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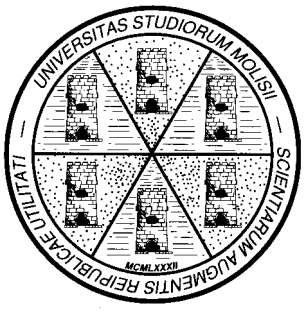

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The Pricing Effect of Certification on Bank Loans: Evidence from the Syndicated Credit Market

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Abstract

This paper provides a direct test of banks' ability to mitigate informational asymmetries. In syndicated loans, lenders' incentive to screen ex ante and monitor ex post borrowers increases with the share they retain; consequently, the higher this share, the less risky the loan is considered by investors, and the lower is the interest rate they require. We analyze a large sample of syndicated loans arranged in over 80 countries during the nineties. We find that interest rates decrease in the share of the facility retained by the arranger. This certification effect is greater for smaller, more opaque loans where screening and monitoring are more valuable.

JEL-classification: G82, G14, G21
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1 Introduction

Among the many reasons why banks are unique[1], the most important is certainly their ability to provide information. For example, a large body of financial literature shows that the value of firms increases when they obtain a new bank loan, consistent with the view that, by granting a loan, banks implicitly disclose part of the private information in their possession and provide a certification of the financial conditions of the borrowers[2].

However, the positive reaction of the firms' stock prices to the announcement of new bank financing or loan renewal is an indirect proof of the banks' unique ability to solve informational asymmetries by acting as delegated monitors (see, in particular, Diamond, 1984). Indeed, banks can produce valuable information only to the extent that they can ensure its reliability. As first suggested by Leland and Pyle (1977), thisresult can be achieved if lenders contribute with their own assets in funding the borrowers that they have screened. A more direct test of banks' ability to solve informational asymmetries would consider the cost of credit as a function of banks' ability in its screening and monitoring activities.

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[1] For a recent and thorough survey on financial intermediation see Gorton and Winton (2002).

[2] A number of studies found that capital markets react positively to the announcement that an enterprise has obtained new bank financing (James, 1987, and Lummer and McConnel, 1989). Furthermore, the reaction is stronger for smaller (Slovin et al., 1992) and more opaque firms (Best and Zhang, 1993), as it is to be expected if information disclosure by banks is more valuable for these categories of borrowers. Dahiya et al. (2001), examining the information content of the announcement of loan sale by the leading bank, found a negative and significant impact on the borrowers' stock returns in the period surrounding the announcement.

In this paper we provide such a direct test, measuring whether or not the certification of the borrower's financial conditions provided by an arranger of a syndicated credit facility has an effect on the interest rate charged to the borrower.

A syndicated credit facility is a loan originated by one or more arrangers, which are in charge of the screening and monitoring activities. It is then split in brackets, possibly of different size, and offered to potential subscribers, which take upon themselves the credit risk on their share of the loan. As argued by Dennis and Mullineaux (2000), syndicated loans represent a hybrid of private and public debt. Like standard bank loans, they are much more flexible than public debt placements and are often tailored to the borrower's needs.[3] Like public debt placements, syndicated loans allow borrowers to raise large amount of funds, and they are placed among a potentially large number of institutions across the world, at harmonized conditions for all subscribers'.

An important feature of the syndication process is the relative position of arrangers with respect to borrowers. When a borrower is seeking for bidders for a facility, its interests are in conflict with those of the potential arranger. The former is on the buy side of the market, looking for the lowest possible price for the facility that it needs; the latter is on the sell side, with the objective of maximizing its total revenues. Once the mandate has been awarded, the borrower and the arranger become instead partners in seeking a satisfactory result from the market placement. In fact, the failure of the deal would not only leave the borrower without funds, harming its reputation, but it would also put at stake the standing of the arranger. The interest rate on the syndicated credit facility is therefore the equilibrium outcome of

[3] In fact, initially agreed credit conditions are often rearranged before the expiration of the debt contract. Furthermore, although syndicated credit facilities have a number of standardized characteristics, their portions are not traded in organized markets, and can be sold by lenders only when the original contract specifically provides for it.

the conditions put forward by the arranger and those called for by the providers. Ceteris paribus, the equilibrium interest rate on the loan will therefore reflect the degree of certification provided by the arranger.

Of course, in order to use interest rates on syndicated credit facilities to test for the certification effect provided by the arrangers, one needs to identify a measure of this effect that varies across operations. Following the predictions of Gorton and Pennacchi (1995) for the case of loan sales, we assume that arrangers retaining a larger share of a syndicated facility have a greater incentive to evaluate and monitor their borrowers. Thus, if screening and monitoring reduce asymmetric information, these facilities should have, ceteris paribus, lower interest rates.

In the empirical analysis we use a large data set provided by Dealogic Capital Data, a company that monitors syndicated loans placed in the international markets. In particular, we use information on syndicated credit facilities granted to borrowers of over 80 countries between 1990 and 2001.[4] The results show asmall but significant effect of risk retaining on the interest rate paid by borrowers, concentrated in the case of small facilities.

An alternative explanation of a negative relationship between the share retained by the arranger and the interest rate on a syndicated loan might be that providers are not willing to subscribe facilities with a too high riskto return ratio, forcing the arrangers to retain larger shares simply to avoid a syndication failure ("to have a dog", in the practitioners' jargon). We control for this alternative possibility, finding no evidence that it drives our results.

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[4] Although recently a number of studies have analyzed the factors influencing a bank's choice to syndicate a loan, not much attention has been paid to the effects of the composition of the syndicate on the pricing of credit facilities. Angbazo et al. (1998) and Dennis et al. (2001) are, to our knowledge, the only exceptions.

The rest of the paper is organized as follows. The next section describes the institutional characteristics of the syndicated credit market, and the evidence already available on some of its major features. Section 3 presents the empirical model used for testing the effects of the arranger's degree of certification on the interest rates charged on credit facilities. The following section describes the data used in the empirical analysis. Section 5 presents the econometric results. The final section concludes.

2 The Market for Syndicated Credit: Institutional Characteristics and Previous Evidence

The last ten years have witnessed a rapid growth of the market for syndicated credit facilities in most countries. Between 1990 and 2001 the volume of facilities granted to private firms increasedmore than five times, topping US $1.6 trillion in 2001. According to Jones et al. (2000), in the US syndicated lending represents approximately half of new loans to corporations, generating more underwriting fees than either the equity or the bond market.

