

How to increase the efficiency of bond covenants: A proposal for the Italian corporate market

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1. Introduction

Covenants are particular clauses in debt contracts of firms – bonds in this case – that restrict business policy, giving creditors the possibility to put into force precise actions – normally early repayment – when the covenants are violated. The main reason for the existence of bond covenants is to solve the conflicts of interest between shareholders and bondholders. In fact, shareholders and bondholders, having different rights on the cash flows generated by the firm, often suffer of conflict of interest's situations. The shareholders can make business policies that reduce the market value of debt, determining a transfer of wealth from the bondholders. In addition, the choice of risky investments gives rise to conflict between the two subjects, because the additional risk will be distributed in an asymmetric way, not favouring bondholders. Covenants, therefore, limiting such behaviour, can reduce the conflict of interests between the two parts. Unfortunately, covenants also produce undesirable effects, reducing flexibility in business policy. The type of covenant and its limits must be chosen, therefore, in order not to compromise business policy, and to be credible in reducing the conflict of interests for the bondholders.

Covenants on bonds were firstly studied in four fundamental articles. In Jensen and Meckling (1976) the covenant was inserted in organic way in the agency costs theory to solve the conflict between shareholders and bondholders. In the same year Black and Cox (1976) publish the first article on the pricing of covenants, using the bond model proposed by Merton (1974) based on the options theory. The two authors consider the covenant as an option that the underwriter of the bond can use when the covenant is violated. A year later, Myers (1977) included the covenants in the more general theory that explains business motivations for indebtedness. Smith and Warner (1979) is the first article specifically dedicated to covenants, with a detailed classification of such instrument. In the years following these publications, we see a consolidation of the themes developed in the initial articles, with some analysis of banking arguments, like monitoring (Berlin and Loeys, 1988; Park, 2000), and several empirical works (Kalay, 1982; Malitz, 1986). In the last few years two important study areas have been looked at in detail: (1) the problems relating to the covenants' violation, and (2) the differences between covenants on public debt and on private debt. Regarding the first area, most of the literature is on aspects of accounting except for some articles related to the renegotiation of the debt contract as a result of covenants violation (Berlin and Mester, 1992). The adoption of determinate accounting principles became, in fact, an instrument of business policy (Watts and Zimmermann, 1986), which can be used to avoid the violation of covenants in debt contracts (Beneish and Press, 1993; Smith, 1993; Wilkins and Zimmer, 1996; Beatty, Ramesh and Weber, 2002; Beatty and Weber,

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2003). The main focus of the articles related to the second study area was about the differences within bond covenants in typical banking topics such as: banking relationships (Citron, Robbie and Wright, 1997; Carletti, 2004), the role of collaterals (Rajan and Winton, 1995), the monitoring (Black, *et al.*, 2004; Carletti, 2004) and the pricing on bank covenants (Bazzana, 2007 and 2008b).

If we analyse the empirical works in more depth, a large part of them have tried to test the debt covenant hypothesis proposed by Smith and Warner (1979), i.e. firms choose accounting methods to maximize slack in debt covenant constraints (Booth and Chua, 1995; Dichev and Skinner, 2002; Niskanen and Niskanen, 2004; Asquith, Weber and Beatty, 2005). Some secondary results of such studies (Dichev and Skinner, 2002; Mather and Peirson, 2006) and more specific articles (Bradley and Roberts, 2004; Chava, Kumar and Varga, 2005) make it possible to have some preliminary empirical evidence on the price of covenants. First of all, as found in the first two cited articles, the bank covenants are more numerous and more restricting than bond covenants. Thus, the violation cases are more frequent in bank covenants, and such violations do not seem to be an index of default for the firm. One of the main empirical evidence regarding debt covenants contracts is the different characteristic among private debt and public debt. The covenants in bank financing are more numerous and are set at a more tight level than those in bond issue (Dichev and Skinner, 2002; Mather and Peirson, 2006). This implies that the violation of covenants happens first in bank financing, and only after in bonds (Sweeney, 1994). This evidence is explained in literature referring to the coordination between the debtholders. The low level of coordination between the bondholders involves substantial renegotiation costs in the case of violation of a covenant, which is not the case in bank financing. In the first case will be sought, therefore, to avoid violation setting the value of the constraints more distant to the current value in the financial statement.

This difference of covenants in private and public debt, has led some authors to search for possible solutions to increase the efficiency of the bond covenants, where the bondholders have a low level of coordination. The first paper with an effective operative proposal is Amihud, Garbade and Kahan (2000). The three authors highlight that the choice between private debt and public debt, both with covenants, is in fact a trade-off for the enterprise. The bond issues are more liquid and easily diversifiable by the investors, compared with bank financing. In contrast, the bond covenants are weaker and the agency costs higher, as compared to the best possibility of renegotiation and monitoring of bank financing. The limited protection of the bondholders involves a higher spread in bond issue than on bank financing. The proposal of the authors is the creation of a supertrustee acting on behalf of the bondholders to «emulate the advantages of private loans – active monitoring, tight covenants and ease of recontracting – while retaining the benefits of liquidity and ease of diversification» (Amihud, Garbade and Kahan, 2000, p. 116). Recently Bratton (2006) has proposed an amendment to U.S. legislation of bondholders trustee in order to increase the power of action during the renegotiation. Schmidt (2006), commenting the work of Bratton (2006), proposes to reduce the quorum for the decisions in assembly in order to reduce delays in the process of renegotiation. The same author goes beyond identifying the amendment in the debt contract as a radical solution to the problem. One could, in fact, grant to the bondholders certain rights in business choices, when a specific covenant is violated.

