insolvent and liquidation cannot be avoided, it is important to rapidly sell its assets in order to pay debts, because the longer a procedure takes, the more the value of the assets could decrease.

The third aim of the modified bankruptcy act is to reduce overall costs, in order to increase the average ratio of claims reimbursed to the creditors.

Some brief considerations emerge from these objectives.

Firstly, some empirical researches concerning the Italian context (Ferro et al., 2009; Ferro and Di Carlo, 2010; Ferro et al., 2013) highlight that in a considerable percentage of cases, firms asking for a reorganization procedure to go bankrupt because of their bad financial and economic conditions.

Secondly, the new bankruptcy act has not changed the triggering criteria of the liquidation procedure: actually, the insolvency (defined as the inability to meet obligations and pay debts regularly) still represents the key element in discriminating between healthy and non-healthy firms. Moreover, in order to assure an adequate and fair treatment of the rights of different stakeholders involved, dealing with potential conflict of interests, the law strictly regulates all the phases of the procedure, with one of the main consequences being that the Court has to reject the petition when all the required steps are not strictly observed, even though the firm is actually insolvent. From a legal perspective, this means that the insolvency test should play a secondary role, even if, as just mentioned, according to the Italian bankruptcy act it represents the key element in discriminating healthy and non-healthy firms. Nevertheless, from an economic point of view, in many cases the rejection of filing concerns insolvent firms, that should have gone into bankruptcy (Bisogno, 2012). The delay in ordering relief frequently implies higher indirect costs as well as a lower value of the firm, whose bankruptcy will be generally declared in the near future (Di Carlo et al., 2010).

Finally, within the bankruptcy law and the condition required for starting the procedure, it does not seem clearly defined the connection among bankruptcy, financial and economic distress. In very concise words, while economic distress can be interpreted as the result of poor operating performance, a firm can be considered in financial distress when the currently available liquid assets are severely inadequate to meet the current obligations of its hard financial contracts.
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(John, 1993). As stated above, in the Italian bankruptcy law, the occurrence and intensity of financial distress are the determining elements upon which the judge can decide to accept (or not) the filing for bankruptcy and what possible alternative is best to maximize the outcomes of different claimers. However, as highlighted by Italian literature (Di Carlo, 2012; Canziani, 1997: 140), financial distress can be considered as the last step of a broader process where strategic and competitive deficiencies of the distressed firms play a crucial role.

As a consequence, we think that it is important to take into account the connection between both financial and economic distress as well as bankruptcy; this suggests, among other things, dealing with ex ante and ex post perspectives through a temporal approach, avoiding to contrast them, as better explained later on.

3. Literature Review: Bankruptcy Efficiency

In accordance with Branch (2002), three major areas of research concern the investigation of both nature and magnitude of costs originating from bankruptcy procedures: the optimal capital structure; the premium on risky debt and the reform of bankruptcy legislation in order to improve its efficiency.

Previous literature has mainly focused on the first and second topic, investigating the bankruptcy cost issue under the heading of capital structure, since the trade-off theory in particular considers them one of the most influential elements to take into account, in order to evaluate the optimal debt/equity ratio (Myers, 1977, 2001; Harris and Raviv, 1991). However, despite decades of research, there is still no unanimous consensus on the theory’s empirical relevance. Within this framework, there are two competing positions on the importance of the costs of financial distress.

According to the first perspective, based on the Coase theorem (Coase, 1960), these costs are regarded as necessarily marginal and not particularly significant (Haugen and Senbet, 1988). As a consequence, bargaining costs are assumed to be low and thus stockholders and debt holders, in the case of financial distress, will agree to informal reorganizations before substantial deadweight costs are incurred.

Within the second perspective, Scholars have argued that factors linked to bankruptcy costs, such as free-riding problems, loss of investment opportunities, and so forth can obstruct efficient outcomes of the operations of the firm (Van Horne, 1989; Titman, 1984; Sharpe, 1994; Eisdorfer, 2008). As a consequence, this branch of literature has assumed that bankruptcy costs are relevant, and firms need to take them into account when making financial decisions.

Moving from this second perspective, we address the bankruptcy cost issue within the framework of the efficiency of bankruptcy procedures, which implies that the goals of bankruptcy legislation should be clearly defined.