A syndicated credit facility is one offered to a single borrower by two or more banks, which sign the same contract and stand equally in right of repayment.[5] Although the terms and conditions of the contract are common for all members of the syndicate, each bank can choose the share to subscribe, and its legal position with respect to the borrower is independent from that of the other syndicate participants. In fact, the other participants have no legal duty to satisfy in its place the obligations eventually not fulfilled by a member of the syndicate.

[5] A detailed description of the institutional features and practices of the syndicated credit market is provided by Rhodes et al. (2000).

The organization of a syndicated transaction is a complex process, characterized by two principal phases. First, the borrower seeks potential bidders for the facility that it requires, either from relationship banks or from financial institutions acknowledged as market leaders. This is done on the basis of a set of specific conditions, such as the amount, the timing, and the range of acceptable rates. Normally, borrowers prefer sole bidding, giving to the winning bank an unrestricted mandate to decide autonomously on the organization of the offer to the underwriters, the distribution of roles and the syndication in the marketplace. In some cases, especially when a bidder seeks a fully underwritten bid for an amount that is too high for any institution to commit alone, a multi-bank bidding group is formed. At the end of this phase, the borrower mandates one or more banks to act as arrangers.[6]

In the second phase, the syndication takes place and the characteristics of the credit facility are negotiated in detail. The arranger, in conjunction with the borrower, prepares and circulates within the potential underwriters an information memorandum, containing the summary conditions of the facility and the information on the borrower's activities and financial conditions. As the syndication progresses, terms and conditions are fully agreed with the borrower, and the arranger writes the final contract. Next, the arranger sends a letter inviting all potential subscribers to adhere to the syndicate at the terms and conditions specified by the contract.[7] When all potential participants have responded, "the books are closed" and credit is allocated. The signing ceremony ends the process.

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[6] For expositional simplicity, in the following we will consider only the case of a single arranger. Unless it is explicitly mentioned, the same considerations apply in the case of multiple arrangers.

[7] In the case of multiple arrangers, one of them, designated as the book-runner, fulfills this duty.

The complex interplay of interests within credit syndicates is analyzed in a number of papers. Dennis and Mullineaux (2000) concentrate on the determinants of a bank's decision to syndicate a credit facility, showing that syndication is more likely to happen when information on the borrower are more transparent, when the arranger has stronger lending relationships with the borrower and when the facility has longer maturity. Lee and Mullineaux (2001) find that when the arranger is more reputable and the borrower is less risky and less informationally opaque, syndicates tend to be larger and more diffuse.

Credit syndicates share a number of features with loan sales, but they differ in one fundamental aspect. While loan sales do not transfer the obligations between theacquiring bank and the borrower, credit syndicates establish from the beginning a direct relationship between subscribers and borrowers. As such, syndicated loans address the same problems that typically motivate loan sales (e.g., avoiding regulatory limits, reducing asset concentration, and lowering funding costs), while providing stronger guarantees to the subscribers.

Indeed, as in the case of loan sales, incentive compatible arrangements that guarantee sufficient screening and monitoring activities can be found along the lines suggested by Gorton and Pennacchi (1995), who show that "by retaining a portion of loan, the bank could reduce agency problem since it continues to face a partial incentive to maintain the loan's value. The greater the portion of the loan held by the bank, the greater will be its incentive to evaluate and monitor the borrower". As a result, banks will sell a smaller fraction of more risky loans.[8]

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[8] Gorton and Winton (2002) draw the attention to the paradoxical behavior of firms that in order to raise funds borrow from a bank which then sells the loan's cash flows to investors in the capital markets, instead of directly issuing a security. This paradox applies also to credit syndicates, but in a milder form, because credit syndicates entail a direct relationship between

A number of papers analyze the factors affecting the share of the loan retained by the arranger, confirming the theoretical prediction of Gorton and Pennacchi (1995). Simons (1993), analyzing data from the 1991 Shared National Credit Program on syndicated loans, finds that arrangers retained on average 17,4 per cent of loans that were subsequently classified by regulators as "pass", 30,5 per cent of those classified as "substandard" and 47,3 per cent for those classified as "loss".Dennis and Mullineaux (1994) show that more reputable arrangers are able to sell off larger portions of syndicated loans, and interpret this result as consistent with the hypothesis that the arranger's status is a certification of theborrowers' financial conditions. Jones et al. (2000) show that the average loan share retained by the arranger increases with measures of its riskiness, such as its maturity.[9] Dennis and Mullineaux (2000) show that arrangers typically hold a larger proportion of information-problematic loans in their own portfolios.

Angbazo et al. (1998) analyze the effect of syndication on loan interest rates. Their major finding is that credit spreads on syndicated highly leveraged transaction loans (HLT),[10] have lower yield spreads than other HLT loans, providing evidence in favor of the hypothesis that better risk diversification among a pool of borrowers reduces the cost of credit. Dennis et al. (2001) find a similar result. Finally, Angbazo

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the borrower and the subscriber. In a sense, credit syndicates can be seen as an implicit underwriting agreement by part of the subscribers.

[9] They also find that, although arrangers retain a larger portion of their lower-quality loans, some banks specialize in the lower end of the credit spectrum, and these banks syndicate a larger share of their low-quality loans.

[10] These are defined as "all loan financing used for buyouts, acquisitions and recapitalizations; all loan financing which double the borrower's liabilities and result in a leverage ratio higher than 50 per cent or increase the leverage ratio higher than 75 per cent; all loan financing that are designed as HLT by the syndication agent and all loan financing to subsidiaries of HLT companies."

et al. (1998) also find that spreads on syndicated HLT loans are lower when the arranger retains the largest share among all providers.

3 Certification Effects in the Pricing of Syndicated Credit: The Empirical Model

3.1 The identification of the pricing effect of certification

Arrangers can signal the soundness of the borrowers' financial conditions by retaining a larger share of the credit facilities that they organize. In the case of loan sales, Gorton and Pennacchi (1995) argue that a bank planning to sell the loan does fewer screening and monitoring than what would be desirable. However, by retaining a fraction of the loan, it can give itself a stronger incentive to screen and monitor the borrower, thus mitigating the agency problems. As a result, the sale price is lower (and the implied interest rate is higher) when the selling bank retains a smaller share of the loan.

Clearly, the analysis by Gorton and Pennacchi (1995) is strongly related to that of agency problems within credit syndicates, suggesting that the degree of certification on the financial conditions of the borrower can be considered an increasing function of the share of the facility retained by the arranger (see also Dennis and Mullineaux, 2000). Under this hypothesis, given all other characteristics, syndicated credit facilities with a larger share retained by the arranger should have lower interest rates. Further, the certification effect should be stronger in the case of credit facilities of smaller size, because larger loans are made to larger companies, which typically provide more transparent information on their financial conditions than smaller borrowers (see, e.g., Berger and Udell, 2002).

