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Bank ownership and connected lending

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ABSTRACT

Bank ownership concentration may not only induce banks' controlling owners to become involved in connected lending but also deter them from doing so. This paper examines how the cash flow rights of the banks' controlling owners are associated with the need for special connections with banks, which is a proxy measure of connected lending. Using data from more than 2,600 firms across 25 countries, this study finds that the cash flow rights increase the need for special connections, but the increase becomes smaller as the cash flow rights increase. No evidence is found that the cash flow rights result in a decrease in the need for special connections.

1. Introduction

It is widely accepted that banks play an important role in resource allocation. With delegated monitoring, banks should allocate resources to their best uses. Nevertheless, in reality, banks may engage in connected lending. Specifically, banks may extend loans to some borrowers based on the fact that they are connected or related, rather than on borrower characteristics. Charumilind, Kali, and Wiwattanakantang (2006) found that Thai firms related to some prominent families have better access to long-term loans and have more assets and sales than unrelated firms. Beck, Demirguc-Kunt, and Maksimovic (2005) also found that firms reporting being constrained by the need for special connections with banks have slower growth rates. Their findings suggest that connected lending can adversely affect resource allocation.

Firms' needs for special connections with banks in order to obtain loans has been shown by Dheera-aumpon (2013) to be positively associated with the control rights of the banks' controlling owners. It is intuitive because, as argued by Levine (2004), banks' controlling owners may exploit their relationships with non-bank firms in order to benefit themselves. Specifically, they may channel funds to their own non-bank businesses or those connected with them. This makes it harder for unconnected businesses to obtain loans. In other words, more connected lending results in a higher need for special connections with banks. This result suggests that the control rights in excess of cash flow rights owned by the banks' controlling owners should be decreased in order to reduce connected lending and thereby reduce the need for special connections with banks. The result, however, does not indicate whether the cash flow rights of the banks' controlling owners should also be reduced.

The excess control rights of the banks' controlling owners apparently can tempt them to engage more in connected lending, because the excess control rights give them control power without the cost of a greater stake in the potential loss from connected loans. However, it is uncertain whether the cash flow rights of the banks' controlling owners induce them to engage more in connected lending. This is because the cash flow rights give them control power but at the cost of a greater stake in the potential loss. It is

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therefore unclear whether the cash flow rights of the banks' controlling owners should be reduced. It may be better to have banks' controlling owners with high cash flow rights than to have controlling owners with limited cash flow rights or no controlling owner at all.

In this study, the need for special connections with banks is used as a proxy measure of connected lending. Different from other studies such as Charumilind et al. (2006) and Cull, Haber, and Imai (2011), this study uses firms' responses to a survey question rather than prominent families' ownership of firms or bank regulations to proxy for connected lending. A firm's response should be a relatively close proxy measure of connected lending compared to measurements used in previous studies.

It is important to note that the need for special connections is different from the corruption of bank officials. Dheera-aumpon (2013) shows that the control rights of the banks' controlling owners are related differently to the former and the latter. The corruption of bank officials has been considered by numerous studies, including Beck, Demirguc-Kunt, and Levine (2006), Barth, Lin, Lin, and Song (2009), and Houston, Lin, and Ma (2011). The need for special connections with banks, however, has been investigated by just a few studies. This paper, which aims to study how the cash flow rights of the banks' controlling owners affect the need for special connections with banks, thus contributes to the literature on connected lending.

A simple model of connected lending is presented to show that the cash flow rights of the banks' controlling owners can have a non-monotone effect on connected lending. When the banks' controlling owners have a low level of cash flow rights, connected lending rises; when they have a high level, it falls. This paper uses data on more than 2,600 firms across 25 countries to examine whether this proposition is correct. Similar to Dheera-aumpon (2013), the firm-level data are from the World Business Environment Survey (WBES) conducted by the World Bank. It includes information on the degree to which the need for special connections with banks affects the raising of external finance. A high level of this need indicates a high prevalence of connected lending. The bank ownership data are from Caprio, Laeven, and Levine (2007), which includes information on the cash flow rights of the banks' controlling owners.

The results indicate that the cash flow rights of the banks' controlling owners cause an increase in connected lending, but the increase becomes smaller as the cash flow rights increase. In contrast to the model's prediction, a high level of cash flow rights does not cause a reduction in connected lending. The results therefore suggest that in order to reduce connected lending, the cash flow rights of the banks' controlling owners should be reduced, and they should be reduced considerably if they are at a high level. The results are robust to controlling for various firm-level and country-level factors. They are also robust when the instrumental variables approach is used.

The remainder of the paper is organized as follows. Section 2 presents a simple model of connected lending. Section 3 presents the data and the method. Section 4 discusses the results, Section 5 tests the robustness of the results, and Section 6 concludes.

2. Simple model of connected lending

This section presents a model of connected lending which is developed along the lines of Boot and Thakor (1993) and Laeven (2001). Connected lending is modeled as a situation in which the bank's controlling owner extends loans of inferior quality at lower interest rates to himself or his connected parties. For simplicity, the possibilities that connected loans may have advantages from banking relationships with the loans' recipients and that connected parties might have fewer incentives than unconnected parties to repay are ignored. In the model, the bank's controlling owner who is also a director can approve a loan to finance a project, including his own or connected parties. Because the controlling owner's power increases with his control rights, the bank's controlling owner has a greater capability to approve connected loans if he has a larger equity share in the bank. It is, however, unclear whether the controlling owner finds it worthwhile to approve connected loans. The controlling owner faces a trade-off between the benefit from a cheaper loan and the loss of value of his equity share in the bank. In particular, the controlling owner approves a connected loan only if his benefit from a connected loan exceeds a decrease in his equity value.

The bank can approve a loan of one dollar to finance a project that requires an investment of one dollar and yields some expected return. Specifically, a project gives a return of $\tilde{R} = R(\theta) > 0$ with probability θ and 0 with probability $1 - \theta$, with $R'(\theta) < 0$ and $R''(\theta) \le 0$. Therefore, θ can be regarded as the loan quality. For simplicity, it is assumed that there is no moral hazard, meaning that the bank has full information about θ. It is also assumed that an unlimited range and amount of projects are available to the bank. This means that the bank can choose the project to be financed; that is, it can choose θ (the loan quality). The loan is financed with K dollars of book equity capital and $1 - K$ dollars of deposits. The bank pays the depositors r^f, the gross risk-free rate of interest. It is also assumed that depositors do not exercise market discipline on banks.

Once the bank realizes the return $\tilde{R}$, the bank is closed if $\tilde{R}$ is less than its obligation to depositors, $(1 - K)r^f$. This means that when the financed project fails or realizes a return of zero, the bank defaults on its deposit liabilities and become insolvent. If there is no connected lending, the controlling owner who is also a director chooses θ to maximize the expected net return, $\theta\{R(\theta) - (1 - K)r^f\}$. This gives the optimal loan quality

$$\hat{\theta} = \frac{-R\left(\hat{\theta}\right) + (1-K)r^f}{R'\left(\hat{\theta}\right)}. \tag{1}$$

It is assumed that $R(\hat{\theta}) > (1-K)r^f$; that is, the optimal choice of loan quality gives a positive net return to the bank if the financed project succeeds.