2. The conflict of interests between shareholders and bondholders

The conflict between shareholders and debtholders, and the role of covenants, has been classified in an organic way by Smith and Warner (1979). Under certain assumptions on firm structure, of which the most important is the lack of agency costs on all other types of contracts, the two authors identify three main sources of conflict: (1) dividend payments, (2) claim dilution and (3) assets substitution. These will be added a fourth, identified by Myers (1977), which deals (4) the underinvestment (TABLE 1). The main purpose of their presence comes from the fact that in the price of issued bonds being incorporates such firm policies. In fact, the debt issued by a company has a financial component and a structural component. The first is subject to financial

risk, because the price of debt is changed to a variation of the interest rate. The second component is subject to business risk, estimated with the variability of the assets value. The cash flow of a firm are usually not dependent on the second component, so any change in the business risk next to the bond issue entails a corresponding change to its market price. In addition to this reasoning, the conflict of interests also depends on the different nature of the rights to the cash flows of the two groups of subjects. Shareholders receive the residual cash flow, after having paid the bondholders who are entitled to fixed cash flows. The limited liability of the shareholders to the net capital, together with bankruptcy costs, can also change the risk preferences of shareholders and debtholders (see Damodaran, 2001).

Source of conflict	Interested firm policy
Dividend payments	Dividend policy
Claim dilution	Financing policy
Assets substitution	Investment policy
Underinvestment	Investment policy

TABLE 1. The sources of interests' conflict between shareholders and bondholders

In the first case (dividend payments), we can think, for example, to a company that has a dividend policy based on a fixed percentage of net income. Thus, the issue price of any bond should incorporate the underlying risk of this policy. The shareholders may decide to increase this percentage, for example with an extraordinary distribution of dividend financed by the sale of company assets. In this case the company risk increases, because the variability of assets grows, and the issue price of new bonds must be set at a lower level compared with the previous issue. The market value of the previous debt will also decrease, resulting in fact, a transfer of wealth to shareholders.

Even the claim dilution to the cash flows of the bondholders can lead to a conflict of interests. A new bond issue may, in fact, changes the price of existing bond in two ways. In the first case, if the new issue has a greater level of seniority, in case of bankruptcy the payments to bondholders would have a different priority. Older bondholders would be paid after the new one, so in the case of lack of funds, it could set a capital loss for the original bondholders. This leads to a reduction in the price of bonds with lower seniority, thus determining the conflict of interests. On the other hand, the issue of new debt, even with equal or less seniority, increases the financial leverage of the firm, and therefore the company risk that reflects in a decrease in the price of existing debt.

The third case of a conflict between shareholders and bondholders concern the assets substitution. Shareholders can take possession of wealth's bondholders changing the investment policy, for example, choosing to undertake risky projects. The shareholders, paid the fixed cash flow to the bondholders, are entitled to all the right tail of the distribution of cash flows of the project, risking only the net capital. They then moved toward risky investment projects. The bondholders, who receive a fixed repayment, are likely that the company chooses less risky projects, in order to cover with high probability that reimbursement. So the expected return of shareholders is an increase function of the risk of the project, while the expected return of bondholders is a decreasing function of the same. This clearly creates a conflict of interest, which may reflect on the price of the bond issues. If the underwriters define its demand function on the basis of the average risk of the undertaken investment projects, the issue price will incorporate that assessment. A change in investment policy will be incorporated in new bond issues, which should be placed at a higher interest rate, by decreasing the market value of the outstanding bonds, therefore transferring the wealth to the shareholders.

The last reason of conflict, identified by Myers (1977), concerns the possibility that the shareholders decide to follow a policy of underinvestment, refusing to undertake investment projects with positive net present value. This can happen, for example, when shareholders are seeking to obtain abnormal cash flow through extraordinary dividend or shares repurchase. This policy may not be feasible if the generated cash flows are used for new investment projects. The same can happen if shareholders estimate that a specific investment project can reduce the risk

of debt, with a correspondent transfer of wealth in favour of bondholders.

3. The costs of covenant violation

The conflict of interests between shareholders and bondholders can be reduced by inserting appropriate covenants in debt contracts in order to reduce the transfer of wealth to shareholders. Using this instrument involves certain costs, among which the most important are the violation costs. In fact, if the company violates the covenants, the creditor may normally require early repayment or its renegotiation. In both cases the company and the creditors must bear a number of costs, which can reduce the efficiency of covenants.

We can consider three types of violation costs: (1) costs of renegotiation, (2) costs of refinancing, and (3) costs of restructuring (Beneish and Press, 1993). The first are related to the time needed for negotiation and for the redefinition of the debt contract (for example, legal fees and auditing). The costs of refinancing can identify with the increase in the interest rate on new debt following the covenants violation (either in the case of a new debt contract or of a redefinition of the existence ones). Finally, the restructuring costs are associated with changes in company policy after the violation (for example, the request for reduction of financial leverage or the decrease in business performance due to liquidation of assets). These costs are mainly paid by the debtor – the firm – but the costs of the renegotiation may be charged even to the lender – the bank or bondholders.

From an empirical point of view has noticed a different attitude in covenants violation by banks and bondholders (Smith, 1993; Sweeney, 1994). In the case of private debt, covenants are usually set tighter than in public debt. This results in a greater likelihood of violations of covenants in private debt, as opposed to public debt. Both authors hypothesize that this difference is due mainly to the different degree of coordination of the two classes of creditors. Indeed, in the case of private debt, the number of creditors is limited and mainly represented by banks. In the case of public debt, the number of creditors is significantly higher and composed mainly of non-institutional investors, resulting in greater difficulty to find shared agreement in case of violation. This implies, therefore a higher total violation cost. So, despite the covenants are efficacy in reducing the conflict of interest between shareholders and bondholders, the efficiency of the instrument is reduced in the case of public debt.