As we argued before,there is an alternative explanation for a negative relationship between the share of the loan retained by the arranger and its interest rate. In the case of facilities with a too high risk to return ratio, providers could be unwilling to subscribe the loan, forcing the arrangers to retain a large share simply to avoid a syndication failure ("to have a dog"). We discriminate between the certification effect and this alternative explanation using the average provider's share of the facility as a measure of the syndicate's success. In fact, for a given loan size, an unsuccessful syndicate is less likely to be subscribed by a large number of providers.

One problem with this identification strategy is that "arrangers address adverse selection problems by keeping syndicates small and more concentrated, presumably to enhance incentives to monitor" (Lee and Mullineaux, 2001); the more so when borrowers are more risky and informationally opaque. It could therefore be the case that a small syndicate is not a failure at all. We address this potential problem by testing for the certification effect in a sample of small facilities – those for which certification is more valuable – with a large number of providers. Indeed, although it is not necessarily the case that facilities with a small number of providers are potential failures, it is very unlikely that a syndicate with a large number of subscribers is a failure. Therefore, if the negative relationship between the share of the loan retained by the arranger and its interest rate is found also for this sample of small facilities underwritten by a large number of providers, we can be confident that such relationship is due to the certification effect, and not on the arrangers' willingness to avoid a potential syndication failure.

The degree of certification is also likely to be a function of the arranger's reputation, which would be put at stake if it did not fulfill carefully to its screening and monitoring duties. However, reputation does not depend uniquely on the certification ability. In addition to truthful reporting of the financial conditions of the borrowers,

arrangers could have built in the past a superior standing for their skills in fulfilling other duties related with their position, such as bookkeeping. Both these effects work in favor of lower interest rates for borrowers, but only the first reflects certification. Moreover, highly reputed banks might also exploit their market power imposing higher interest rates to their borrowers (see, e.g., John et al., 2001). The overall pricing effect induced by the three factors related with reputation – certification ability, managerial skill and market power – is therefore ambiguous, and it depends on whether the market power or the efficiency effect prevails.[11]

Given the difficulty in disentangling the overall effect of reputation, we will use the arranger's share of the market for syndicated credit facilities (which, according to previous literature, is a proxy for its reputation) as a control variable. Of course, by doing so we somewhat underestimate the overall pricing effect of certification. However, if there was a significant effect on the interest rate even within the sample of syndicates arranged by more reputed banks, we could argue that certification provided by retention of a larger share of the facility by part of the arranger is complementary to that associated with a stronger reputation.

Finally, a number of credit facilities, mainly those of larger size, are arranged by more than one bank, making it difficult to identify the degree of certification. For this reason, in the following we concentrate our attention on syndicates with a single arranger.

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[11] Focarelli and Panetta (2002) address a related issue, i.e. the change in market prices induced by consolidation in commercial banking, which also depends on whether the market power or the efficiency effect prevails.

3.2 Control variables

The effect of the arranger's ability to certify the borrowers' financial conditions is correctly identified if all the other determinants of the interest rate on a syndicated credit facility are controlled for.[12] In choosing what factors influence interest rates, we go along with the previous literature, interpreting the loan contract as a contingent claim that can be priced using option pricing techniques (Smith, 1980). This permits to give sound motivations for including, among the determinants of the interest rate on a bank loan, characteristics such as its size, its duration, the presence of a collateral, the variability of the borrower's assets, and to attribute to the coefficient of these variables an expected sign.

In order to control for the characteristics of the credit facility, we also include in the pricing regression dummies related to loan purpose, loan rating, type of contract, margin type, currency of denomination and market where the facility is launched. Furthermore, we include dummies to account for subordinated credit facilities and for the presence of options allowing time extensions and renegotiations. On the part of the lenders, we control for the members' possibility to sell part of the loan on the secondary market and for privately placed deals (club deals). Finally, we introduce time dummies to account for common macroeconomic characteristics.

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[12] Indeed, if we didn't control for the other determinants of the interest rate we would probably find a positive relationship between the share retained by the arranger and the interest rate on of the loan. In fact, syndicated facilities granted to riskier borrowers have both higher interest rates and a larger share of the loan retained by the arranger.

3.3 Econometric setup and identification strategy

Following the approach of Booth (1992), the effect on the interest rate of the certification provided by the arranger is estimated using the following regression:

$$i_{ijt} = f(X_{ij}, D_i, Z_j, T_t), \quad (1)$$

where i_{ijt} is the interest rate on a credit facility granted by bank i to borrower j at time t, X_{ijt} is a set of characteristics of the credit facility (e.g., credit rating, currency of denomination, etc.), D_i is a set of dummy variables for each bank i, Z_j is a set of characteristics for borrower j and T_t are time dummies. The model is estimated using ordinary least squares. Robust standard errors are calculated using the procedure suggested by White (1980).

We adopt the following identification strategy. First, we test for the pricing effect of the share of the facility retained by the arranger (our proxy for certification), controlling for the share of the loan that is placed with each provider (a proxy of the degree of success of the syndicate) and for the arranger's market share for syndicated credit facilities (a proxy of the arranger's reputation). Second, we check that the pricing effect of the arranger's retained share of the facility is stronger in the case of credit facilities of smaller size (following Gande et al., 1999, those below US $75 million), as it should be the case if certification is more valuable for smaller and more opaque borrowers. Third, we verify that in the case of smaller-size credit facilities the pricing effect of the share retained by the arranger does not vanish when we consider a sub-sample of facilities for which the average provider's share is below the median, as it would be the case if our results were due to the arrangers willingness to avoid a potential syndication failure. Finally, we check that the certification effect is still present for smaller facilities arranged by market leaders, in contrast to the hypothesis that a more reputable arranger can offer a valuable certification of borrower's financial conditions even without retaining a larger portion of the loan.

4 Data and summary statistics

The empirical analysis is conducted using Loanware, a commercial data set provided by Dealogic Capital Data and recording the large majority of transactions for which information is public. Our sample includes information on 14,121 credit facilities organized by a single arranger between 1990 and 2001, and where the interest rate is expressed as a spread over the LIBOR.

The distribution of syndicates by size and borrower's nationality, presented in table 1, sheds some light on the structure of the market. The distribution by size is skewed to the left (the top quartile accounts for the three quarters of the market volume). Credit facilities of smaller size (less than US $75 million) represent 56 per cent of the total number of contracts, but they account for only 11 per cent of the credit volume. Facilities with a size of more than US $500 million are 6 per cent of the total number of contracts, 45 percent of the volume of credit.