Taking into account the above-mentioned distinction between direct and indirect costs of a bankruptcy procedure, the net recovery value of a firm can be expressed as follows:

\[
\text{Gross recovery value} = \text{Net recovery value} - \text{DC} - \text{IC} \quad [1]
\]

Where:

\[
\text{DC} = \text{Direct Costs}; \\
\text{IC} = \text{Indirect Costs}; \\
\text{NRV} = \text{Net Recovery Value available for all the stakeholders (providers of capital, suppliers, tax office and so forth)}.
\]

Thus, the higher the (direct and indirect) costs, the lower the net value that can be distributed between creditors and shareholders.

Starting from the equation no. [1], it can be stated that an efficient bankruptcy procedure should aim at minimizing direct and indirect costs linked to financial distress and to the actual filing for the procedure. In this perspective, as we highlighted in the introduction, an optimal procedure should help reach this main target through achieving two goals (Hart, 1995):

- Ex-post efficiency, which consists in maximizing the ex-post value of the insolvent firm, generating the highest possible outcome for all
the claimants (also preserving the right of stockholders holding non-financial interests). This facet of the procedure calls for an optimal division of bankruptcy value (Bebchuk, 2000);

− Ex-ante efficiency, which concerns various effects of the bankruptcy:

− Once a firm has raised funds by borrowing money, there should be an incentive to repay its debt, through establishing penalties if it does not fulfill its liabilities (Hart, 2000); from this point of view, ex ante efficiency should aim also at avoiding the above mentioned strategic defaults (Anderson et al., 1996);

− Ex ante efficiency manifests itself also by providing creditors with incentives to monitor the performances and the operations of the firm (Cornelli and Felli, 1996; Blazy and Chopard, 2004);

− Another important facet of the ex ante effects of the bankruptcy procedure on corporate behavior regards the time at which a bankruptcy petition is filed (Rasmussen, 1994): since generally the start of the procedure is exogenously determined, but depends upon the revelations of bad news by the debtor\(^5\), an efficient procedure should be able to guarantee the cooperation of the management in starting it in a timely manner (Povel, 1999).

Together with ex-ante and ex-post efficiency, Aghion et al. (1994) add to their proposal of the optimal bankruptcy procedure two more targets. The first one regards the preservation of absolute priority order, whereas the second one suggests that the decision about the destiny of the firm (i.e. liquidation or reorganization) should be devolved upon the creditors' will rather than judges or experts.

The Authors themselves acknowledge that it seems very difficult to achieve all the four goals so far highlighted, since some of them can be in conflict with each other, especially ex ante incentives and ex post efficient outcomes. This approach is common to the majority of the literature.

Fisher and Martel (2008), for example, suggest that if current management has special skills, then ex-post efficiency might suggest retaining the incumbent management. But if they were aware of this, managers would have a weaker incentive to avoid bankruptcy in the first place, this way violating ex ante efficiency (Hart, 1995; Berkovitch et al., 1997). According to Bolton and Scharfstein (1996), it might be actually necessary to encourage ex-post conflict among creditors (thus increasing the likelihood of inefficient decisions) in order to improve ex-ante incentives.

However, although the majority of the previous literature has mainly hypothesized a conflict between the two forms of efficiency, some studies highlight their interconnectedness and the necessity of combining them, especially with regards to the Absolute Priority Rule (APR) and the consequences of its violation. Bebchuk (2002) points out that an optimal and efficient ex-post division of the proceeds would have the best general effect on ex-ante incentives and behaviours. Therefore, in order to identify the best ex-post allocation of value, it is necessary to fully analyze the ex ante effects of this division (Bebchuk and Fried, 2001).

The studies just mentioned, though, provide little empirical insight and very few hints about how to do it and how to measure the gain in the overall efficiency.

In the next sections, we will try to combine the two perspectives through a critical analysis of the outputs provided by previous literature; more specifically, in order to assess the ex post convenience of a timely onset of the procedure (consequence of ex ante incentives), following Fisher and Martel (2008), we focus on the above mentioned indirect costs of bankruptcy, because of their ability to affect both perspectives.

3.1 Efficiency and Indirect Costs of Bankruptcy

The indirect costs of bankruptcy are supposed to be:

− Substantially higher than direct ones (among others, Pham and Chow, 1989; Hotchkiss et al., 2008);

− Very hard to assess, because they manifest themselves basically as unobservable opportunity costs (such as lost sales caused by the worsening of a firm’s financial conditions arising because of asymmetric information, free-riding problems, loss of sales and competitive position, higher operating costs, risk shifting, over/under investment issues and

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\(^5\) Who normally have less information than managers and shareholders.
ineffective use of management’s time; Chen and Merville, 1999).

