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On syndicate composition, corporate structure and the certification effect of credit ratings

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ABSTRACT

We assess the relative importance of ratings versus stock exchange listings in reducing information asymmetry using a dataset of syndicated loans to public and private firms in the UK. We find that the certification effect of ratings is largest for private firms and that syndicates are smallest if firms are privately held or unrated. Moreover, we find that the marginal effect of being stock exchange listed is insignificant once these firms are rated. Exploiting the heterogeneity among lenders, we find that especially foreign bank and non-bank investors do not provide capital if firms are unrated. Our paper highlights the information produced by rating agencies as an important mechanism by which ratings improve access to capital. Our results also emphasize the importance of syndicate moral hazard on the supply of uninformed capital: bank–borrower relationships significantly increase the loan share syndicated to investors particularly if firms are not listed and unrated.

1. Introduction

The syndicated loan market is an important source of global corporate finance, exceeding the total annual issuance volume of equity and bond markets. A significant portion of these loans have been allocated to private and unrated firms.[1] Information asymmetry therefore plays a key role in the development of this market. Information frictions caused by borrower adverse selection or moral hazard can be mitigated if lending is performed by a single lender (Diamond, 1984; Ramakrishnan and Thakor, 1984; Fama, 1985) which can be even further improved if this lender has prior relationships with this borrower (Boot, 2000). However, in a syndicated loan setting, where the loan is shared among multiple lenders, there is an additional element of moral hazard between the lead arranger and other syndicate members (Holmstrom and Tirole, 1997) which is referred to as "syndicate moral hazard" in the literature. The lead arranger has an incentive to shirk on his monitoring effort because he only keeps a fraction of the loan in its own books. Syndicate moral hazard is important because it has substantial supply side effects, i.e. investors who are not familiar with the borrower (the "uninformed investors") are not willing to provide capital (Sufi, 2007). Mitigating information problems is therefore at the heart of much economic literature.

In this paper, we assess the relative importance of ratings versus stock exchange listing at reducing information asymmetry. We address this issue by explicitly investigating whether syndicates are larger (and therefore the supply of available debt financing) if firms are rated rather than stock exchange listed. As there is no financial data on private US firms readily available, we use a dataset of syndicated loans taken out by public and private firms in the UK over the period from 1996 to 2007. We exploit a specific institutional feature in the UK related to the corporate structure of firms: firms can either be private limited liability companies ("private") or public limited liability companies ("public") which in turn can either be "listed" or "not listed". Both private and public firms can be "rated" or "unrated". We exploit this heterogeneity to assess the marginal impact of being rated rather than listed on syndicate composition and the supply of uninformed capital.

Existing research highlights the importance of credit ratings. Kisgen (2006) provides evidence that ratings affect capital structure decisions if firms are near a credit rating upgrade or downgrade. Faulkender and Petersen (2006) find that credit ratings are associated with better access to public debt markets and higher leverage. Sufi (2009) examines the effects of the introduction of

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[1] Between 1987 and 2007, more than 50% of the syndicated loans have been allocated to private borrowers in the US (Saunders and Steffen, 2009).

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bank loan ratings and finds that bank loan ratings increase the access of borrowers to debt financing, lead to higher leverage, higher asset growth and more investment in working capital. Our paper contributes to this literature analyzing the relative importance of credit ratings and stock exchange listings at expanding the supply of debt financing.

We find that loans to opaque firms have much smaller syndicates than do transparent firms. For example, we find that the number of lenders would be expected to decrease by a factor of 0.84 (0.80) if loans are allocated to private (unrated) firms relative to transparent firms. Further, unrated listed firms have significantly smaller syndicates than do listed and rated firms. The marginal effect of being rated is larger for not-listed than for listed firms.

Next, we use the number of foreign banks and non-bank investors as dependent variables. We find that the smallest syndicates are associated with private and unrated firms; in other words, credit rating certification is critical to the supply of debt financing. We also find that public and rated (but not listed) firms have the same number of lenders as stock exchange listed and rated firms, i.e. the marginal effect of being stock exchange listed is insignificant. However, the number of lenders declines by a factor of 0.80–0.83 if firms are listed but not rated (holding everything else constant).

Overall, our results suggest that the information produced by rating agencies is an important mechanism by which ratings improve access to capital.