Credit syndicates are very common for borrowers from the United States and the United Kingdom. The two markets account, respectively, for 80 and 5 per cent of the total number of contracts, and for 76 and 8 percent of the credit volume (table 1). Although loan size is almost uniformly distributed across borrower nationalities, the share of credit allocated to Japanese and German firms through facilities amounting to US $500 million or more is 77 and 84 per cent, respectively.

Table 2 presents the distribution of credit facilities by maturity and loan purpose. About 15 per cent of the contracts (almost one quarter of the total volume of credit) has a duration of less than one year; 55 per cent (47 per cent) between one and three years. Only 2 per cent of the facilities, both as number of transactions and as volume of credit, has maturity of more than 5 years.

Excluding the facilities for which the purpose is not recorded, the largest share of the market is represented by operations for refinancing or debt repayments (48.2

per cent of the number of contracts and 49.6 of the credit volume); next are operations financing working capital (17.8 per cent and 9.5 per cent, respectively) and acquisitions (13.1 and 15.9 per cent). LBO and MBO related facilities represent only 3.3 percent of the number of contracts and 3.2 of the credit volume. The largest facilities are those supporting a corporate promissory note (i.e. standby facilities), with an average loans size of US $622 million, followed by the acquisition finance facilities (233 million).

Summary statistics for the dependent variable and the most relevant regressors used in the econometric analysis are presented in panel A of table 3. Syndicated credit facilities have an average spread of 162 basis points over the LIBOR, with a standard deviation of 96 basis points. The drawn return, which is the annual return (excluding up-front fees)[13] that will accrue to a senior provider if the facility is fully drawn throughout its life, is only one basis point higher. The size of credit facilities is extremely variable, ranging from 200,000 to 15 billions of US dollars, with an average value of 165 millions and a median value of 65.

Data on the share of the credit facility retained by the arranger and on the average provider's bracket size is available for only 2,951 contracts, limiting significantly the size of the sample that can be used in the econometric analysis testing for the certification effect. However, the summary statistics for this sample, presented in panel B, are quite similar to those of the larger one. The average size of the facility is US $178 million (165 in the larger sample) and the average spread is 147 basis points (162 in the larger sample). On average, 30 per cent of the facility is retained by the arranger and 22 per cent of the remaining part is subscribed by each provider.

[13] The up-front fees are paid directly by the borrower to the arranger and only in very few cases are recorded in the database.

In the case of smaller facilities (those with a value of US $75 million or less), the average share retained by the arranger is larger, the interest rate is higher and the duration is shorter. Smaller facilities are typically allocated among fewer providers, but with larger shares. Syndicate credit facilities arranged by one of the three market leaders are on average larger, have more providers and have shorter maturity.[14] They are also characterized by smaller shares retained by the arranger and the providers.

These findings are consistent with two of our hypotheses. First, facilities granted to smaller, more opaque borrowers require a stronger certification by part of the arranger. Second, market leaders can afford to retain a smaller share of the facility, because they supply certification by means of their higher reputation. More rigorous tests of these and our other hypotheses will be presented in the next section.

5 Results of the Econometric Analysis

The econometric analysis is initially conducted on a sample of 14,121 credit syndicates organized by a single arranger. Although data on the share of the credit facility retained by the arranger and on that subscribed by each provider are available only for 2,951 syndicates, the reduction in the sample size does not seem to bias the results. Panels A and B of table 4 show that the estimates on the larger sample and those on the smaller sample are qualitatively and quantitatively similar. Furthermore, even introducing the two additional variables for the arranger's and the providers' shares, the coefficients of the other variables are virtually unchanged. In all three cases the predictive power of the regression is fairly good, with corrected R-squared ranging from 0.42 for the regression on the larger sample to 0.50 for that on the smaller

[14] That of the three largest arrangers is an obvious choice, as their market sharers represent, respectively, 20, 14 and 12 per cent of the total value of syndicated credit facilities, while the

sample. In light of these results, in the following we concentrate only on the smaller sample.

5.1 Discussion of Control variables

As discussed in section 3, in estimating the arranger's ability to provide certification on the borrowers' financial conditions we control for a number of factors influencing the interest rates on the credit facilities.

Table 5 reports the coefficients of the most interesting control variables.[15] Consistent with Angbazo et al. (1998) and Booth (1992), larger loans have a lower interest rate. Several factors can account for this effect. In particular, large loans are usually granted to large borrowers, which typically have a lower default risk, stronger

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fourth larger arranger has a market share of 2 per cent.

[15] The unreported control variables follow these patterns. The time dummies match the evolution of the syndicate loan market in the period 1990-2001, as described by Rhodes et al. (2000). In the first part of the 90s we observe an increase in loan prices, possibly due to the surge in risk associated with the economic recession experienced by most developed countries, and the losses experimented by major US banks. In the central part of the 90s banks increased their capital, favoring an expansion in credit supply that resulted in a two years decline in prices, in 1994 and 1995. Starting from 1997, the strong increase in acquisition activities and the effects of the Asian financial crisis caused a new surge in prices that lasted until 2001. As expected, loans with better credit ratings have lower interest rates. The difference in the interest rates between A and CC rated is about 115 basis points. On average the interest rate level is lower for borrowers that operate in the energy and oil sectors, in the insurance sector and for holding companies. It is higher for borrowers active in more innovative sectors (broadcasting, cable TV, telecommunications, media) and sectors that are highly sensible to changes in the economical and political conditions (hotels and leisure, aerospace and defense, construction). Facilities granted for acquisition activities exhibit a 22 basis points positive spread with respect to those with operations refinancing purpose. The same spread raises to 32 basis points for facilities granted for DIP-financing, and to almost 80 basis points for LBO/MBOs. On the contrary, facilities used to finance the purchase of vessels or to support a corporate promissory note have the lowest interest rates. This results, consistent with the findings in Booth (1992) and Angzabo et al. (1998), corroborates the view that banks extract the

bargaining power with the banks and more transparent financial conditions. Moreover, the syndication activity could exhibit some degree of increasing returns to scale.

Short-term loans have lower interest rates. This is consistent with the predictions of Flannery (1986), who suggests that longer maturity loans have a higher probability of default, and Diamond (1991), who shows that high risk firms choose longer maturity facilities in order to reduce refinancing risk. Furthermore, as suggested by Coleman et al. (2001), short-term facilities could reduce potential agency problems within the syndicate, imposing a more frequent monitoring of the behavior of both the borrower by part of the arranger, and of the arranger by part of the providers.