One of the first and best-known attempts to estimate indirect costs of financial distress interpreted in terms of revenue losses is provided by Altman (1984), who examines a sample of firms that went bankrupt. The Author measures the decline in sales of these firms compared to those of competitors in the same industry: the assessment of indirect costs of bankruptcy has been carried out taking into account the difference between earnings realized in each of the three years prior to the firm’s bankruptcy and earnings that could have been expected at the beginning of each of those years. According to the outcomes of this research indirect costs are significant, since, on average, the difference in earning amounts to 10% of firm value just prior to bankruptcy, indicating that sales and operating margins of distressed firms have been eroded.

Along the same lines, Opler and Titman (1994) find interesting results analyzing industries that have experienced economic downturns: the Authors investigate whether firms with high financial leverage prior to the onset of industry crisis perform differently than their more conservatively financed counterparts. Their findings show that highly leveraged firms lose sales and market shares to their less leveraged competitors, owing to different factors:

– *Customer-driven losses*, which reflect the growing unwillingness of customers to do business with distressed firms, especially within specialized products sectors, in which a high standard of post-sales service is needed (Baxter, 1967; Titman, 1984; Maksimovic and Titman, 1991);

– *Competitor-driven losses*, occurring since financially sound competitors may take advantage of downturn periods to aggressively advertise or price their products, in an attempt to put weaker firms out of business;

– *Management-driven losses*, affecting by a higher willingness to downsize in response to industry decline.

Opler and Titman (1994) measure firms’ performances during the distressed period through sales growth and changes in operating income compared with industry averages. When the whole industry is in a distressed situation, sales of high leveraged firms decline by 26 percent more compared to their competitors. The management-driven losses mentioned by the Authors reveal themselves also through asset sales, carried out by financially distressed firms in larger amounts compared with their less leveraged counterparts. Their research, in sum, proves that mainly it is financial distress to affect operating performances, more than the other way around.

Andrade and Kaplan (1998) reach the same conclusion, analyzing a sample of highly-leveraged transactions regarding firms that became financially (not economically) distressed, in order to isolate the effects of the costs of financial distress. Their research draws attention on the costs linked to capital expenditures decline and asset sales, which lead to a reduction in the firm’s sales profitability higher than 12%.

The effect of financial distress and higher bankruptcy likelihood has been confirmed also regarding variables such as the market value of firms experiencing a situation of financial troubles, isolating once again the connection and the possible autocorrelation between economic performance and financial distress. In order to do so, some studies (Cutler and Summers, 1988; Bhagat et al., 1994) investigates the consequences of litigation processes, provided that they can cause financial distress independently from economic crisis.

All in all, in agreement with some previous pieces of research (see Table 1), we can summarize that financial distress, increasing the probability of bankruptcy, affects economic variables and operating performance of firms. These consequences can be evaluated as indirect costs of bankruptcy, which can negatively affect variables such as sales profitability, future development and market value.

It is worth noticing that previous studies generally deal with the US context, mainly investigating big and/or listed firms. As for the Italian context, a recent research (Bisogno and De Luca, 2012) tries to assess indirect costs of bankruptcy within the realm of small, non-listed firms. The empirical analysis is carried out through:

