Do Political Connections Help Firms Gain Access to Bank Credit in Vietnam?

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Abstract

One of the major contributing factors to Vietnam's macroeconomic instability has been the massive growth of credit inflows and its often inefficient allocations. Vietnam is in a state of economic transition from state-planned to open market based. The private sector has grown very rapidly but private firms' demand for credit is still largely crowded out by the state sector. This paper specifically focuses on the use and impact of political connections by private firms to gain access to bank loans. More generally, this is one issue resulting from, and contributing to, the inequality of credit distribution across the Vietnam's economy. Using individual company level data from 2007 to 2009 inclusive, this paper finds that exercising political connections increases a private firm's probability of accessing a loan by 4.7%. In testing the effect of political connections on loan terms, this analysis found that firms with political connections also paid a price in the form of higher interest rates. Indeed private firms trying to access bank credit apparently pay a premium to their Vietnamese bankers in return for their privileged relationship. This suggests that the benefit of political connections translates into an extra financial advantage to both the lender and borrower.

I. Introduction

Vietnam is in the midst of transitioning from a primarily socialist state-run economy to a market driven economy. This has been extremely beneficial in terms of aggregate economic growth and capital inflows but due to a lack of regulation and financial sector development, these capital increases have often been directed towards speculative, short term, and opportunistic areas rather than long term fundamental investments. For private firms in the newly open economy, access to bank credit is an essential need for growth and success. However, political connections that still informally exist between the state financial sector, privatized firms (formerly state-owned firms), and new private enterprises direct bank financing towards these politically connected firms. Concurrently though, private banks have taken major steps forward, increasing their market share in the financial sector (Leung, 2009). I aim to examine two major issues: the extent to which firms with political connections receive increased access to bank credit and whether firms with political connections gain any benefit on their loan terms.

In 1986 Vietnam embarked on a future altering path of legal, institutional, and regulatory reform. Vietnam's Government put forward a new policy called "Doi Moi" or "renewal" which allowed for the creation of a new and formal enterprise law (Hau and Dickie, 2006). Successive enterprise reform and private sector enabling decrees set in motion the abandonment of the previously centrally planned economy for the evolution of Vietnam's own brand of a "socialist market economy". This process has been increasingly effective and there have been several revisions and additions to the law and policy since 1986.

Enterprise law has spurred the growth of private sector enterprises (Hansen, Rand, and Tarp, 2000) leading to substantial economic growth of 7-8 percent per year, second only to China (Hau and Dickie, 2006). The growth of the market economy and private sector has also spurred the growth of new, market driven, strategic methods of doing business. Much research has shown that emerging markets and small firms often suffer from a lack of available credit (Berger and Udell, 2002). The World Bank (2006) has stated that "access to finance" is one of the biggest constraints to fostering business growth, particularly in transitional economies and developing countries that can no longer rely directly on government support. As such, the development of stable and sound financial and banking institutions is of the utmost importance.

A large amount of research has been dedicated to the understanding of legal and financial institutions and their roles and impacts on economic growth. Indications are that without "strong legal institutions, financial flows to potentially profitable companies are curtailed, and as a result, overall economic growth is hampered" (Malesky and Taussig, 2008). A major issue here is that in Vietnam's rush to liberalize the financial sector they have not been able to establish sound oversight and regulatory bodies. At the same time Vietnam has allowed the number of banks to skyrocket (Fulbright Economics Teaching Program [FETP] Policy Discussion Paper [PDP] No. 2, 2008). This raises the question of how one can reconcile Vietnam's strong economic growth with the inconsistencies that still exist around credit access.

Vietnam presents an interesting case because it actually ranks 30th out of 183 countries in terms of getting credit in a general sense (World Bank, 2010). This is a very positive sign. The problem that my research then aims to explore is the issue of equality of

credit allocation across companies, industries, and sectors. In both the banking sector and across the rest of the economy many businesses have developed through staged and partial privatization concurrent with the creation of thousands of new small and medium sized startup enterprises (SMEs). This has lead to an expanding private sector co-existing with a gradually diminishing state enterprise sector. However, since the private sector is relatively young and the fact there is high SME turnover (Hansen et al., 2004), fair credit access is very important for firm growth. Thus, if small firms constrained by internal finances cannot get loans through formal channels because they are crowded out by state owned enterprises (SOEs), they may resort to other methods such as leveraging their political connections with state institutions.

The deposit and lending markets have changed quite dramatically between 2005 and 2007. For state owned commercial banks (SOCBs), their deposit market share of the financial sector has decreased from 78.6% to 58.0% and their lending market share of the financial sector has decreased from 68% to 54% (Leung, 2009). On the other hand, for Joint Stock Banks (JSBs), which are privately owned banks, their deposit market share has increased from 14.3% to 29% and their lending market share has increased from 16% to 38% (Leung, 2009). The remaining market share belongs to Foreign Bank Branches and Joint-Venture Banks with their deposit market share increasing slightly from 7.1% to 13% and their lending market share decreasing slightly from 16% to 8% (Leung, 2009). Furthermore, in late 2008, Vietnam underwent an economic downturn of its own, which many believe was in part caused by the overextension of credit and non-performing loans that were based on political connections (Leung, 2009).