Consistent with the findings of the previous literature, interest rates on secured credit facilities are on average 40 basis points higher than on unsecured ones. As suggested by previous analyses, this evidence supports the hypothesis that banks require guarantees on riskier loans.[16]

Credit facilities in which the subscribers are allowed to transfer part of the loan on the secondary market have relatively lower interest rates, in harmony with the hypothesis that this option favors the lenders, while it may harm the borrower. Subordinated facilities have higher interest rates, so as to compensate the lenders for the higher credit risk. The coefficient of the dummy controlling for the renegotiation of an existing loan is not significantly different from zero. Privately placed facilities (club deals) have lower interest rates, possibly because they are underwritten within groups of borrowers with stronger relationships, where agency problems are lower. Finally, and quite surprisingly, the existence of an option to extend the size or the maturity of

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highest yields in riskier transactions and those where the borrower needs quick financing (Megginson et al., 1995).

[16] For a discussion of this issue see, among others, Smith and Warner (1979), Berger and Udell (1990), John et al. (2000).

the facility has a significant negative effect on the interest rate, despite the fact that it favors the borrower.

5.2 Discussion of Test Variables

The results reported in panel C of table 4 show that the degree of certification provided by the arranger has a significant effect on the interest rate charged on a syndicated credit facility. The coefficient of thelogarithm of the share of the facility retained by the arranger, our proxy for certification, is -7.4 and it is significantly different from zero at the 1 per cent level. An arranger increasing its retained share by one standard deviation from the average value (from 30 to 49 per cent, see table 3) gains for the borrower a lower spread with respect to the LIBOR of almost 5 basis points. These price changes are not huge, but the gains for borrowers are not trivial: for a facility of 85 million (the median amount) fully drawn during the median maturity of 4 years, they sum to US $170,000.

The coefficient of the dummy for the three arrangers with the largest market shares is -5, and it is only borderline significant at the 10 per cent level, suggesting that among the three effects related with reputation – certification ability, managerial skill and market power – the first two prevail.

Further, the coefficient of the share of the credit facility subscribed by each provider (expressed in log value) is positive and significantly different from zero at the 5 per cent level. This result confirms that the arrangers capable of placing a facility within a larger number of providers indeed gain lower interest rates for their borrowers: the marginal effect when the providers' share shrinks by one standard deviation from the average value (from 22 per cent to 6 per cent) is slightly less than 5 basis points.

Overall these results find support in favor of the main hypothesis of the paper, that arrangers providing a higher degree of certification of the financial conditions of the borrowers obtain lower interest rates for their clients.

5.3 Result of Sub-samples

It is widely agreed that the financial conditions of small firms are far less transparent than those of large, possibly public companies. The certification that an arranger provides by retaining a larger share of a syndicated credit facility is therefore likely to be more valuable in the case of facilities of lower size, which are typically granted to smaller borrowers. For these facilities, the effect of certification on the equilibrium interest rate should therefore be stronger. In order to test this hypothesis, we split our sample into two sub-samples, according to the size of the facility.[17] The results, reported in table 5, indicate that for smaller facilities the coefficient of the share of the loan retained by the arranger is -13.75 (and it is significantly different from zero at the 1 per cent level, panel A). An arranger increasing its retained share by one standard deviation from the average (from 40 to 58 per cent, table 3), gains for the borrower a lower spread with respect to the LIBOR of slightly more than 6 basis points. For a facility of $42 millions (the median amount) fully drawn during the median maturity of 3 years, the gains for borrowers sum to US $76,000.

On the contrary, for larger facilities the pricing effect of certification is not significantly different from zero. Moreover, the difference between the coefficients for smaller and larger loans is significant at the 5 per cent level (panel C). This evidence is consistent with the hypothesis that the certification provided by an

[17] As before, we follow Gande et al. (1999) considering small facilities those with a value of less than US $ 75 million.

arranger of a syndicated credit facility is not important in the case of larger operations, typically granted to borrowers with more transparent financial conditions.

As already said, it is possible that in the case of facilities with a too high risk to return ratio, the difficulty to find underwriters might force the arrangers to retain a large share in order to avoid a syndication failure ("to have a dog"). In order to control for this alternative explanation of the negative relationship between the share of the loan retained by the arranger and its interest rate, we analyze two sub-samples of syndicates that are most likely to be successful. First, assuming that a syndicate with a large number of subscribers is very unlikely to be a potential failure, we estimate equation (1) on a sample of small facilities (those with total value below US $ 75 million) in which the average share of each provider is below the median (22.7 per cent). The results, reported in Panel B of table 6, show that the coefficient of the arranger's retained share remains negative and significantly different from zero. [18] Second, we consider a sub-sample of facilities arranged by one of the three market leaders, judging that these banks are less likely to organize potential failures. The results, reported in panel A of table 6, show that also in this case the coefficient of the share of the loan retained by the arranger is negative and significantly different from zero.[19]

The results of the estimates on the two samples of credit syndicates that are less likely to be potential failures confirm that the negative coefficient of the share of the loan retained by the arranger is indeed a measure of the certification effect provided through risk retention.

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[18] In an unreported regression we also verified that the coefficient for the arranger's retained share is not statistically different from that obtained for the sub-sample of facilities with an above the median providers' share.

Finally, although this effect cannot be distinguished from that coming from superior managerial abilities, market leaders might provide additional certification because they put at stake their more valuable reputation. However, the results of the estimates on the sub-sample of facilities arranged by the three market leaders show that, at most, this effect is complementary to that coming from risk retention.

6 Conclusions

In this paper we have provided a direct test of banks' unique ability to mitigate informational asymmetries, by verifying whether syndicated loans in which a larger share of the facility is retained by the arranger are considered less risky by providers, and therefore have lower interest rates. Following the predictions of Gorton and Pennacchi (1995) for the case of loan sales, we have assumed that the degree of certification provided by the arranger is an increasing function of the share of the facility that it retains. Indeed, the larger is the share of credit risk held by the arranger, the greater will be its incentive to evaluate and monitor the borrower.

Our empirical results confirm the presence of a certification effect, showing that syndicated facilities in which the arranger retains a larger share have, ceteris paribus, lower interest rates. We also found evidence that such a certification effect is larger for smaller, potentially more opaque syndicated credit facilities, supporting the view that banks play a more valuable role in screening and monitoring the financial conditions of smaller and less reputable borrowers.