3.1. Costs in bond issue

In the case of bond issue we must distinguish (1) a model for the firm and (2) ones for the bondholders. In the first case, the firm is subject to two types of costs, the loss of flexibility in business policy and the expected cost of covenants violation, and an income, the lower interest rate compared to an equivalent bond without covenants. Suppose that a firm should issue a bond with nominal value D and must choose between a standard contract with spread s , and a contract with a financial covenant with a reduction b on the spread. We define with d the relative distance between the current value of the financial ratio of the firm and the value of them established by the covenant and with p_F the probability of covenant violations, estimated by the firm. Let then C_F the total violation costs, including those of renegotiation, and F_C the costs arising from the loss of flexibility in corporate policy. Both types of costs are expressed in monetary value. For simplicity assume risk neutrality by the firm, so we can only take into account the expected values of the problem.

The firm will choose the issue with covenants only if

$$D \times s \geq D \times (s - b) + F_C(d) + p_F(d) \times C_F \quad (1)$$

that, if we divide both terms for the face value of the bond, becomes

$$b \geq f_c(d) + p_F(d) \times c_F \quad (2)$$

Both the cost of flexibility loss, and the probability of violation are decreasing in respect to d , i.e.

$$\frac{\partial f_c(d)}{\partial d} \leq 0, \frac{\partial p_F(d)}{\partial d} \leq 0 \quad (3)$$

You can find the choice set for the firm in the following

$$\Omega_F = \{(b, d) | b - f_c(d) + p_F(d) \times c_F \geq 0\} \quad (4)$$

The bondholders are subject to the reduction of the spread and to the renegotiation costs in the event of violation, the latter depending on the coordination level. In fact, if the bondholders are relatively few, the degree of coordination is significantly reduced and the renegotiation costs are particularly high and such, in most situations, can prevent a change in the contract. The bondholders can count on revenue from early repayment because, when the firm violates the covenant, the market price of the bond will be lower reflecting greater risk. The bondholders will, therefore, underwrite the bond issue only if:

$$D \times s \leq D \times (s - b) - p_B(d) \times C_B(co) + p_B(d) \times R(d) \quad (5)$$

that, if we divide both terms for the face value of the bond, becomes

$$b \leq p_B(d) \times [r(d) - c_B(co)] \quad (6)$$

As in the previous case the probability of violation, estimated by bondholders, is decreasing with increasing in d , while revenue from the early repayment is supposed growing. Indeed, the greater the distance set at the time of issue, the greater the reduction in the market price in the event of violation. The signs of derivatives are, in this case, the following

$$\frac{\partial r(d)}{\partial d} \geq 0, \frac{\partial p_B(d)}{\partial d} \leq 0, \frac{\partial c_B(co)}{\partial co} \leq 0 \quad (7)$$

The choice set for the bondholders thus becomes

$$\Omega_B = \{(b, d) | b - p_B(d) [r(d) - c_B(co)] \leq 0\} \quad (8)$$

The overall condition of the bond issue will thus chosen by the firm, identifying the pair (b, d) on the following S set

$$S = \Omega_F \cap \Omega_B \quad (9)$$

In FIGURE 1 you can see an example of the set S , assuming exponential probability functions and linear functions for costs and revenues for the firm and the bondholders.

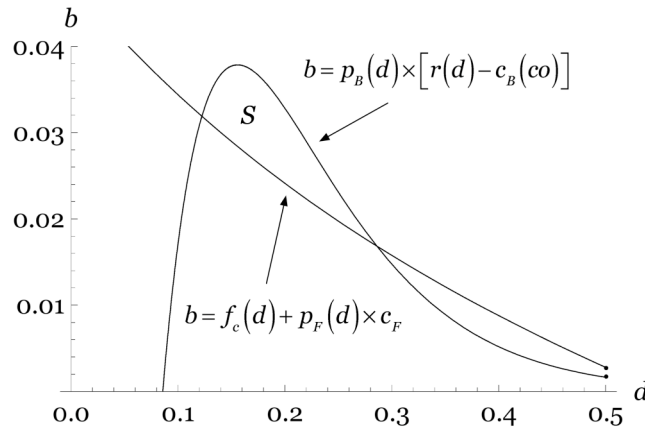


FIGURE 1. The choice set for the firm ($c_F = 1\%$, $c_B(co) = 3\%$, $\sigma_F^2 > \sigma_B^2$)

A low level of coordination between the bondholders increases the renegotiation costs, reducing the S set of choice for the firm. Other things being equal, the bond will issue with a smaller spread and/or with a higher value of d . In some cases, where the coordination level is extremely low, the S set could be empty and the firm will decide to issue a standard bond (FIGURE 2).

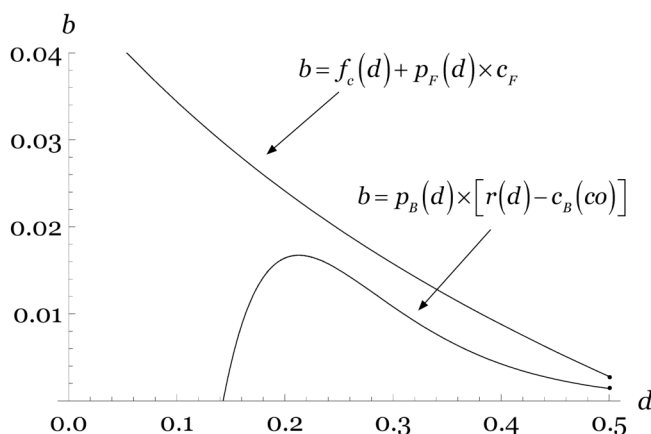


FIGURE 2. The empty choice set for the firm ($c_F = 1\%$, $c_B(co) = 5\%$, $\sigma_F^2 > \sigma_B^2$)

Therefore, a high level of coordination, for example if the bondholders decide to rely to a trustee, would lead to a reduction in the expected renegotiation costs in the event of covenant violation. The set S of choice by the firm would become wider, allowing a more efficient decision, avoiding the situations in which the company would find more convenient the issue of a standard bond (see FIGURE 2).