Even with the expansion of JSBs, there are worrying trends in the state-sector which could exacerbate the use of political connections to get bank loans. Even though there have been huge credit increases in recent years, SOEs still receive as much as 70% of the total credit in the economy (FETP PDP No.2, 2008) thus starving many SMEs of the credit they need for growth. As the private economy begins to generate new wealth in Vietnam, the extremely large and old SOE conglomerates are opening their own "banks, finance companies, securities firms, leasing companies, and insurers" (FETP PDP No.3, 2008). Reports have further shown that these finance companies help state managers transfer value from SOEs to private subsidiary firms that are also owned by the SOEs (FETP PDP No.3, 2008). This taking advantage of the private sector by SOEs would only seem to necessitate the use of political connections by private firms to gain access to credit. I analyze the effects that political connections have on credit distribution between 2007 and 2009 inclusive, and what the implications may be for efficient allocations and flows of capital.

II. Literature Review

The literature on "relationships lending" has taken a number of different forms, each treating the definition of a relationship and its consequences slightly different. Due to the differences in the definition of relationships and the context in which they are studied, the various empirical studies do not necessarily contradict each other. However, it is important to understand these definitional and contextual differences in order to understand the implications of my results.

Traditional studies of relationship lending deal with the problem of asymmetric information between lender and borrower. Lenders need to measure the risk of each borrower in order to determine how they allocate their loans. Hard market based information about borrowers can sometimes be difficult to obtain by lenders and thus "soft" information is collected over time from the relationships established between lenders and borrowers (Berger and Udell, 1995; Berger and Udell, 2002). This view has often been linked with positive outcomes for credit allocation (Berger and Udell, 1995; Boot, 1999). Lenders are able to gather valuable "soft" information over time to solve asymmetries and therefore more accurately price their loans. Good borrowers benefit from better loan terms because the "soft" information generated from the relationship makes the borrower less risky provided the "soft" information is positive. This literature, however, seems to be focused in markets with well developed and functioning financial systems.

When looking at the nature of relationships in emerging markets, the definitions of a relationship change and the consequences of relationships are quite different. A number of studies take the position that relationships exacerbate "cronyism" (Johnson and Mitton, 2002; La Porta, Lopez-de-Silanes, and Zamarripa, 2003; Charumilind, Kali, and

Wiwattanakantang, 2006). La Porta et al. (2003) show that in Mexico, "close ties between banks and borrowers allow insiders to divert resources from depositories or minority shareholders to themselves." The relationship between a firm and a bank is one where the bank's owners or owner's relatives also own an interest in one or many private firms. Owners can then divert funds directly to businesses where they can profit creating "looting" in the financial system (La Porta et al., 2003). In the analysis they look at bank level data on loans made in Mexico. They sample loans from 18 banks and track them from 1993 to 1999. This allows them analyze the pervasiveness of related lending and also how these loans have performed over time. They make several key findings. They find that related lending accounts for about 20% of commercial loans, that banks increase this activity in times of economic distress and often subsequently go bankrupt, that the terms for related borrowers were much better than for unrelated borrowers, and there were much higher default rates and lower recovery rates for related loans (La Porta et al., 2003).

Finally, in line with my research, several studies examine "political connections" as the relationship variable. Johnson and Mitton (2002) look at political connections in Malaysia, Leuz and Oberholzer-Gee (2006) study these connections in Indonesia, Charumilind et al. (2006) in Thailand, and Khawaja and Mian (2005) look at Pakistan. In the Malaysian case, Johnson and Mitton (2002) do not specifically look at loans but rather the market value of firms with political connections during the period in which Malaysia implemented capital controls. They find that having political connections accounted for a "32% gain in market value during September 1998." (Johnson and Mitton, 2002)

In Indonesia, Luez and Oberholzer-Gee (2006), look at firms overall financing strategies in the presence of political connections. Their results "provide strong support for

the view that foreign securities and close political connections are substitutes." (Leuz and Oberholzer-Gee, 2006) Although they provide several explanations for this result, the one of interest is that firms use their political connections to get preferential financing locally rather that looking to foreign capital markets. While Leuz and Oberholzer-Gee (2006) do not uncover exactly how firms use their political connections, Charumilind et al. (2006) attempt a more specific analysis in Thailand. Using data on 270 nonfinancial companies listed on the Stock Exchange of Thailand during the Asian financial crisis, they find that "firms with connections to banks and politicians had greater access to long-term debt than firms without such ties." (Charumilind et al., 2006) They suggest that in countries with poor corporate governance, firms can take advantage of long-term loans which are more beneficial to them due to the risky nature of the economic environment. On the other hand, banks would prefer to give short-term loans to these risky firms to lessen the risk of default over time. Thus, political connections have a negative impact on the allocation of loans.

There are two studies which are closely related to my research in that they look directly at the impact of political connections on loan access. Khwaja and Mian (2005) look at the effect that political connections have on access to bank credit in Pakistan. They define this type of lending much more specifically as a type of corruption. Furthermore if a firm has political connections, it means that at least one of their board members is a politician. In this case political connections lending can be seen as a serious threat to the economy because corruption often causes resources to be diverted towards expenditure rather than investment. They also obtain bank level data on corporate loans outstanding between 1996 and 2002 (Khmaja, and Mian, 2005). Pakistan is somewhat similar to Vietnam in that Government backed banks dominate domestic lending, 64% (Khmaja, and Mian, 2005). The results are

quite significant. They conclude that politically connected firms receive loans that are "45% larger" but also have "50% higher default rate" and that political preference is only shown by government banks while private banks do not appear to lend on political grounds (Khmaja, and Mian, 2005).