Our results do not vanish when we control for an alternative explanation of the negative relationship between the share of the facility retained by the arranger and the

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[19] Indeed, its absolute value is even larger than that estimated in the unreported regression on the sample of facilities arranged by non-leading banks, although the difference is not

interest rate charged on the loan, namely that in the case of facilities with a high risk to return ratio, providers will not be willing to subscribe the loan, forcing the arrangers to retain a large share in order to avoid a syndication failure ("to have a dog"). Moreover, we found evidence of a significant certification effect of a larger retained share also in the case of larger, more reputable arrangers.

However, in the case of larger loans (which represent less than half of the total number of facilities but ninety per cent of the total value of syndicated credits), we found no certification effect of a larger share retained by the arranger. For these facilities, typically granted to borrowers with more transparent financial conditions, interest rates appear to be fully accounted for by observable borrower- and deal-specific characteristics. The reasons for the success of syndicated credit facilities of larger size as a substitute for the issue of public debt is therefore to be found in other characteristics, such as their flexibility and timeliness.

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statistically significant.

Table 1

Syndicated Loans by Borrower's Nationality and Size

(columns: size of loan; rows: borrower's nationality)

The table refers to all credit facilities with a single arranger and for which it is available the information on the return expressed as a spread over the London Interbank offered rate (Libor). Amount is expressed in million of U.S. dollars; the number of facilities in units. In parenthesis are reported the ratios of totals across rows.

		[illegible] $25,000	> $25,000 and [illegible] $75,000	> $75,000 and [illegible] $150,000	> $150,000 and [illegible] $250,000	> $250,000 and [illegible] $500,000	> $500,000	Total
Canada	**Amt.**	400 (1)	2061 (4)	8035 (16)	6262 (12)	7745 (15)	25970 (51)	50472
	#	*28 (13)*	*42 (19)*	*70 (32)*	*32 (15)*	*22 (10)*	*26 (12)*	*220*
France	**Amt.**	87 (0)	1216 (6)	2764 (13)	1977 (9)	2564 (12)	12596 (59)	21204
	#	*5 (6)*	*27 (30)*	*24 (27)*	*11 (12)*	*8 (9)*	*15 (17)*	*90*
Germany	**Amt.**	97 (0)	444 (1)	1602 (5)	2157 (6)	3358 (10)	25546 (77)	33203
	#	*7 (10)*	*9 (13)*	*14 (20)*	*11 (16)*	*10 (14)*	*18 (26)*	*69*
Italy	**Amt.**	203 (1)	1353 (10)	1661 (12)	2659 (19)	3260 (24)	4542 (33)	13677
	#	*12 (14)*	*29 (35)*	*16 (19)*	*14 (17)*	*8 (10)*	*5 (6)*	*84*
Japan	**Amt.**	57 (0)	165 (1)	1484 (5)	1546 (6)	1051 (4)	23268 (84)	27571
	#	*4 (8)*	*4 (8)*	*15 (29)*	*8 (16)*	*3 (6)*	*17 (33)*	*51*
United Kingdom	**Amt.**	690 (0)	7778 (4)	19081 (10)	25212 (14)	42407 (23)	89959 (49)	185126
	#	*57 (8)*	*151 (21)*	*175 (25)*	*130 (18)*	*118 (17)*	*76 (11)*	*707*
United States	**Amt.**	41957 (2)	174299 (10)	248625 (14)	214666 (12)	305638 (17)	786236 (44)	1771421
	#	*3007 (27)*	*3553 (32)*	*2205 (20)*	*1058 (9)*	*844 (7)*	*609 (5)*	*11276*
Other countries	**Amt.**	5868 (3)	24244 (11)	41240 (19)	32251 (15)	44382 (20)	73586 (33)	221572
	#	*400 (25)*	*499 (31)*	*369 (23)*	*161 (10)*	*129 (8)*	*66 (4)*	*1624*
Total	**Amt.**	49358 (2)	211559 (9)	324492 (14)	286730 (12)	410404 (18)	1041702 (45)	2324246
	#	*3520 (25)*	*4314 (31)*	*2888 (20)*	*1425 (10)*	*1142 (8)*	*832 (6)*	*14121*

Table 2

Syndicated Loans by Loan Purpose and Maturity

(columns: Class of original maturity; rows: loan purpose)

The table refers to all credit facilities with a single arranger and for which it is available the information on the return expressed as a spread over the London Interbank offered rate (Libor). Amount is expressed in million of U.S. dollars; the number of facilities in units. In parenthesis are reported the ratios of totals across rows.

		0-12 Months	12-36 Months	36-60 Months	60+ Months	Unknown	Total
Standby/ CP support	**Amt.**	104248 (53)	76568 (39)	10972 (6)	1140 (1)	2994 (2)	195922
	#	*132 (42)*	*149 (47)*	*14 (4)*	*2 (1)*	*18 (6)*	*315*
Working capital/ Gen. Corporate	**Amt.**	58776 (35)	80117 (47)	9962 (6)	200 (0)	21266 (12)	170322
	#	*386 (23)*	*1011 (61)*	*87 (5)*	*1 (0)*	*173 (10)*	*1658*
Refinancing / Debt Repayment	**Amt.**	194914 (22)	504621 (57)	144892 (16)	2620 (0)	45688 (5)	892736
	#	*571 (13)*	*2908 (65)*	*670 (15)*	*16 (0)*	*331 (7)*	*4496*
Project financing	**Amt.**	1796 (2)	13604 (18)	28860 (37)	30803 (40)	2372 (3)	77435
	#	*16 (4)*	*110 (26)*	*170 (40)*	*112 (26)*	*20 (5)*	*428*
Acquisition	**Amt.**	73002 (26)	129973 (45)	71112 (25)	816 (0)	10929 (4)	285831
	#	*173 (14)*	*644 (53)*	*327 (27)*	*9 (1)*	*73 (6)*	*1226*
LBO / MBO	**Amt.**	1791 (3)	8612 (15)	43965 (75)	2471 (4)	1476 (3)	58316
	#	*6 (2)*	*71 (23)*	*209 (69)*	*3 (1)*	*16 (5)*	*305*
Others	**Amt.**	21508 (18)	54537 (45)	27099 (22)	7266 (6)	10195 (8)	120606
	#	*117 (13)*	*439 (49)*	*188 (21)*	*62 (7)*	*95 (11)*	*901*
Unknown	**Amt.**	101451 (19)	222486 (43)	67830 (13)	1815 (0)	129498 (25)	523078
	#	*713 (15)*	*2420 (51)*	*542 (11)*	*17 (0)*	*1100 (23)*	*4792*
Total	**Amt.**	557485 (24)	1090518 (47)	404693 (17)	47132 (2)	224418 (10)	2324246
	#	*2114 (15)*	*7752 (55)*	*2207 (16)*	*222 (2)*	*1826 (13)*	*14121*