3.2. Costs in exchange offer

The costs in exchange offer occur when the covenant becomes tight, binding the firm's policy. In this case the firm can (1) attempt a renegotiation with creditors or (2) attempt to replace the bond with a new issue without covenants (the exchange offer). The low level of coordination between the bondholders determines, in this case, high renegotiation costs that does not make convenient for the firm to renegotiate the debt contract. The firm can only try to replace existing debt, providing a new ones without the protection afforded by the covenant. If we consider the relationship to a single investor, the minimum conditions for the exchange will be to balance the expected loss of replacement revenue, net from the expected renegotiation costs. Therefore, the increase in the spread will be at least being greater than the loss of protection of the bondholders. The analysis changes significantly if we move from the individual investor to all subscribers of the debt. The firm could, in fact, set the new issue differently, trying to exploit the limited level of bondholder's coordination (Oldfield, 2004). Suppose that the firm sets the new bond, without covenant, at a lower spread than the equilibrium spread for the individual investor. Accepting the exchange is equivalent to vote favourably to the cancellation of the covenant on the old bond. If the exchange is carried out by a qualified majority of bondholders the cancellation of the covenant will affect even for investors who have not acceded to. To calculate correctly the loss or gain value in the four possible cases (TABLE 2), we can use the standard bond pricing.

The price of any bond is estimated whit the sum of their discounted cash flows, using the spot curve, as in the following expression

$$p_s = \sum_{i=1}^n \frac{f_i \times 100}{(1+s_i)^{t_i}} \quad (10)$$

where s_i is the spot rates at time t_i (expressed in years), and f_i are the cash flows (each divided by the refund value of the bond). Given the theoretical price \hat{p}_s estimated using expression (10), we can find the internal rate of return (IRR), i.e. the rate that solves the following expression

$$\hat{p}_s = \sum_{i=1}^n \frac{f_i \times 100}{(1+IRR)^{t_i}} \quad (11)$$

Let's assume that the bond with covenant that the company wants to replace has remaining duration of n years, fixed annual coupon c_c and market price of 100. Using equation (6) it is possible to identify what should be the equilibrium coupon for the new issue addressed to the individual investor (see Bazzana, 2008a). Given the distance d between the limit of the financial covenant and the current financial ratio of the firm, the equilibrium value for the coupon of the new issue will be $c_c + b_B^*$, where

$$b_B^* = p_B(\hat{d}) \times [r(\hat{d}) - c_B(co_h)] \quad (12)$$

and co indicates the level of coordination. In this way the new bond, with maturity n , will have the same market value of the bond to be exchanged and will thus be issued at a price of 100. The company decided, however, to exploit the limited level of coordination between the bondholders to issue the new title with a coupon value $c_l = c_c + b_b^* - r_l$, slightly lower than the equilibrium ones. The price is calculated using in expression (11) as discount rate the IRR of the equilibrium issue

$$p_l = \sum_{i=1}^n \frac{f_{l,i} \times 100}{(1+c_c + b_B^*)^{t_i}} = \sum_{i=1}^n \frac{(c_c + b_B^* - r_l) \times 100}{(1+c_c + b_B^*)^{t_i}} + \frac{100}{(1+c_c + b_B^*)^{t_n}} \quad (13)$$

The prices of the two bonds will be, however, affected by the results of the exchange offer. If a qualified majority of investors do not accept the exchange, the market price of the old bond doesn't change. The minority of investors that had accepted the exchange would have an increase in prices of the new title. This because the new bond comes with a higher coupon and with the protection given by covenant for the old ones. In this case we apply the same expression using the IRR of the old bond

$$p_l|_{<75\%} = \sum_{i=1}^n \frac{f_{l,i} \times 100}{(1+c_c)^{t_i}} = \sum_{i=1}^n \frac{(c_c + b_B^* - r_l) \times 100}{(1+c_c)^{t_i}} + \frac{100}{(1+c_c)^{t_n}} \quad (14)$$

The price of the old bond, when the exchange had success, loses value, because the bond loses the protection offered by the covenant. In this case, for the price estimation, we use the IRR of the equilibrium issue, that is

$$p_l|_{>75\%} = \sum_{i=1}^n \frac{f_{l,i} \times 100}{(1+c_c + b_B^*)^{t_i}} = \sum_{i=1}^n \frac{c_c \times 100}{(1+c_c + b_B^*)^{t_i}} + \frac{100}{(1+c_c + b_B^*)^{t_n}} \quad (15)$$

If we assume that: (1) the coupon of the original title, c_c , is equal to 4%, (2) the increase in coupon b_B^* for the equilibrium issue, without covenant, is equal to 1%, (3) the maturity n , is of four years and (4) the reduction of equilibrium coupon r_l is 0.4%, we obtain the data in TABLE 2. The best strategy for the investor is to accept the exchange, dominant strategy than to keep the old bond. Indeed, whatever the final outcome of the exchange, the investor will get a highest market price of the bond: 98.58 instead of 96.45 and 102.18 instead of 100. Such a rational decision, because the loss of coordination will be taken by all other investors, so the result will be the acceptance of the exchange with a market price of the new bond of 98.58 and a transfer of wealth to shareholders.