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6 The comparison is between firms in the top leverage decile and firms in the bottom leverage decile.
Table 1
Estimation of indirect costs of financial distress in the U.S.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Sample</th>
<th>Variables</th>
<th>Estimated costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altman (1984)</td>
<td>12 retailers and 7 other industrial firms</td>
<td>• Industry sales</td>
<td>• 8.1% of TV (year t-3)</td>
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<tr>
<td></td>
<td></td>
<td>• Industry profit margin</td>
<td>• 7.1% of TV (year t-2)</td>
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<td></td>
<td></td>
<td>• Firm estimated sales</td>
<td>• 6.6% of TV (year t-1)</td>
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<tr>
<td></td>
<td></td>
<td>• Firm expected profit</td>
<td>• −10.5% of TV (year 0)</td>
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<td></td>
<td></td>
<td>• Firm actual profit</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Total value of the firm (TV)</td>
<td></td>
</tr>
<tr>
<td>Cutler &amp; Summers (1988)</td>
<td>Case study: Texaco vs Pennzoil lawsuit</td>
<td>• Equity value</td>
<td>• “Leakage” of 83% of combined change in wealth</td>
</tr>
<tr>
<td>Bhagat et al. (1994)</td>
<td>330 firms with lawsuit filings and settlements as defendant or plaintiff (1981-1983): in total 550 observations</td>
<td>• Shareholder wealth (SW)</td>
<td>• $20 million SW (matched)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cumulative abnormal return (CAR)</td>
<td>• −1% CAR (matched)</td>
</tr>
<tr>
<td>Opler &amp; Titman (1994)</td>
<td>46,799 firm-years of data (1972-1991) in distressed industries</td>
<td>• Debt / assets</td>
<td>• Firms in leverage deciles 8 to 10: SG 13.6% lower</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sales</td>
<td>• Firms in leverage deciles 10 vs. decile 1: SG 26.4% lower</td>
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<tr>
<td></td>
<td></td>
<td>• Sales growth (SG)</td>
<td>• SR 11.9 lower for distressed firms</td>
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<td></td>
<td></td>
<td>• R&amp;D expense / sales</td>
<td></td>
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<td></td>
<td></td>
<td>• Stock return (SR)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>• Operating income change</td>
<td></td>
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<tr>
<td>Andrade &amp; Kaplan (1998)</td>
<td>31 firms defaulted after highly-leveraged transactions (HLT)</td>
<td>• Debt/total capital</td>
<td>From pre-HLT to year 0:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• EBITDA/interest expense</td>
<td>• EBITDA/sales growth = −12.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• EBITDA/sales</td>
<td>• CAPEX/sales growth = −47.6%</td>
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<tr>
<td></td>
<td></td>
<td>• Capex margin</td>
<td>Total costs of distress:</td>
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<td></td>
<td></td>
<td>• Net cash flow margin</td>
<td>• 10% to 20% of firm value</td>
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<td></td>
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<td>• Return on total capital</td>
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<td>• Return on equity</td>
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Source: Bisogno and De Luca (2012)

- Investigating two non-paired samples of failed and non-failed firms, examining five years prior to bankruptcy (i.e. from 2006 to 2010);
- Examining the trend of some accounting ratios (mainly leverage ratio, EBITDA/Sales, EBITDA/Total assets);
- Using descriptive statistics as well as univariate and multivariate analysis.

The outcomes of the study can be synthesized and interpreted as follows:

- Indirect costs of bankruptcy do exist and are quite significant also for small firms since financial distress negatively influences:
- Future perspectives of development, revealed by a significant difference in capital expenditures between the two samples, during the test period: in the wake of Chen and Merville (1999), this means that the financial distress situation is an influential factor that leads firms to miss good deals and to sacrifice future development opportunities in order to solve short-term liquidity problems, raise as much cash as possible and pay their debts;
- Operating margins and sales profitability (average EBITDA shrinks by 56.46% of its initial value and the mean EBITDA/Sales ratio highlights a considerable decrease of almost 170% over the whole time interval), which witness poorer “quality” of sales compared to healthy companies;
- Profitability of assets in place (measured by the EBITDA/Total assets ratio): in the time span considered, this metric shows a significant decrease (-112%) for the firms in the test sample, in contrast with their financially sounder counterparts.

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7 The “failed” sample is made up of 40 firms that filed for bankruptcy in 2011, whereas the control sample encompasses 386 healthy firms.
8 Witnessed by higher indebtedness and declining interest coverage ratio.
Going bankrupt is mainly caused by financial distress and bad capital structure choices, in contrast with the idea that considers revenue decline as the main factor linked with bankruptcy (Altman, 1984). This is proven by:

- The tendency of sales in bankruptcy firms, that show even a growth, unlike what one would expect;
- The upward trend of the Debt/Total asset ratio, which increases by more nearly 37% between 2006 and 2010;
- The decreasing values of the interest expenses coverage ratio, that records a strong negative variation (more than 100% in the span of time analyzed);
- Filing for the procedure earlier would have avoided part of the indirect costs suffered by the firms that went bankrupt. As an example, while three years before bankrupt (i.e. 2008) the negative trend of the EBITDA/Total assets ratio (a proxy of the incidence of indirect bankruptcy costs) was -21.57%, the year prior to the bankruptcy (i.e. 2010) the decrease of the same ratio was about −112%.