Table 3

Descriptive Statistics

Panel A refers to all credit facilities with a single arranger and for which the return is expressed as a spread over the London Interbank offered rate (Libor). Panel B refers to all credit facilities with a single arranger where the fraction retained by the arranger is available. Panel B presents two sample-splits. The first refers to credit facility with amount <= (>) $75 million; the second refers to credit facilities where the arranger is (is not) one of the top 3 leaders in the market. Drawn return is the annual return expressed in basis point over the Libor that will accrue to a senior provider if the facility is fully drawn throughout its life. Spread is the margin expressed in basis point over the Libor. Amount is expressed in million of US dollars. Number of providers is the number of institutions that have participated in a facility as a provider of funds (including the arranger). Amount per provider is expressed in million of U.S. dollars. The provider's share (when available) is the fraction of funds provided on average by the providers (excluding the arranger). The arranger's share (when available) is the fraction of funds provided by the arranger. Maturity is expressed in months.

Variables	Obs.	Median	Mean	Std. Dev.	Min.	Max.
Panel A: All Credit Facilities with mono arranger						
Drawn return	14121	150.0	163.1	95.7	17.0	450.0
Spread	14121	150.0	161.7	95.5	16.6	450.0
Amount	14121	65.0	164.6	424.1	0.2	15000.0
Maturity (months)	12295	36.0	46.6	32.4	1.0	360.0
Panel B: Credit facilities with a single arranger and for which the information on the fraction retained by the arranger is available						
Drawn return	2951	137.5	149.4	93.0	17.0	450.0
Spread	2951	130.0	147.2	92.3	17.0	450.0
Amount	2951	85.0	178.2	408.3	2.8	12000.0
Number of providers	2951	5.0	6.9	6.5	2.0	93.0
Provider's share	2951	18.1	22.4	16.3	0.3	97.3
Arranger's share	2951	26.7	30.1	18.7	0.0	96.0
Maturity (months)	2818	48.0	48.8	28.8	1.0	321.0
Large credit facilities (amount > $75 million)						
Drawn return	1580	105.0	132.6	92.4	17.0	450.0
Spread	1580	100.0	130.6	91.0	17.0	450.0
Amount	1580	160.0	296.2	530.2	75.3	12000.0
Number of provider	1580	8.0	9.8	7.6	2.0	93.0
Provider's share	1580	12.0	15.0	12.0	0.3	94.5
Arranger's share	1580	18.5	21.7	15.2	0.0	92.1
Maturity (months)	1507	59.0	52.2	31.0	1.0	321.0
Small credit facilities (amount <= $75 million)						
Drawn return	1371	156.3	168.6	89.9	18.8	450.0
Spread	1371	150.0	166.4	90.2	18,8	450.0
Amount	1371	42.0	42.1	19.2	2,8	75.0
Number of providers	1371	3.0	3.7	2.2	2.0	25.0
Provider's share	1371	27.2	30.9	16.5	2.2	97.3
Arranger's share	1371	40.0	39.7	17.6	0.0	96.0
Maturity (months)	1311	36.0	45.0	25.5	1.0	180.0
Small credit facilities where the providers share is below the sample median						
Drawn return	687	144.2	153.1	89.2	18.8	425.0
Spread	687	137.5	149.7	89.3	18.8	425.0
Amount	687	50.0	47.3	19.0	3.4	75.0
Number of providers	687	4.0	5.0	2.5	2.0	25.0
Provider's share	687	19.2	18.5	5.3	2.2	27.2
Arranger's share	687	33.3	35.8	18.4	0.0	96.0
Maturity (months)	670	40.0	47.6	27.0	1.0	180.0
Small credit facilities where the arranger is one of the top 3 market leaders						
Drawn return	332	150.0	168.5	91.0	22.5	450.0
Spread	332	150.0	166.8	90.4	22.5	450.0
Amount	332	50.0	45.5	19.2	6.0	75.0
Number of providers	332	3.0	3.7	2.3	2.0	6.0
Provider's share	332	27.4	31.7	16.9	5.5	92.3
Arranger's share	332	40.0	39.8	17.7	4.3	92.9
Maturity (months)	315	36.0	42.7	32.5	1.0	120.0

Table 4

Effect on Spreads

Panel A reports the results of estimating equation (1) for the entire sample. Panel B reports the results of estimating equation (1) of the paper for facilities with mono arranger where the fraction retained by the arranger is available. Facility size is expressed in million of U.S. dollars. Top3 is a dummy variable that takes value 1 if the arranger is one of the top 3 leaders in the market. The provider's share (when available) is the fraction of funds on average provided by a single provider. The arranger's share (when available) is the fraction of funds provided by the arranger. Renegotiation is a dummy variable that takes value 1if the facility is a renegotiation of an existing facility and 0 otherwise. Club is a dummy variable that takes value 1if the loan is sold on a club base and 0 otherwise. Transfer is a dummy variable that takes value 1 if it is possible for a syndicate member to transfer part of the loan on the secondary market and 0 otherwise. Secured is a dummy variable that takes value 1if the loan is backed by a specific assets or revenues of the borrower and 0 otherwise. Extension is a dummy variable that takes value 1if the facility provides an extension option. Heteroskedasticity robust standard errors are reported in parentheses. The symbol *** indicates a significance level of 1 per cent or less; ** between 1 and 5 per cent; * between 5 and 10 per cent.