While the majority of research from developing countries agrees that political connections create inefficiencies in loan allocation, two studies have argued otherwise. In the context of Vietnam, studies have looked at both sides of the relationship lending argument. One study has concluded that networking with government officials has a significant negative effect on bank loan access in Vietnam because it allows firms to gain access to other sources of finance such as "aid money (or) government support programs" (Le, Venkatesh, and Nguyen, 2006). However, their data is limited to businesses from only three cities in Vietnam and also largely reliant on perceptions rather that hard data. Furthermore they only control for characteristics of the owner of the firm and not the firm itself. Allen, Qian, and Qian (2005) apply a similar relationship based definition to the banking sector in China. They hypothesize that the imbalance in growth between the private sector (high growth) and the listed and state sectors (low growth) is due to "alternative financing channels and governance mechanisms, such as those based on reputation and relationships, support(ing) the growth of the Private Sector" (Allen et al., 2005). They undertake an in depth review of the supporting financial institutions for each of the three sectors, looking at how enterprises in each sector raise capital. The key finding arises from the fact that "almost all the surveyed firms that received start-up financing from state-owned banks had already established close relationships with those banks before their inception" (Allen et al., 2005). One possible reason proposed for why the Private Sector benefits so

much from this relationship based lending is that "China has one of the highest levels of social trust" (Allen et al., 2005). One weakness though, is that these conclusions are derived from the intuitive combination of reported survey information, statistical figures, and general market data. There is no direct test done between relationships and bank loans or whether the firms that receive these loans actually perform any better.

The research that I primarily draw from runs counter to these conclusions in its investigation of political connections in Vietnam. Malesky and Taussig (2008) argue that relationships lending and political connections lending must be looked at in separate realms in a developing country context. This is because "these bonds, which include family, friends, ethnic cohorts, and political acquaintances…refer specifically to personal relations outside of banking interactions" (Malesky and Taussig, 2008). Therefore connections lending is characterized by external relationships.

Malesky and Taussig (2008) create a very robust model to test the impact of political connections on credit access. They follow this up to test the counterargument that these loans do not increase firm performance in any way and thus are not driving factor behind private sector growth. They use data from obtained from 6400 firms across all 64 provinces of Vietnam in 2006. Their model includes a dependant variable of whether a firm has a bank loan, a political connections variable measured across a three point scale, and a number of firm level and provincial level controls. They find that having just one political connection increases the probability of securing a loan by about 4%, a small but significant result.

The second two tests are of credit access on firm performance. In these two tests the dependent variable is changed to: "Net profit or losses after taxes and operating expenditures/total investment" and "Investment Growth". The control variables are identical

with a few additions: firm presently has a bank loan, firm exports directly, firm exports through a distributor, ratio of economic cases filed by private firms in provincial people's courts, and informal charges (Malesky and Taussig, 2008).

Malesky and Taussig (2008) make three primary conclusions:

- 1. Personal connections to the government are very important to accessing a loan.
- Political connections do not have an impact on profit or investment growth and thus do not support the "hypothesis that connections can substitute for legal institutions in helping banks locate the highest performing borrowers in transition states".
- 3. From further research it appears that the most profitable firms may actually choose to opt out of the formal borrowing market.

Malesky and Taussig's research is only cross-sectional, using data from 2006. I plan to extend their research using data from 2007 through 2009, looking at the extent to which political connections continue to influence bank loans. Finally, I will try to evaluate the extent to which the terms on these loans are also influenced by political connections.

III. Data

The primary data used comes from the Provincial Competitiveness Index (PCI) (The Vietnam Competitiveness Initiative [VNCI], 2007-2009). The PCI is an annual survey of firms that measures the effect of economic governance on private sector performance. It was first introduced in 2005 and has been repeated annually since then. The survey results are based on stratified random sampling and in 2008 garnered a response rate of 26%, about 7000 firms across Vietnam's 64 provinces (VNCI, 2008). The success has led to the survey being regarded as one of the most objective sources of economic governance and competitiveness and is now an important decision making tool for economic stakeholders. The survey asks firms to respond to a wide variety of questions that cover ten major issues. These issues form ten sub-indexes: Entry Costs, Land Access and Security Tenure, Transparency, Time Costs of Regulatory Compliance, Informal Charges, State-Owned Enterprise Bias and Competitive Environment, Proactivity of Provincial Leadership, Private Sector Development Policies, Labor Training, and Legal Institutions (VNCI, 2005-2008).

One weakness of the PCI, with respect to my research, is that the data is all obtained from firms. In many other studies the primary data used was from banks. This gave the advantage of being able to track specific loans over time using hard accounting data. Unfortunately, Vietnam is ranked by the World Economic Forum, "50th out of 52 countries in both the strength of auditing and accounting standards and investor protection" (FETP PDP No. 3, 2008) and "45th out of 52 in credit information" (FETP PDP No. 3, 2008) making it very difficult to obtain reliable accounting data in Vietnam. However, the PCI does have several advantages. Political connections can be accurately and easily determined from the responses of firms while other studies have employed complex matching techniques between

firms' boards and political entities and other indirect methods of measuring political connections. Also in 2007, two key variables were added to the data set, interest rates on loans and whether the loans came from a JSB or SOCB.

I combine these annual data into an unbalanced panel spanning the years of 2007, 2008, and 2009. Each iteration of the PCI uses a new sample. However, there are instances of firms that have appeared in only one year, only two years, or all three years. This will allow for analysis at the firm specific level over time. During the matching process of firms over time, I found that there were a small number of coding errors where firms were entered in the data twice. These duplicate observations were thus dropped and amounted to less the 1% of the total observations. Finally, I combine the PCI data with relevant hard data from the General Statistics Office of Vietnam (GSO) and the Ministry of Labor, Invalids, and Social Affairs (MOLISA)¹. This data provides key provincial aggregates needed to control for structural cross-national differences. Summary statistics for all data can be found in Tables 1-3 in the Appendix.