The 75% of investors	<i>i</i> -th investor	
	Accept	Doesn't accept
Accept	98.58	96.45
Do not accept	102.18	100

TABLE 2. Bond prices for the single investor (no-fair exchange offer)

In terms of price the wealth can be calculated with the following expression:

$$\begin{aligned} \Delta p &= \sum_{i=1}^n \left[\frac{f_{l,i} \times 100}{(1+c_c)^{t_i}} - \frac{f_{l,i} \times 100}{(1+c_c+b_B^*)^{t_i}} \right] = \\ &= \sum_{i=1}^n \left[\frac{c_c \times 100}{(1+c_c)^{t_i}} - \frac{(c_c+b^*-r_l) \times 100}{(1+c_c+b_B^*)^{t_i}} \right] + \left[\frac{100}{(1+c_c)^{t_n}} - \frac{100}{(1+c_c+b_B^*)^{t_n}} \right] \end{aligned} \quad (16)$$

When $t_i = i$ the expression (16) may develop and simplify obtaining the following compact expression, which highlights the value of earnings to shareholders, resulting from lack of coordination between the bondholders:

$$\Delta p = \frac{r_l}{c_c + b_B^*} \times \left[1 - (1+c_c+b_B^*)^{-n} \right] \times 100 \quad (17)$$

It is easy to show that this value is decreasing whit a higher level of coordination between the bondholders, in fact, using expression (12) and (17) we have

$$\frac{\partial \Delta p}{\partial c_o} = \underbrace{\frac{\partial \Delta p}{\partial b_B^*}}_{\leq 0} \times \underbrace{\frac{\partial b_B^*}{\partial c_c}}_{\leq 0} \times \underbrace{\frac{\partial c_c}{\partial c_o}}_{\leq 0} \leq 0 \quad (18)$$

The level of coordination between the bondholders plays again a crucial role. The high coordination in the event of a trustee will push the firm to make the exchange offer fair, with the consequent reduction in the transfer of wealth to the shareholders. The prices in the exchange offer, assuming an equilibrium spread of the bond issue, are shown in TABLE 3. The strategy to accept the exchange remains dominant and the equilibrium that is reached is the same as the TABLE 2, but without any transfer of wealth.

The 75% of investors	<i>i</i> -th investor	
	Accept	Accept
Accept	100	96.45
Do not accept	102.18	100

TABLE 3. Bond prices for the single investor (fair exchange offer)

Another benefit would occur in the issue, because the bond price should no longer embed the possibility of an unfair exchange offer, bringing to a smaller spread.

4. A proposal for the Italian corporate market

The use of debt covenants is quite uncommon in the Italian financial market: these terms are principally required by private lenders, often in structuring syndicate loans (Unicredit Banca Mediocredito and Centrale dei Bilanci, 2005) and only rarely are they adopted in public debt contracts. The prominent role of SMEs in the Italian economy (Vella, 2002; Canovi, Grasso and

Venturelli, 2007) and a narrow-relationship banking model are the principal reasons that traditionally justify the irrelevance of bond covenants (Bertinetti, 2000; Corigliano, 2007). In fact, the Italian corporate public debt market is still too small (Pinardi, 2003) and the approach of most investors is somehow quite primitive. The relevant costs of organizing a placement (Banfi and Di Pasquali, 2003; Pagnoni, 2005) and the lack of a strong financial culture amongst money savers who normally prefer to underwrite the government debt issues, are the historic limitations that have underpinned the growth and the development of a high yield bond market. The modest size of most loans required by s.p.a.'s – the only kind of corporation allowed by the Italian civil code to issue debt notes for money savers – makes a public offer of bonds too expensive a way to finance most Italian companies: for this reason the demand for money has traditionally been met by banks (Stanca, 2003; Banfi and Di Pasquali, 2003; Zara and Feltrinelli, 2006). The consequent dependence of industries on banking finance has led the corporate bond market to become a residual source of money, attended by listed companies with a leverage ratio higher than the ones relying only on bank debt (Barucci and Faralli, 2004).

These peculiar characteristics contributed to lead to the scandals that shocked the Italian economy in the early in the new century. In this scenario the Parmalat and Cirio cases seem to have been particularly significant: the company management and some primary banks used the money collected from bondholders – normally through Dutch or Luxembourg incorporated companies as collector vehicles – mostly to repay the huge credits of banks and not to finance the industrial activity (Onado, 2003; Di Staso, 2004; Pardolesi, A. M. P. and Portolano, 2004; Inzitari, 2005). The lack of valid control operated by dispersed debtors was one of the main reasons for the defaults: the missing perception of such misleading conducts and of the borrower's disrupted finances dramatically underlined the inadequacy of the law particularly in the Parmalat case, just few days before the 2003 company law reform entered in force, which removed the issuing threshold that forced Italian companies to the “forum shopping” practice.

The legislative choice to abandon an indebtedness legal edge was made in favour of a “market control-based” discipline (Brescia Morra, 2003; Palmieri, 2006b): the reform of 2003 didn't however substantially modify the section of the 1942 civil code regulating bondholders' right of control. Also legislative decree no. 262 of 2005 – known as the “money saving law” - didn't improve the powers of debtholders and of their common representative, but brought about relevant changes only concerning some internal control aspects (such as a more incisive participation of minority shareholders, obtained also by reserving the right to designate at least a director and to choose the chairman of the internal audit committee), while greater attention was paid to drawing a stricter regulation of the so called “euro-bonds” (i.e. the European securities circulating in the “over-the-counter” markets: see Palmieri, 2006b; Pellegrini, 2006).

Even if the Parmalat crack (just as the previous Cirio case) was a totally unexpected event and didn't permit a precautionary renegotiation of the debt terms to avoid the financial crisis, the 2001 default of the Argentinian Republic debt seems to have been the most dramatic evidence of the consequences deriving from a lack of coordination of bondholders, even if following the borrower's default. Differently from the corporate bonds repayment failure that was solved by an emergency bankruptcy law that provides for the conversion of the larger listed companies' debt notes into shares of the same debtors, the “tango-bond” crack invested directly bondholders, giving them the choice between a curtailment of lent sums, a considerable lengthening of notes or a mix of the two options. Most international investors adhered to the offer formulated in the first days of 2005, unlike of approximately 250,000 Italian money savers who chose to reject the exchange of the defaulted bonds with new notes, hoping for a better second renegotiation offer, which – unfortunately – was never made. The lack of coordination of creditors enabled the Argentinian Republic to save about 24% of the total restructured debt value.