	Panel A:	Panel B:	Panel C:
Variables	Entire sample	Sample where the Arranger's share is available	Sample where the Arranger's share is available
Arranger's share			-7.42 ***
			(2.22)
Provider's share			6.49 **
			(3.14)
Top 3	-6.03 ***	-4.96	-5.09 *
	(1.43)	*(3.10)*	*(3.10)*
Facility size (log value)	-11.29 ***	-15.40 ***	-15.67 ***
	(0.60)	*(1.50)*	*(2.15)*
0-12 Months	-30.17 ***	-30.02 ***	-30.31 ***
	(2.93)	*(8.37)*	*(8.39)*
12-36 Months	-14.18 ***	-18.49 **	-17.95 **
	(2.58)	*(7.46)*	*(7.47)*
36-60 Months	1.41	-2.17	-2.06
	(3.08)	*(7.96)*	*(7.97)*
60+ Months	-9.25	-29.89 **	-28.48 **
	(5.90)	*(12.88)*	*(13.09)*
Renegotiation	13.44	29.77	27.79
	(11.94)	*(18.51)*	*(19.22)*
Club	-6.46 *	-11.61 *	-11.99 *
	(3.46)	*(6.43)*	*(6.42)*
Transfer	-6.45 ***	-7.34 **	-7.23 **
	(1.67)	*(3.24)*	*(3.24)*
Subordinated	16.61		
	(54.36)		
Extension	-9.55 ***	-17.19 ***	-16.58 ***
	(2.21)	*(3.71)*	*(3.71)*
Secured	39.20 ***	43.11 ***	42.48 ***
	(1.64)	*(3.29)*	*(3.29)*
Constant	260.35 ***	271.27 ***	274.87 ***
	(5.33)	*(14.68)*	*(23.22)*
No. of Observations	14,121	2,951	2,951
R-Square	0.419	0.496	0.500
Degrees of freedom		2,745	2,743

Table 5

Robustness Check:
Effect on Spreads by Size of the Facility

Panel A reports the results of estimating equation (1) for small facilities (below US $75 million). Panel B reports the results of estimating equation (1) for large facilities (above US $75 million). In Panel C we report the value of an F-test on the significance of the difference of the coefficients for small and large facilities. Facility size is expressed in million of U.S. dollars. Top3 is a dummy variable that takes value 1 if the arranger is one of the top 3 leaders in the market. The provider's share (when available) is the fraction of funds on average provided by a single provider. The arranger's share (when available) is the fraction of funds provided by the arranger. Renegotiation is a dummy variable that takes value 1if the facility is a renegotiation of an existing facility and 0 otherwise. Club is a dummy variable that takes value 1if the loan is sold on a club base and 0 otherwise. Transfer is a dummy variable that takes value 1 if it is possible for a syndicate member to transfer part of the loan on the secondary market and 0 otherwise. Secured is a dummy variable that takes value 1if the loan is backed by a specific assets or revenues of the borrower and 0 otherwise. Extension is a dummy variable that takes value 1if the facility provides an extension option. Heteroskedasticity robust standard errors are reported in parentheses. The symbol *** indicates a significance level of 1 per cent or less; ** between 1 and 5 per cent; * between 5 and 10 per cent.

Variables	Panel A: Small Facilities (Less than US $75 million)	Panel B: Large Facilities (More than US $75 million)	Panel C: Difference Test (Small vs. Large Facilities)
Arranger's share	-13.75 ***	-2.80	4.84 **
	(4.05)	*(2.90)*	
Provider's share	5.68	1.78	0.35
	(5.31)	*(3.97)*	
Top 3	-6.99	-3.43	0.29
	(5.20)	*(4.08)*	
Facility size (log value)	-15.20 ***	-11.49 ***	0.51
	(4.00)	*(3.32)*	
0-12 Months	-31.78 **	-34.79 ***	0.03
	(14.30)	*(10.92)*	
12-36 Months	-19.83	-20.70 **	0.00
	(12.55)	*(10.13)*	
36-60 Months	-14.38	2.71	0.99
	(13.25)	*(10.99)*	
60+ Months	-2.62	-21.24	0.40
	(23.48)	*(18.14)*	
Renegotiation	43.91	44.20 *	0.00
	(28.29)	*(23.18)*	
Club	-2.48	-22.35 **	2.01
	(8.90)	*(10.80)*	
Transfer	-14.27 ***	-0.87	3.95 **
	(5.07)	*(4.45)*	
Extension	-11.51 *	-18.32 ***	0.71
	(6.63)	*(4.62)*	
Secured	44.78 ***	38.93 ***	0.73
	(4.97)	*(4.70)*	
Constant	315.28 ***	242.22 ***	2.24
	(38.37)	*(34.11)*	
No. of Observations	1,371	1,580	
R-Square	0,38	0,50	
Degrees of freedom	1,185	1,393	

Table 6

Robustness Check: Effect on Spreads by Arranger's Reputation and Provider's Share in Small Facilities

Panel A reports the results of estimating equation (1) for small facilities (below US $75 million) where the arranger is one of the top 3 leaders in the market. Panel B reports the results of estimating equation (1) for small facilities (facilities below US $75 million) where the provider's share is below the sample median (0.272). Facility size is expressed in million of U.S. dollars. The provider's share (when available) is the fraction of funds on average provided by a single provider. The arranger's share (when available) is the fraction of funds provided by the arranger. Renegotiation is a dummy variable that takes value 1if the facility is a renegotiation of an existing facility and 0 otherwise. Club is a dummy variable that takes value 1if the loan is sold on a club base and 0 otherwise. Transfer is a dummy variable that takes value 1 if it is possible for a syndicate member to transfer part of the loan on the secondary market and 0 otherwise. Secured is a dummy variable that takes value 1if the loan is backed by a specific assets or revenues of the borrower and 0 otherwise. Extension is a dummy variable that takes value 1if the facility provides an extension option. Heteroskedasticity robust standard errors are reported in parentheses. The symbol *** indicates a significance level of 1 per cent or less; ** between 1 and 5 per cent; * between 5 and 10 per cent.

Variables	Panel A		Panel B	
	Facilities where the arranger is a market leader		Small Provider's Share (below the sample median)	
Arranger's share	-31.37	**	-11.66	**
	(13.66)		*(4.94)*	
Provider's share	15.73		-21.77	**
	(12.81)		*(10.15)*	
Top 3			-6.56	
			(7.99)	
Facility size (log value)	-35.45	***	-16.14	**
	(10.33)		*(7.09)*	
0-12 Months	-3.17		-41.63	*
	(29.08)		*(23.05)*	
12-36 Months	9.58		-8.45	
	(26.51)		*(20.83)*	
36-60 Months	-37.58		2.99	
	(31.68)		*(22.35)*	
60+ Months			36.79	
			(32.20)	
Renegotiation			35.80	
			(38.56)	
Club	-11.86		-5.39	
	(23.84)		*(12.64)*	
Transfer	-17.64		-12.73	*
	(12.70)		*(7.52)*	
Extension	-16.65		-5.62	
	(18.08)		*(9.96)*	
Secured	49.38	***	45.47	***
	(12.05)		*(8.37)*	
Constant	355.69	***	*377.58*	***
	(102.28)		*(67.63)*	
No. Of Observations	332		687	
R-Square	0.35		0.41	
Degrees of freedom	220		517	

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