¹ Data originally sourced from GSO and MOLISA and provided by Edmund J. Malesky

IV. Theoretical Framework and Empirical Specification

Much of the discussion around Vietnam's economic turbulence in late 2008 has focused on the large increases in investment capital. These increases were originally stimulated by the Vietnam-US Bilateral Trade Agreement in 2006 followed by Vietnam's accession into the WTO in 2007 (Leung, 2009). Vietnam's membership excited foreign investors leading to large increases in capital inflows to Vietnam. The result of this was that "M2 grew at a rate of 45 percent and bank credit at 63 percent" (Leung, 2009). Investors poured both long term foreign direct investment and speculative short term portfolio investment into Vietnam believing it was a stable emerging market, as can be seen in Figure 1.



Figure 1. Breakdown of Capital Flows into Vietnam

Source: Leung, 2009

Interestingly, the lack of supervision that the State Bank of Vietnam (SBV) and the Ministry of Finance (MOF) had over the JSBs led to JSB credit growth of 95 percent especially among SOEs (Leung, 2009). Figure 2 shows the increase credit of SOCBs and other banks.



Figure 2. Credit expansion of SOCBs and other banks

Source: FETP PDP No. 3, 2008

When the downturn hit, it quickly became evident that many of these loans had gone to inefficient uses with many predicting that loans were being allocated based political relationships rather than market data. What is happening here is that researchers and other stakeholders in Vietnam are using the micro-level behavior of firms and banks to explain the macro-level recessionary effects. However, there has been very little research on what the effects of these micro-level political relationships have been. My research takes steps to reconcile this by doing a micro-level study of firms, determining whether or not these bank loans are driven by political connections.

The data analysis will attempt to uncover two major issues. Do political connections help firms gain access to bank credit? What are the effects on the terms of the loan if a firm has political connections?

Primarily I follow the methodology used by Malesky and Taussig (2008) and extend it using data from 2007-2009. To first understand the problem of bank loan access I use the dependent variable taken from the question, "Do you presently have a bank loan from a state owned or joint stock commercial banks (Yes/No)?" (VNCI, 2007-2009) This provides the best measure in the available data. I do not know the credit history of individual firms or the size of the loans received. However, these two variables may not provide the best measure of credit access. Due to the economic reforms created by "Doi Moi", credit history would not be reliable because private firms have only existed for a relatively short period (Malesky and Taussig, 2008). Also, the fact that there is still a large informal lending sector (Rand, 2006) alongside formal financial markets, means that the size of the loan would be inaccurate because the firm's entire portfolio of financing options is not known.

The key indicator of political connectivity comes from the degree to which a firm has ties to the government. While economic reforms in Vietnam have been quite progressive, there has been virtually no political reform. The government is still based on a single legal Communist Party of Vietnam with "high turnover of Politburo members…preclud(ing)…the accumulation of individual power" (Malesky and Taussig, 2008). Other studies have often looked at changes in political power finding that political connections are closely related to the political party in power (Luez and Oberholzer-Gee, 2006; Khwaja and Mian, 2005). In contrast, Vietnam's single party state means that political connections could have enduring power over time because the party is ever present even though individuals may not be. Changes in political leadership, then, may not be very influential unless new individual political leadership made sweeping policy changes that get enforced in the economy. What are important, due to the structure of the party, are political connections at the provincial

level and with state-sector enterprises (Malesky and Taussig, 2008). The PCI data makes this connection because the data is collected across every province and the nature of the survey question captures these provincial and state-sector connections. The indicator is derived similarly to Malesky and Taussig (2008) from three separate questions combined to create a three-point scale:

- Owner is a former government official or military officer (Yes/No)
- Owner is a former SOE manager (Yes/No)
- Owner is a former SOE employee (Yes/No)

For each response, firm's received a point if they indicated one of these connections was present in the firm. It is important here to include SOE connections because Vietnam has historically been dominated by large and prestigious state-owned enterprises. To work for these institutions can also often be a gateway to political leadership (Malesky and Taussig, 2008). Thus, to a banker this would provide a degree of legitimacy to the firm.

My model will then include a number of firm level control variables. These controls include firm size (employment and capital), dummies for whether the firm is a privatized local or central SOE, the age of the firm, a number of variables measuring the industries in which the firm operates, whether the firm has a Land Use Rights Certificate (LURC), and dummies for the legal structure of the firm.

Several aggregate provincial controls are also used. These are important because there will be structural differences across provinces as well as issues of competitiveness in different regions. Thus, my first specification will look as follows:

(1) Bank Loan Access_{it} = $\beta_0 + \beta_1 \cdot Polcon_{it} + \beta_2 \cdot Firm Controls_{it} + \beta_3 \cdot Provincial Controls_{jt} + C_{ij} + U_{ijt}$

The second specification will estimate the effects of political connections on the terms of the loans received, using the "average annual interest rate" (PCI, 2009) the firm is paying as a dependant variable:

(2) Interest Rate_{it} = $\beta_0 + \beta_1 \cdot Polcon_{it} + \beta_2 \cdot Firm Controls_{it} + \beta_3 \cdot Provincial Controls_{jt} + C_{ij} + U_{ijt}$

V. Results

a) Access

First, I consider the problem of access to bank loans using the dependant variable, "Does your firm currently have a bank loan?" The key variable of interest is the degree of political connection that the firm has with the local government. The results are shown in Table 1. The model is fully specified with firm and provincial controls.