The above brief description of these defaults seems to undoubtedly show the critical aspects of Italian law in regulating the public protection of dispersed creditors, particularly of corporate bond owners. A possible answer from the market could be the adoption of covenants. Their use could ameliorate the Italian corporate debt market, also from the firms' point of view: indeed these terms could be applied not only to structure safer bonds, but also to reduce borrowing costs (Bradley and Roberts, 2004; Chava, Kumar and Varga, 2005) and to allow a rapid renegotiation, opening a possible financial source alternative to the monopoly of banks (Cafaggi, 2002;

Qi and Wald, 2006). However, to be really efficient, the adoption of covenants should match with a rational conduct that normally only a single creditor – like a bank – can have. This quality would reduce the agency costs of renegotiation, lead to a considerable saving of time, otherwise spent in bondholders' voting, and contain the danger of underwriters' opportunistic behaviour in a default event, pointing to a long-term relationship as a market-reliable counterpart for the borrower.

4.1. The new securities introduced in the Italian corporate financial market

The 2003 company law reform brought considerable changes to the Italian Civil Code of 1942 by coming the historic limitations suffered of the Italian corporate financial market. Traditionally the Code provided for only two forms of securities for the s.p.a. model, i.e. shares and bonds: only for listed s.p.a.'s a so called "mini-reform" renewed in 1974 the distinction by admitting non-voting shares. The 2003 reform led to an increased fading of the traditional differences between the two kind of securities admitted for s.p.a.'s, by allowing corporations to freely modify them in obedience to some limited principles and by introducing new financial hybrids.

The latter find a narrow regulation in art. 2346, 6th co., c.c., which allows the issuers to relate the debt more strictly with the corporate affairs. Indeed, the owners of such securities may take part in corporations' affairs in two different ways: the first and main way consists in exposing the value of securities to entrepreneurial risk partially, or wholly as shareholders do (hereinafter "passively participating hybrids") The second way consists in the possibility for creditors to take part indirectly in the management, having the right to vote on some predetermined issues such as, for example, the issuance of new debt (for a similarity with voting bonds, see Enriques, 2005b) or to nominate an independent director (art. 2351, 5th co., c.c.; hereinafter "actively participating hybrids"). The great freedom to differently match these characteristics enables issuers to create debt securities, for example, not directly exposed to the company's trend like "classic" bonds, but with the right to designate the qualified member of the board.

The 2003 reform didn't modify in depth artt. 2410–2420 ter c.c., which regulate the issues of non-participating bonds and the assembly of underwriters. The most relevant amendments concerned the removal of the issuing limit rule for listed s.p.a.'s, (calculated on the amount of the sum of legal capital and the reserves owned by the issuer) in favour of a market monitoring of the companies' sustainable indebtedness, which seems to partially sustain the criticism over the legal capital rules recently voiced by some Authors (for the Italian debate see: Enriques and Macey, 2001; Denozza, 2002; Enriques, 2005a).

On the contrary, the reform didn't change the part of Italian Civil Code that regulates the assembly of bondholders. The primary duties of the assembly continue to be the approval of the debt renegotiation proposal and the election of a delegate, the only s.p.a.'s direct counterpart for questions concerning the debt contract. Although this task could be assigned to a single person, a financial service company or a trust company are also considered eligible. However, because of debtors' indifference, the delegate is normally chosen by a Court on the request of s.p.a.'s management.

In any case, the bondholders' representative lacks of an adequate power to check the issuer's moves, as he has only the right to attend the shareholders meeting, to read the minutes of debates and to look into the shareholders' register, whereas he is denied a direct access to the other most important account books. These limitations reduce the delegate's capacity to perceive the company's financial distress and, consequently, to propose a preventive debt renegotiation, which should be approved by the majority of bondholders. This organizational formula works only for non-participating risk bonds and for companies' trend related hybrid securities on the strength of art. 2411, 3rd comma, c.c. On the contrary, art. 2376 c.c. provides that the owners of actively participating hybrids – even if company's trend related – should meet in assembly in compliance with the rules governing the extraordinary meeting of shareholders, without the right to nominate a delegate as non-risk participating bondholders do.

Both of the described legal models seem to lack efficacy in preventing a borrower's default, mainly because the assembly's vote requires a long interval of time, which normally becomes

determinant to approve a debt renegotiation plan following an unexpected financial crisis (Palmieri, 2006a). Furthermore, art. 2376 c.c. presents considerable problems in unifying the will of the bondholders – often represented by dispersed money savers without adequate financial culture – due to the lack of a delegate that could act as an active sentinel for bondholders and, at the same time, as a unique contractual counterpart for the company’s board of directors.

4.2. The “supertrustee” benefits for the Italian corporate bonds market

The Trust Indenture Act of 1939 prohibits to offer bond issues for sale without a formal written agreement (i.e. an indenture) signed by both the issuer and the bondholders, that fully lays out the details of the bond issue. The Act also stipulates that a trustee must be appointed for the protection of bond investors. In the event that a bond issuer should become insolvent, the appointed trustee may be given the right to seize the issuer’s assets and sell them in order to recoup the bondholders’ investments.