The indirect costs of bankruptcy just mentioned can be a consequence of the management-driven losses mentioned by Opler and Titman (1994): in fact, the closer firms get to bankruptcy, the more likely it is they might be badly run, on the ground that managers neglect the operational aspects of the company and mainly focus on the financial side, in order to avoid a bankruptcy procedure. Moreover, the decrease in sales, profitability might suggest that pre-distressed firms frequently sell below cost and/or at “crippling conditions” (and, as a consequence, operating margins go down).

4. Ex-ante and Ex-post Efficiency: A Temporal Approach

Starting from the premise that no law can be perfect, it is worth reminding that very existence of standard forms of bankruptcy procedures established by the state is due to the difficulties for both debtors and creditors to anticipate the possibility of default and specify in their initial contracts all the consequences of this event. Moreover, a negotiated solution, set up on a contract-based process able to reduce the costs of these procedures, is very difficult to achieve (Dybvig, 1994): transaction costs, in fact, are likely to be too large for both debtors and creditors to manage their own bankruptcy course of action, especially if debtors acquire new assets and new creditors as time passes (Aghion et al., 1994). In other words, the main objectives of the bankruptcy law may be pursued supposedly in a more efficient way through a standard procedure than by means of single contracts among the debtor and its stakeholders. Furthermore, and in more general terms, «it is not possible to think about, plan for and write down provisions for all future events in a “comprehensive contract” specifying precisely the parties’ obligations in every conceivable state of the world» (Robé, 2011: 15).

As previously mentioned, most of the literature and prior studies on the field consider bankruptcy procedures to suffer from a conflicting trade-off among their main purposes, especially the pursuit of ex-ante and ex-post efficiency.

From a certain point of view, there might seem to be a contrast between these two perspectives (ex ante and ex post); for example, it could be argued that APR leads managers to adopt a highly risky behavior, on the grounds that, when a firm is close to bankruptcy, shareholders obtain little (or nothing); as a consequence, a new risky investment could have two opposite effects: i) if things go well, shareholders gain; ii) if things go wrong, mainly creditors bear the loss. Apart from managers, following APR rule could generate moral hazard problems also regarding other subjects, such as banks: especially when the firm’s debt structure is mainly constituted by one large lender, the bank will have most of the power in the voting procedure.

In small and medium enterprises, though, the moral hazard problem is different from the one afflicting big firms, in that most times the interests

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9 The sample of firms that went bankrupt was composed on the base of information extracted from the main Italian Courts database, selecting firms that filed for the procedure in 2011.

10 The Author also points out that: «Without the creation of a “legal fiction” to serve as counterparty to the contributors of resources to the venture, the structuring of their business would be very complex». (Robé, 2011, p. 18).
of managers and shareholders tend to coincide. This implies that the classic moral hazard problems concern the relationship between the managers/shareholders and the creditors (especially banks), limiting the influence of excessive risk-taking and overinvestment issues: if managers destroyed the firms’ value, they would damage themselves. Consequently, given the right incentives and within the opportune procedure, SMEs’ managers could be motivated not to delay the moment of filing, in order to preserve also their own wealth.

Following this approach, we believe that it is possible and opportune to find a balance between the *ex post* and the *ex ante* efficiency, assuming these two perspectives have a common goal: to preserve the value of the firm, also protecting all stakeholders (included those holding non-financial interests).

Therefore, the two main targets of a bankruptcy procedure should not be regarded as in conflict with each other and not attainable at the same time. As just pointed out, it is necessary to find the optimal trade-off, in order to avoid the mistakes that can arise from an imbalance between them. Considering the importance of keeping the firm ongoing, we reckon that the mentioned equilibrium should be reached especially taking into consideration a temporal perspective. In fact, starting from the results of some prior pieces of research that highlight the indirect costs of financial distress (especially Bisogno and De Luca, 2012), one can easily acknowledge the importance of not delaying the procedure. Also for SMEs, in fact, the benefits deriving from avoiding the direct costs of the process are more than offset by the above mentioned indirect costs. This means that, in an *ex ante* phase, in case of severe financial distress, it is opportune to file for bankruptcy without postponements: reducing the indirect costs suffered by the firm before filing would preserve its overall value, hence maximizing the proceeds deriving from the procedure, in accordance with the *ex post* goal as well.