I run the access model using a random effects probit due to the binary nature of the dependant variable. Both the equity capital and firm employment are positive and significant. This indicates that larger firms, both in capital and employment gain greater access to bank loans. Firm performance also has a positive and significant coefficient indicating that Vietnamese bankers may be allocating their loans to better performing borrowers. The possession of a Land Use Rights Certificate (LURC) is highly significant and has the largest marginal effect of all the variables, an approximately 26.5% higher probability of accessing a bank loan. Having an LURC serves as an important measure of collateral for banks particularly in a country like Vietnam where it is difficult to obtain hard data on borrowers. Interestingly, being a privatized central SOE is also significant. This shows that SOEs have residual power in gaining access to bank loans and reinforces the bias towards firms connected with the state sector in terms of credit allocation. Finally, at a provincial level, the only significant variable is the education proxy, the percentage of secondary school graduates, which has a positive effect on loan access.

The key finding, though, of this test is that political connections do indeed affect access to bank loans. The political connections variable is specified on a three point scale with the marginal effects leading to a 4.7% increased probability of getting a loan. Due to

the fact that the state sector still captures the majority of available credit, this seems to indicate that private firms still face heavy competition for credit and must use any assets they have, including political connections, to get loans.

Table 1. Affects of political connections on bank loan access (Random Effects Pro	bit with
Marginal Effects reported)	

Dependant Variable: Firm currently has a bank loan from an SOCB or JSCB	(1)
Degree of political connection with local government	0.0472***
	(0.0182)
Total firm equity capital lagged one year	0.0891***
	(0.00984)
Overall firm performance lagged one year	0.0210*
	(0.0120)
Total firm employment lagged one year	0.0826***
	(0.0107)
Firm age since established	0.000592
	(0.00186)
Firm mainly operates in industry/manufacturing/construction	-0.0254
	(0.0348)
Firm mainly operates in service/commerce	0.0551
	(0.0342)
Firm mainly operates in agriculture/forestry/aquaculture	-0.0414
	(0.0517)
Land Use Rights Certificate (LURC)	0.265***
Cole nuonnistanshin	(0.0258)
Sole proprietorship	(0.143)
Limited lightlity	(0.208)
	(0.217)
Joint stock company	(0.217) 0.0210
Joint stock company	(0.217)
Partnership	(0.217)
Firm type other	-0.0562
	(0.324)
Privatized local SOE	0.0174
	(0.0481)
Privatized central SOE	0.127**
	(0.0638)

Active enterprises per 1000 citizens (ln)	-0.0606
	(0.0640)
Telephones per capita	-0.0487
	(0.241)
% of high school graduates in province	0.00173***
	(0.000648)
Distance from HCMC and Hanoi	2.95e-05
	(4.22e-05)
Population of province (thousands)	-6.74e-07
	(1.07e-05)
Observations	8,558
Log likelihood	-5093
Degrees of freedom	20
Chi squared	225.7

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

It may be the case that the credit market in Vietnam is characteristic of credit rationing. Stiglitz and Weiss (1981) developed a theoretical justification for credit rationing. Credit rationing says that when demand for credit is greater than supply; banks cannot simply raise interest rates until there is market equilibrium otherwise riskier borrowers will adversely select into the market because they are the only ones willing to accept higher interest rates. Thus, banks set a return maximizing interest rate and ration credit to available buyers. If this is the case then the key obstacle for firms is not the terms of the loan but access to loans. It is clear that private firms in Vietnam have a much smaller supply of credit available than state firms; therefore it makes sense that political connections might be critical to credit access.

b) Terms

The second major test I conduct is on the terms of the loans associate with political access. Here, I use interest rates as the dependent variable. In the data, interest rates are combined into ranges and coded on a six point scale. A 1 represents an interest rate below 7% and a 6 represents an interest rate above 15%. The model is similar to the access specification, with a set of firm and provincial controls.

Dependant Variable: Average annual loan interest rate	(1)
Degree of political connection with local government	0.198***
	(0.0359)
Total firm equity capital lagged one year	0.0347*
	(0.0189)
Overall firm performance lagged one year	-0.0198
	(0.0252)
Total firm employment lagged one year	-0.0430**
	(0.0203)
Firm age since established	0.00679*
	(0.00353)
Firm mainly operates in industry/manufacturing/construction	0.0591
	(0.068/)
Firm mainly operates in service/commerce	0.0724
Finne mainly an anotas in a minulture (famaster) (a super)	(0.00/9)
Firm mainly operates in agriculture/lorestry/aquaculture	(0.0025)
Land Use Dights Cartificate	(0.0955)
Land Use Rights Certificate	-0.111^{+1}
Sole proprietorship	-0.0119
sole proprietorship	(0.530)
Limited liability	0.0607
	(0.531)
Joint stock company	0.0689
I I I I I	(0.533)
Partnership	× ,
Firm type other	-0.344
••	(0.676)

Table 2. Affects of political connections on loan interest (Random Effects)

Privatized local SOE	-0.0227
	(0.0930)
Privatized central SOE	-0.162
	(0.183)
Active enterprises per 1000 citizens (ln)	0.111
	(0.130)
Telephones per capita	-0.820
	(0.504)
% of high school graduates in province	-0.00434***
	(0.00132)
Distance from HCMC and Hanoi	-0.000328***
	(8.42e-05)
Population of province (thousands)	-1.66e-05
	(2.15e-05)
Constant	3.984***
	(0.556)
Observations	5,509
R-squared	0.0161
Chi squared	80.45
Degrees of freedom	20

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.