The model by Holmstrom and Tirole (1997) implies that syndicate moral hazard is an important determinant of the supply of uninformed capital. Informed lenders need to hold a financial stake in the borrower to certify his quality before uninformed lenders invest. The empirical literature has just started to examine syndicate moral hazard (Sufi, 2007; Bharath et al., forthcoming). We provide further evidence for syndicate moral hazard evaluating the effect of being opaque (for example, being unrated or private) on syndicate structure for relationship versus non-relationship borrowers. Relationships are important and generate private information to banks about the clients (Fama, 1985). A testable hypothesis is that, if borrowers are opaque, relationship lenders keep a smaller share of the loan. We use three proxies for prior bank–borrower relationships measuring the existence and strength of the relationship. We find that relationships significantly reduce the financial stake lead arrangers have to hold in the borrower if firms are unrated. Moreover, this effect is particularly strong if firms are not stock exchange listed and unrated. In other words, if borrowers are opaque, the information gained in bank–borrower relationships is important as it reduces the amount of informed capital needed in the economy. Our results are consistent with syndicate moral hazard being an important determinant of the supply of debt financing.

We perform several robustness tests using OLS, Poisson and negative binomial models. We further estimate the regressions in reduced form and include borrower fixed effect to control for endogeneity. Additionally, we use an instrumental variable approach to address the endogeneity concerns associated with being rated and several tests to address selection into being private or stock exchange listed. All of our previous results hold.

This article is related to three strands of existing research. First, it is related to the literature on how syndicated loans are structured (Panyagometh and Roberts, 2002; Lee and Mullineaux, 2004; Jones et al., 2005; Sufi, 2007; Champagne and Kryzanowski, 2007; Maskara, 2010), why loans are syndicated (Simons, 1993; Dennis and Mullineaux, 2000) and how syndicated loans are priced (Hao et al., 2006; Ivashina, 2009; Santos and Winton, 2008; Bharath et al., forthcoming; Hale and Santos, 2008; Norden and Wagner, 2008). It also relates to several international studies examining syndicate structures across countries (Esty and Megginson, 2003; Esty, 2004; Qian and Strahan, 2005). Second, this paper also contributes to the literature that argues that access to debt financing affects firm financing and investment policy (Faulkender and Petersen, 2006; Kisgen, 2006; Sufi, 2009). Third, it relates to the broader literature on the importance of credit rating agencies (see, for example, Bannier and Hirsch, 2010; Boubarki and Ghouma, 2010; Lu et al., forthcoming).

The paper is structured as follows. The next section describes the theoretical motivation and hypothesis of this paper. Section 3 presents the data and methodology. Section 4 presents the analysis and Section 5 discusses the results and shows several robustness checks. The last section concludes.

2. Credit ratings, corporate structure and the supply of uninformed capital

The empirical analysis is motivated by the model of Holmstrom and Tirole (1997), who identify under which circumstances and in which proportions firms are financed by informed and uninformed capital. There are informational frictions between borrowers and lenders due to borrowers' incentives to divert cash or to engage in excessive risk taking (borrower moral hazard). Informed lenders exert monitoring effort to mitigate borrower moral hazard. In a syndicated loan setting, lead arrangers monitor borrowers on behalf of the participant lenders.[2] This gives rise to an additional element of moral hazard. As monitoring is costly and unobservable but the proceeds of the loan are split among all lenders, the monitoring bank has incentives not to exert the optimum monitoring effort (syndicate moral hazard).[3] Uninformed lenders are only willing to invest in the loan if the informed lender keeps a portion of the loan on its own books.

Lead arrangers essentially perform two functions, a monitoring and an information production function. They monitor borrowers over the lifetime of the loan; furthermore, they produce, evaluate and disseminate information about the borrower to investors, certifying the reputation of the borrower. As certification is particularly important in high information asymmetry environments, lead arrangers have to keep a larger share in these loans to mitigate the syndicate moral hazard problem.

The supply of uninformed capital can be expanded if investors can rely on credit ratings and additional information associated with being stock exchange listed (e.g. analyst reports). Credit ratings are based on both public and nonpublic information.[4] One important dimension of public information is financial statements. Nonpublic information is received in conference calls or meetings with the management of the firm and frequently contains confidential information, e.g. a breakdown of profits by products or plans to launch new product lines (Jorion et al., 2005). Stock analysts also evaluate public and nonpublic firm information and provide their assessment and opinion to investors.

In this paper, we hypothesize that ratings are more important in reducing information asymmetry than are stock exchange listings because of the following reasons: First, credit ratings drive managerial decision making. Managers adjust their capital structure near a rating upgrade or downgrade (Kisgen, 2006). Additionally, ratings can negatively affect the business of firms: long-term supply contracts may require the firm to maintain a specific credit

[2] The rationale is given in Diamond (1984): lenders give the monitoring task to one single lender to avoid duplication of monitoring costs and free riding in monitoring.

[3] A few papers have recently started to investigate syndicate moral hazard problems (Sufi, 2007; Bharath et al., 2009).

[4] This distinction is rather broad and does not fully reflect the different types of information present in the syndicated loan market. Taylor and Sansone (2006) for example provide an overview of these information types.