In any case, the timing of the procedure, which is one of the most important factors that can help preserve the maximum possible value of the firm going bankrupt, is highly affected by the kind of bankruptcy legislation: frameworks that are basically orientated to rescue insolvent firms (such as the US Chapter 11), even allowing managers to keep running the firm after filing are sometimes considered to be too “soft” or “debtor-friendly” (Fisher and Martel, 2008; Armstrong and Riddick, 2003); as previously highlighted, in this kind of systems, especially in big firms, there is the danger of too aggressive behaviors on the part of managers, who do not completely bear the consequences of their risky actions.

On the other hand, within reorganization procedures that would not allow incumbent management to keep their positions, there will not be enough incentives for a timely filing, which could lead to an erosion of the value of the firm. Moreover, systems considered to be “tough” or “creditor-friendly” might favor the claims of secured creditors even against the survival of the firm itself (Fisher and Martel, 2008).

This means that the lawmaker, balancing the two facets of bankruptcy procedures efficiency, should pursue a manifold purpose:

1. Reducing moral hazard (Hart and Grossman, 1986), discouraging excessive risk-taking (Gertner and Scharfstein, 1991) and dealing with information asymmetries that can make the accounting system vulnerable to earnings manipulations (Rodriguez, 2010; Cifti, 2010);

2. Assuring that the procedure is not delayed and starts in a timely manner (Berkovitch and Israel, 1998), in order to reduce the indirect costs. On this regard, findings of Bisogno and De Luca (2012) previous commented clearly show that the value of operating earnings deflated against total assets record a dramatic decrease: the decline of this ratio expresses the great magnitude of the loss of efficiency and the erosion of margins suffered by the firms during the years preceding the bankruptcy;

3. Simplifying the procedure, especially in the case of small and medium distressed firms: making the whole process quicker would reduce both the direct and the indirect costs of bankruptcy (Thorburn, 2000), preserving the value of the assets in place and of the firm as a whole.

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11 In small, family-based firms, there is often even a complete overlap between shareholders and managers.

12 Especially in big, publicly listed firms, as already pointed out.
Once again, it is worth noting that attaining goals no. 1 and 2 (reducing moral hazard/earnings manipulation and giving incentives to a timely commencement), despite being of direct concern to the ex ante efficiency, will also help increase ex post efficiency, preventing managers from destroying the value of a firm and its assets, hence maximizing the outcomes available for the creditors.

This reasoning can be considered suitable especially for SMEs, since they often tend to postpone the procedure, hiding their situation of financial distress (even through fraudulent behaviors\textsuperscript{13}); as already underlined, this is due not to the will of management to act in their own interest to the detriment of shareholders and creditors, but it is caused by the need of keeping obtaining credit from banks. This essential requirement, which is also vital for healthy firms, assumes a growing importance in pre-distressed periods, a situation where firms need to increase cash inflows, in order to avoid insolvency (i.e. escape bankruptcy).

From this viewpoint, it could be opportune to put in place some preliminary procedures in order to assist firms that are undergoing financial difficulties. In this vein, a sort of alert procedure, which helps arrange some remedies before the situation becomes irreversible, could represent a good solution, especially for SMEs that do not have a large administrative staff able to constantly monitor firm’s financial conditions (like in the French Code of Commerce; Cavalieri, 2011). By this way, if there are signs of irreversible difficulty that would lead to a definitive distress and compromise the going concern, management would be able to undertake the appropriate actions in order to remedy the situation. In the case of inactivity, managers who do not file for any kind of procedure, might be held responsible and prosecuted in the case of later failure of the firm. This procedure could provide a strong incentive for management to start the procedure in a timely manner.

In order to stimulate a timely start of the procedure, the Italian legislation has recently introduced a new form of reorganization, that allows debtors to file even before handing in a restructuring plan, that has to be provided within 120 days for court and creditors’ approval. This recent procedure allows managers to remain in place and give them various options to recover from the financial distress\textsuperscript{14}.

In a broader perspective, since bankruptcy procedures encompass different instruments (basically liquidation vs reorganization\textsuperscript{15}), their efficiency should be evaluated also on the base of their ability to prevent as much as possible the so-called type I and type II errors: inefficient financially distressed firms (which should have been liquidated) erroneously could be classified as efficient and allowed to reorganize (type-I) whereas, on the other hand, type-II errors happen when some economically efficient but failing firms are mistakenly categorized as inefficient and liquidated in bankruptcy (Blazy and Chopard, 2004). The latter circumstance, damaging creditors as well as other subjects (employees, direct and indirect suppliers and so forth), could be very harmful not only for the firm and its shareholders, but also for the economic and social environment in which it operates.