For this specification, I run a random effects regression. This is due to the nature of the data as an unbalanced panel and to identify effects that may not have much variation over time. A Hausman test comparing random effects and fixed effects results in a p-value of 0.1045 which is greater than 0.05 and therefore indicates that using random effects is justifiable. The fully specified model yields some interesting results. Equity capital, firm employment, and LURC are all significant again. Firm employment and LURC are predictably negative, leading to lower interest rates. This is likely because a larger firm must have enjoyed good performance in order to get to a point where they can hire more employees and the LURC provides an important source of collateral.

At the provincial level, percentage of secondary school graduates is again significant and this time negative. Interestingly though, the distance from Hanoi and Ho Chi Minh City is also significant and negative. Malesky and Taussig (2008) speculate that "the Vietnamese government has tried to use SOCBs to alleviate emerging income inequalities and stimulate rural growth." The negative effect of distance from major markets would seem correspond to this hypothesis.

Finally, I find that political connections are again significant and positive with a coefficient of approximately 0.20. This indicates that if you have political connections you will receive a slightly higher interest rate. There are a number of reasons that this could be the case, however, further research is needed to fully uncover the effect. It is possible that following Vietnam's macroeconomic instability in 2008, during which it was well known that credit was being allocated to poor performing state projects, bankers have become more wary of firms using political leverage and believe them to be riskier. However, to date there is no exploration or evidence showing whether firms with political connections are in fact more risky and further research could be done in this area. It could also be the case that Vietnam as a country has learned valuable lessons from the cronyism that took place in other Asian countries prior to the Asian crisis in 1997 (Charumilind et al., 2006; Johnson and Mitton, 2002) and has stricter control of connected lending. If Vietnam's credit market resembles a credit rationing system described by Stiglitz and Weiss (1981) then banks should ration credit to borrowers at the prevailing market interest rate. Perhaps, those firms who wish to circumvent formal channels, by using political connections, are charged a premium for loan access that would not otherwise have been granted.

VI. Conclusion

In my research, my objective was to follow up Malesky and Taussig's research to determine whether political connections on access to bank loans have become more or less significant since 2005. Vietnam's economy has seen both the rapid expansion of credit and a rapid contraction by the government in order to curb inflation and other macroeconomic problems following Vietnam's economic turbulence in 2008 (Leung, 2009). With this sudden contraction of credit it is plausible that credit rationing exists in Vietnam.

The probit model, tested access to bank loans, resulted in a marginal effect of a 4.7% increase in the probability of gaining access to bank loans. This is a similar result to Malesky and Taussig (2008) and shows that the private sector is still probably highly credit constrained, thus leading firms to look for alternate ways to gain access to credit.

On loan terms, I found that political connections were associated with a small increase in interest rates. This could be the case for a number of different reasons. Firms exercising political connections may be perceived as riskier than other firms. Vietnam as a country may have learned from its own and other Asian countries mistakes thereby instituting tighter controls on credit allocation. This increase in interest rate may represent a premium to be paid in the case of credit rationing where access to credit is the most important factor for firms.

The implications of this paper are that Vietnamese bankers must use the correct tools to allocate credit to private sector business which face a limited available credit supply (FETP PDP No.2, 2008). Bankers still rely heavily on LURCs as determinants for loan allocation. As accounting standards improve in Vietnam, bankers should be able to gather the necessary data to help distinguish between firms more accurately. Ultimately, the signs

are positive as the private banking sector continues to grow, while plans are in place to privatize the remaining SOCBs, which should increase the amount of credit available to private firms and decrease their reliance on political connections.

More generally, these findings suggest that the benefit of political connections translates into a financial advantage for both the lender and the borrower, at least in the short term. Whether or not this special access in return for a higher premium impacts the market performance and competitiveness of banks and private enterprises is beyond the scope of this research. However, there are significant implications for private and financial sector competitiveness. The long term issue which requires further empirical research and evidence is the extent to which relationship lending/borrowing is conducted in ways which may undermine market risk and return. To the extent this is true, it could undermine the long term competitiveness and economic growth, of both the enterprise and financial sectors. Such additional research should investigate whether or not the borrowers extra premium to the lender adequately reflects and covers the degree of risks associated with political connections based loans.

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APPENDIX

Table 3. Data Summary (Year = 2007)

VARIABLES	Mean	Standard	Min	Max	Source
		Deviation			
Firm mainly operates in industry/manufacturing/construction	0.455	0.498	0	1	PCI
Firm mainly operates in service/commerce	0.486	0.500	0	1	PCI
Firm mainly operates in agriculture/forestry/aquaculture	0.0527	0.223	0	1	PCI
Total firm equity capital lagged one year	2.822	1.182	1	8	PCI
Total firm employment lagged one year	2.879	1.227	1	8	PCI
Overall firm performance lagged one year	3.765	0.758	1	5	PCI
% of firms sales exported directly	3.565	16.29	0	100	PCI
% of firms sales exported through a distributor	1.891	11.01	0	100	PCI
Privatized local SOE	0.0509	0.220	0	1	PCI
Privatized central SOE	0.0108	0.103	0	1	PCI
Firm with some equities owned by state agencies or SOEs	0.0236	0.152	0	1	PCI
Land Use Rights Certificate	0.740	0.439	0	1	PCI
Firm presently has a bank loan	0.631	0.483	0	1	PCI
State bank					PCI
Commercial bank					PCI
Other bank					PCI
Term of loan (months)	17.38	16.57	-8	160	PCI
Average annual interest rate of loan	3.627	1.253	1	6	PCI
Firm age since established	5.243	5.294	0	78	PCI
Firm age since registered	4.685	3.769	-26	69	PCI
Sole proprietorship	0.403	0.491	0	1	PCI
Partnership	0.00213	0.0461	0	1	PCI
Limited liability	0.436	0.496	0	1	PCI
Joint stock company	0.157	0.364	0	1	PCI
Firm type other	0.00183	0.0427	0	1	PCI
Degree of political connection with local government	0.279	0.469	0	3	PCI
Connection dummy	0.271	0.444	0	1	PCI