The main difference between the Italian bondholders’ delegate and the trustee provided by the Trust Indenture Act is the extension of the powers of the latter, who must exercise them in case of default with the “same degree of care and skill ... as a prudent man” would use for his own affairs (Sec. 315(c)). The operational freedom (that is criticized by Schwarcz and Sergi, 2008, for being too ministerial in the pre-default phase and too weak in the post-default phase, as it isn’t aimed at maximizing the bondholders’ value return) is however contained by Sec. 316(a)(1), which authorizes the majority of bondholders to “direct the time, method, and place of conducting any proceeding for any remedy available to such trustee, or exercising any trust or power conferred upon such trustee” and “on behalf of the holders of all such indenture securities, to consent to the waiver of any past default and its consequences”. Furthermore, the bondholders of not less than three fourths of the indenture securities amount may consent, on behalf of all the holders, to postpone the payment of interests for a period not exceeding three years from due date (Sec. 316(a)(1)).

The “supertrustee” proposal elaborated by Amihud, Garbade and Kahan (2000) aims to improve the tasks and duties of the trustee in the pre-default phase on the strength of an agreement, including the power to act independently of bondholders according to a business judgment standard (also Schmidt, 2006, and Schwarcz and Sergi, 2008, embrace this solution). In a market-based perspective, the adoption of a “supertrustee” should be voluntary, devolving the choice on the issuer. The company should consider the balance of the burden to finance such a counterpart and the benefits of a reduction in borrowing costs achieved by the use of tighter bond covenants as resulting from a more efficient relationship with dispersed debtholders.

This legal scheme could be probably borrowed also by the Italian corporate dispersed debt market as a possible alternative to the bondholders delegate model afforded by art. 2417 c.c. The evanescent figure outlined by the Civil Code has indeed too weak powers to monitor issuers’ compliance with covenants and has no possibility to act directly on behalf of bondholders in case of a breaching of terms. Moreover, the delegate is only a vehicle of bondholders’ will in a pre-emptive default renegotiation phase. In this critical period in a s.p.a.’s life, the considerable time required to summon a meeting of bondholders and to form a supported majority on the debt terms renovation instance appears to hardly match with an often too rapid deteriorating financial distress of the issuer.

4.3. The trust model in Italian and European financial market laws

The use of the trust model is still exceptional in Italy. In obedience to the Civil Law tradition, the Italian lawmaker doesn’t generally support a legal distinction between legal ownership and equitable ownership. Even if the Italian Republic adhered to The Hague Treaty of 1985 and recognized the Common Law trust model, only since 2005 has the Civil Code contained art. 2645-ter, which seems to supply a narrow discipline of a form of ownership similar to trust, even if applicable only to real estate or registered assets and not for speculative purposes. On the con-

trary, the regulation concerning financial services traditionally contains provisions about a securities indenture in favour of a beneficiary. Law no. 1966 of 1939 provided for the “società fiduciaria” (trust company) to supply real assets or securities portfolio fiduciary managements. Nevertheless, after the Investment Services Directive of 1993 (ISD) was acknowledged by legislative decree no. 415 of 1996, “società fiduciarie” may continue to exercise ordinary management as trust companies, but they cannot more directly operate on financial markets on behalf of their clients (art. 60, actually applicable ex legislative decree no. 58 of 1998, art. 199, hereinafter “TUF”; Costi, 2006). Only if the “società fiduciarie” change themselves into “Società di Intermediazione Mobiliare” (financial service companies, hereinafter “SIM”), may they effect fiduciary purchase or sale securities on behalf of their clients, although they lose the possibility to hold and manage them as a trust company having to transfer the financial instruments to clients’ portfolios.

The European lawmaker doesn’t provide a specific regulation on trust companies operating in financial markets. As explained in the prologue, directive 2004/39/EC (hereinafter MiFID) points out to impose to the member States: “In order to protect an investor’s ownership and other similar rights in respect of securities and his rights in respect of funds entrusted to a firm those rights should in particular be kept distinct from those of the firm”. As specified in the second part of the clause “This principle should not, however, prevent a firm from doing business in its name but on behalf of the investor, where that is required by the very nature of the transaction and the investor is in agreement, for example stock lending”. These principles take form in the art. 13 of the directive: the 7th paragraph establishes that investment firms – when holding financial instruments belonging to clients – have to “make adequate arrangements so as to safeguard clients’ ownership rights, especially in the event of the investment firm’s insolvency, and to prevent the use of a client’s instruments on own account except with the client’s express consent”.

The rule of separation of assets must be applied to all the financial services listed by Annex I of the MiFID, which were specularly adopted by the Italian Lawmaker. Among them, the services most similar to a fiduciary duty operated by a trustee afforded by the Trust Indenture Act are the “Underwriting of financial instruments and/or placing of financial instruments on a firm commitment basis”, the “Execution of orders on behalf of clients” and the consequent ancillary service described in Section B of the Annex, i.e. the “administration of financial instruments for the account of clients, including custodianship”. The conjunction “and/or” contained in the first service definition is commonly explained as an alternative between a mere direct securities placing or a placing brought about a pre-emptive underwriting of the financial instruments exercised by the investment firm, because, otherwise, the mere underwriting should be read as an investment made by the investment firm on its own (Costi and Enriques, 2004). Perhaps this solution could be interpreted also as an opportunity for an investment firm to underwrite on a fiduciary basis on behalf of a client, as specified in the MiFID prologue, exercising at the same time the cited ancillary service on the securities held in this way, “... with the client’s express consent”. Nonetheless this explanation doesn’t seem to permit the creation of a trustee replica. To reach such a solution, the clients’ consent should be unique for all bondholders and, moreover, it should be given also by the buyers of the bonds sold by the investment firm on behalf of the first beneficial owners. This common will to keep the fiduciary property of the bonds issued in the investment firm’s portfolio could probably be charged as a precondition in the prospectus, if provision no. 4.13 of Annex V of EC Regulation no. 809/2004, which imposes “A description of any restrictions on the free transferability of the securities”, could be interpreted in this way. The prospectus would also disclose the occurring limits of the rights attached to the securities to allow a trust-based bondholders representation (provision no. 4.6) and it should make the arrangements for the amortization of the loan (provision no. 4.8), including the reimbursement procedures, that would be directly administered by the investment firm as a paying agent, transmitting payments of interest and principal from the issuer company to the securities holders as trusts normally do.