Especially in the case of reorganization, the main objective is to increase the completion rate, that is to say the percentage of firms that manage to complete their restructuring process and to survive as a going concern (in this way also safeguarding stakeholders holding non-financial interests). This issue has been largely investigated in the past and results from previous studies (carried out mainly on the US Chapter 11) show that the confirmation rate of reorganization plans is often quite low, suggesting that in many cases these processes do not maximize the ex post value of bankrupt firms, especially small and medium ones: Flynn (1989) exhibits a confirmation rate of 17% for over 1,500 mostly small-business Chapter 11 filings; Jensen-Conklin (1992) points out that Chapter 11 firms have a 6.5% chance of surviving as a going concern, while according to Baird (1986) this percentage is lower than 10%. Even though confirmation rates are higher for large businesses, past studies have highlighted efficiency failures...
within them as well: according to Altman (1993), only 50% of publicly owned Chapter 11 firms come out from reorganization as healthy entities; results from Hotchkiss (1995) indicate that 40% of firms emerging from Chapter 11 keep registering operating losses three years following the exit from the procedure; lastly, Denis and Rodgers (2007) reveal that 37% of the firms composing their sample fail to emerge from Chapter 11 as going concerns.

These findings highlight that sometimes a soft legislation (such as the one in place in the US and Canada) can bring sub-optimal outcomes (especially in case of reorganization: Thorburn, 2000) and a low survival rate (Couwenberg, 2001), indicating as quite urgent and important the need to decrease type I errors, which probably leads to higher inefficiency than type II.

In order to make restructuring plans more feasible and consistent, they could be subjected to a double check: together with the control of the court, it could be opportune to involve independent financial consultants, who would certify – accepting full responsibility – the viability of the plan under certain conditions and the percentage of satisfaction of the creditors. In the Italian legislation, for example, the contribution of this character is contemplated in reorganization and debt restructuring procedures, within which the advisor is chosen by the filing firm itself. With the aim of making the choice of the right procedure as efficient as possible, and maximizing the value of the business, it might be opportune to provide the court with the power to appoint the financial consultant, whose judgment on the firm’s plan could be critical for the choice between liquidation and reorganization. This new procedure, giving managers the right incentives to file for bankruptcy (i.e. they do not lose control of the firm), could be improved with a slightly more incisive intervention on the part of the court or more independent experts.

With these changes, it could guarantee more educated decisions, lower rate of errors and, all in all, generate a higher ex-post efficiency of bankruptcy procedures.

5. Conclusions

In this paper, we have exploited the results of previous studies in order to shed light on some phenomena linked to bankruptcy and their implications for the efficiency of procedures.

Empirical evidence from the Italian context gives us very interesting hints regarding failing SMEs, which try to delay the filing moment; this behavior leads to a decrease in the value of the firm as a whole, due to the presence of significant indirect costs of bankruptcy, which express themselves especially as a deterioration of operating margins and a loss of future development opportunities.

These results led us to interpret the two facets of bankruptcy efficiency in a different way compared to the majority of previous studies: instead of considering them as conflicting goals, we argue that an efficient procedure should be able to find a good balance between them. The maximization of the outcome available for the creditors (ex post efficiency), in fact, is affected by the willingness and timing of filing for bankruptcy (ex ante efficiency): delaying this moment would generate the indirect costs analyzed in the paper, leading to a decrease in the overall value of the firm.

From this perspective, in order to improve the efficiency of the procedure and to best combine ex ante and ex post goals, it could be useful to take into consideration the possibility of an alert procedure as well as tools such as those provided by the Italian legislation, which should still be strengthened through increasing the requirements of the advisor that certifies the restructuring plan (especially in terms of independence towards the firm filing). Of course, still much work has to be done, especially within the fields of SMEs and civil law-based countries, mainly with the aim of analyzing the effects of the legislative changes on Chapter 11 completion rates over time.

In this vein, further development of this research could be performing a comparative analysis, through which different bankruptcy legislation can be investigated in order to evaluate their efficiency. Actually, the Italian law does not seem to properly deal with the importance of having more harmonized bankruptcy legislation across Europe, whose strategic importance is implicitly suggested by the dramatic increase in bankruptcies. Consequently, as stated by Di Carlo (2012), it could be important,
at least within the EU, to reduce and/or remove differences concerning both the access and the methods of implementation of a bankruptcy procedure.

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