Active enterprises per 1000 citizens (ln)	0.599	0.353	0.230	1.845	GSO B
Telephones per capita	0.127	0.0842	0.0452	0.515	GSO A
Distance from HCMC and Hanoi	241.3	223.7	0	835	GSO A
Population of province (thousands)	1,434	1,048	298.9	5,891	GSO A
Average annual interest rate of loan	3.373	1.253	1	6	PCI

Table 4. Data Summary (Year = 2008)

VARIABLES	Mean	Standard	Min	Max	Source
		Deviation			
Firm mainly operates in	0.441	0.496	0	1	PCI
industry/manufacturing/construction					
Firm mainly operates in service/commerce	0.507	0.500	0	1	PCI
Firm mainly operates in	0.0507	0.219	0	1	PCI
agriculture/forestry/aquaculture					
Total firm equity capital lagged one year	2.934	1.246	1	8	PCI
Total firm employment lagged one year	2.885	1.225	1	8	PCI
Overall firm performance lagged one year	3.794	0.755	1	5	PCI
% of firms sales exported directly	3.358	16.01	0	100	PCI
% of firms sales exported through a distributor	1.882	11.12	0	100	PCI
Privatized local SOE	0.0471	0.212	0	1	PCI
Privatized central SOE	0.0102	0.100	0	1	PCI
Firm with some equities owned by state agencies or	0.0317	0.175	0	1	PCI
SOEs					
Land Use Rights Certificate	0.755	0.430	0	1	PCI
Firm presently has a bank loan	0.609	0.488	0	1	PCI
State bank	0.721	0.449	0	1	PCI
Commercial bank	0.247	0.431	0	1	PCI
Other bank	0.0321	0.176	0	1	PCI
Term of loan (months)	19.84	27.02	-8	1,200	PCI
Average annual interest rate of loan	3.465	1.273	1	6	PCI
Firm age since established	5.539	5.385	0	61	PCI