The interpretation of these rules, however, proves insufficient to see the prospectus as a trust indenture. Indeed, it could simply represent a way to impose an effective common representation of bondholders similar to the trustee provided by the Trust Indenture Act, although not in

contrast with the principle of separation between investment firms' assets and the securities held on behalf of the clients. Indeed provision no. 4.13 of Annex V of EC Regulation no. 809/2004 allows the issuer to specify the "Representation of debt security holders including an identification of the organization representing the investors and provisions applying to such representation" and to point out "where the public may have access to the contracts relating to these forms of representation".

4.4. A proposal for the Italian corporate bonds market

The direct applicability of the EC Regulation no. 809/2004 to Italian corporate bonds issues suggests that also the s.p.a. could adopt a contractual provision indicating the bondholders' model of representation in absence of legal rules, without breaching the assets separation rule imposed by the European Lawmaker.

As explained in paragraph 4.1, the Italian Civil Code provides for two different models of representation for dispersed debt creditors of s.p.a.'s: the bondholders' assembly and delegate model for "classic" bonds and for company's trend related debt securities, the extraordinary assembly method for actively participating hybrids. From the debtors' perspective, the latter seem to be the most interesting securities introduced by the 2003 reform, as they give them the opportunity to insert a "gatekeeper" within the core of the company (Vella, 2004).

As clarified before, the lack of a representative figure is anyway a hard obstacle to the success of a hypothetical renegotiation both in a pre-default phase, and in case of a covenant breach. This legal deadlock could be partially broken by modifying the narrow discipline contained in art. 2376 c.c., and by introducing the opportunity to let the financial market counterparts negotiate an alternative model of creditors' representation (Pisani Massamormile, 2003), similar to the "supertrustee" proposed by Amihud, Garbade and Kahan (2000). This solution could simply be achieved by inserting into the debt contract a mandatory representation of an investment firm exercising the custodianship and administration of financial instruments for the account of clients (art. 1, co. 6, (a), TUF; see also art. 1838 c.c.: Perassi, 2001), that could be implemented by the insertion of an appropriate clause in the prospectus (see provision no. 4.13 of the Annex V of the EC Regulation no. 809/2004). The bank or the SIM organizing as lead manager the initial public offering of debt securities may promote directly this form of representation by electing an affiliated or a third party investment firm as sole bondholders' delegate, mandated to exercise full power action according to a business judgment standard. The operational freedom should include the power to sign debt renovation agreements and transactions (this service, anyway, shouldn't represent a kind of portfolio management, because it wouldn't be a service on a "client by client basis", but a mass-debt administration, similar to that exercised by the bondholders' delegate, although including extraordinary management tasks). Last, the prospectus could also recognize debtors' right to veto the core terms renegotiation proposal, as Amihud, Garbade and Kahan (2000) suggested as a secondary, sub-optimal choice (*contra* Bratton, 2006, who prefers only a ratification of payment terms recontracting, with the exclusion of covenant amendments with a view to not exposing the debtor to the uncertainty of the lenders' vote).

The costs of the administration should be quite irrelevant during the ordinary phase (mainly the independent director's fee and other necessary monitoring expenses) and for this reason they could be sustained by the bondholders, but also by the issuer or by the SIM, as an incentive for the issue. In the event of a breach of a covenant or in case of a payment default, the renegotiation costs (for example the cost of the bondholders' assembly or the cost of extraordinary monitoring) should be paid by the issuer (or the investment firm partially charged with them) in order to defend creditors' value maximization principle and to avoid stimulating opportunistic debtors' behaviour. As in the "supertrustee" model, compensation "should be greater for bonds with more complex covenants, for bonds issued by companies with more complicated and less transparent operating characteristics, and for bonds bearing more credit risk and for which more intense monitoring is appropriate and more renegotiation is likely to be needed" (Amihud, Garbade and Kahan, 2000).

The problem of a possible conflict of interests between bondholders and the lead investment

manager or the affiliated firm could be solved by giving bondholders the opportunity to change the delegate with the majority imposed by art. 2376 c.c., and to choose another firm supplying the same service. As Amihud, Garbade and Kahan (2000) suggest, a debt contract should provide a list of candidates submitted by the borrower to reduce the danger of dealing with an opportunistic representative firm designated by the bondholders. Moreover, the risk of ruining their reputation with clients or of becoming defendants in a class action suit (recently introduced in the Italy) could be sufficient incentives to get the investment firm to effectively fulfil their representative duties.

5. Conclusions

The covenants can be an effective tool to reduce the conflict of interests between shareholders and bondholders. The lack of coordination between the bondholders may, however, reduce the efficiency due to the high amount of the expected costs of renegotiation following the covenant violation. The empirical evidence shows, in fact, that in case of bank loans, where coordination is high, these costs are lower and use of covenants is more efficient. With the help of two theoretical models, the first for the bond issue, the second for the exchange offer, it is possible to identify the cost of lack of coordination between the bondholders. In both cases it is easily to verify the efficiencies in the use of covenants if the bondholders decide to create a trustee. This possibility is suggested for the U.S. market by Amihud, Garbade and Kahan (2000) and, more recently, by Bratton (2006). Following this indication – even if not directly applicable – we propose a change in the Italian Law by allowing to insert into the new financial hybrids' contract a mandatory representation alternative to the model provided by the Italian Civil Code, giving to an investment firm exercising the administration of bonds, the right to act as a full powers delegate on behalf of all the bondholders.

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