Sole proprietorship 0.388 0.487 0 1 PCIPartnership 0.000651 0.0255 0 1 PCILimited liability 0.434 0.496 0 1 PCIJoint stock company 0.175 0.380 0 1 PCIFirm type other 0.00208 0.0456 0 1 PCIDegree of political connection with local 0.277 0.469 0 3 PCIgovernment 0.267 0.443 0 1 PCIActive enterprises per 1000 citizens (ln) 0.654 0.373 0.250 1.969 GSO BTelephones per capita 0.162 0.0952 0.0666 0.581 GSO ADistance from HCMC and Hanoi 243.8 221.7 0 835 GSO APonulation of province (thousands) 1.456 1.082 306 6.347 GSO A	Firm age since registered	5.016	3.943	0	49	PCI
Partnership 0.000651 0.0255 0 1 PCILimited liability 0.434 0.496 0 1 PCIJoint stock company 0.175 0.380 0 1 PCIFirm type other 0.00208 0.0456 0 1 PCIDegree of political connection with local 0.277 0.469 0 3 PCIgovernment 0.267 0.443 0 1 PCIActive enterprises per 1000 citizens (ln) 0.654 0.373 0.250 1.969 GSO BTelephones per capita 0.162 0.0952 0.0666 0.581 GSO ADistance from HCMC and Hanoi 243.8 221.7 0 835 GSO APopulation of province (thousands) 1.456 1.082 306 6.347 GSO A	Sole proprietorship	0.388	0.487	0	1	PCI
Limited liability 0.434 0.496 0 1 PCIJoint stock company 0.175 0.380 0 1 PCIFirm type other 0.00208 0.0456 0 1 PCIDegree of political connection with local 0.277 0.469 0 3 PCIgovernment 0.267 0.443 0 1 PCIActive enterprises per 1000 citizens (ln) 0.654 0.373 0.250 1.969 GSO BTelephones per capita 0.162 0.0952 0.0666 0.581 GSO ADistance from HCMC and Hanoi 243.8 221.7 0 835 GSO APonulation of province (thousands) 1.456 1.082 306 6.347 GSO A	Partnership	0.000651	0.0255	0	1	PCI
Joint stock company 0.175 0.380 0 1 PCIFirm type other 0.00208 0.0456 0 1 PCIDegree of political connection with local government 0.277 0.469 0 3 PCIConnection dummy 0.267 0.443 0 1 PCIActive enterprises per 1000 citizens (ln) 0.654 0.373 0.250 1.969 GSO BTelephones per capita 0.162 0.0952 0.0666 0.581 GSO ADistance from HCMC and Hanoi 243.8 221.7 0 835 GSO APopulation of province (thousands) 1.456 1.082 306 6.347 GSO A	Limited liability	0.434	0.496	0	1	PCI
Firm type other 0.00208 0.0456 0 1 PCIDegree of political connection with local 0.277 0.469 0 3 PCIgovernment 0.267 0.443 0 1 PCIConnection dummy 0.267 0.443 0 1 PCIActive enterprises per 1000 citizens (ln) 0.654 0.373 0.250 1.969 GSO BTelephones per capita 0.162 0.0952 0.0666 0.581 GSO ADistance from HCMC and Hanoi 243.8 221.7 0 835 GSO APopulation of province (thousands) 1.456 1.082 306 6.347 GSO A	Joint stock company	0.175	0.380	0	1	PCI
Degree of political connection with local government0.2770.46903PCIConnection dummy0.2670.44301PCIActive enterprises per 1000 citizens (ln)0.6540.3730.2501.969GSO BTelephones per capita0.1620.09520.06660.581GSO ADistance from HCMC and Hanoi243.8221.70835GSO APopulation of province (thousands)1.4561.0823066.347GSO A	Firm type other	0.00208	0.0456	0	1	PCI
government 0.267 0.443 0 1 PCI Active enterprises per 1000 citizens (ln) 0.654 0.373 0.250 1.969 GSO B Telephones per capita 0.162 0.0952 0.0666 0.581 GSO A Distance from HCMC and Hanoi 243.8 221.7 0 835 GSO A Population of province (thousands) 1.456 1.082 306 6.347 GSO A	Degree of political connection with local	0.277	0.469	0	3	PCI
Connection dummy 0.267 0.443 0 1 PCI Active enterprises per 1000 citizens (ln) 0.654 0.373 0.250 1.969 GSO B Telephones per capita 0.162 0.0952 0.0666 0.581 GSO A Distance from HCMC and Hanoi 243.8 221.7 0 835 GSO A Population of province (thousands) 1.456 1.082 306 6.347 GSO A	government					
Active enterprises per 1000 citizens (ln) 0.654 0.373 0.250 1.969 GSO B Telephones per capita 0.162 0.0952 0.0666 0.581 GSO A Distance from HCMC and Hanoi 243.8 221.7 0 835 GSO A Population of province (thousands) 1.456 1.082 306 6.347 GSO A	Connection dummy	0.267	0.443	0	1	PCI
Telephones per capita0.1620.09520.06660.581GSO ADistance from HCMC and Hanoi243.8221.70835GSO APopulation of province (thousands)1.4561.0823066.347GSO A	Active enterprises per 1000 citizens (ln)	0.654	0.373	0.250	1.969	GSO B
Distance from HCMC and Hanoi243.8221.70835GSO APopulation of province (thousands)1.4561.0823066.347GSO A	Telephones per capita	0.162	0.0952	0.0666	0.581	GSO A
Population of province (thousands) $1456 1082 306 6347 GSO A$	Distance from HCMC and Hanoi	243.8	221.7	0	835	GSO A
	Population of province (thousands)	1,456	1,082	306	6,347	GSO A
Average annual interest rate of loan3.5351.27316PCI	Average annual interest rate of loan	3.535	1.273	1	6	PCI

Table 5. Data Summary (Year = 2009)

VARIABLES	Mean	Standard	Min	Max	Source
		Deviation			
Firm mainly operates in industry/manufacturing/construction	0.404	0.491	0	1	PCI
Firm mainly operates in service/commerce	0.577	0.494	0	1	PCI
Firm mainly operates in agriculture/forestry/aquaculture	0.0775	0.267	0	1	PCI
Mainly operate in Mining	1.973	0.163	1	2	PCI
Total firm equity capital lagged one year	2.911	1.235	1	8	PCI
Total firm employment lagged one year	2.752	1.209	1	8	PCI
Overall firm performance lagged one year	3.562	0.986	1	5	PCI
% of firms sales exported directly	3.351	16.18	0	100	PCI
% of firms sales exported through a distributor	1.692	10.98	0	100	PCI
Privatized local SOE	0.0568	0.232	0	1	PCI
Privatized central SOE	0.0131	0.114	0	1	PCI
Firm with some equities owned by state agencies or SOEs	0.0286	0.167	0	1	PCI
Land Use Rights Certificate	0.615	0.487	0	1	PCI

Firm presently has a bank loan	0.613	0.487	0	1	PCI
State bank	0.337	0.473	0	1	PCI
Commercial bank	0.231	0.422	0	1	PCI
Other bank	0.0312	0.174	0	1	PCI
Term of loan (months)	16.53	18.96	0	476	PCI
Average annual interest rate of loan	4.141	1.186	1	6	PCI
Firm age since established	6.455	28.77	0	2,009	PCI
Firm age since registered	5.796	23.94	0	2,009	PCI
Sole proprietorship	0.355	0.479	0	1	PCI
Partnership	0.00147	0.0383	0	1	PCI
Limited liability	0.453	0.498	0	1	PCI
Joint stock company	0.187	0.390	0	1	PCI
Firm type other	0.00296	0.0544	0	1	PCI
Degree of political connection with local government	0.391	0.518	0	3	PCI
Connection dummy	0.376	0.484	0	1	GSO B
Active enterprises per 1000 citizens (ln)	0.836	0.414	0.339	2.018	GSO A
Telephones per capita	0.264	0.313	0.0356	2.080	GSO A
Distance from HCMC and Hanoi	239.4	227.1	0	835	GSO A
Population of province (thousands)	1,737	1,607	308.9	6,612	PCI
Average annual interest rate of loan	2.859	1.186	1	6	