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### THE INSTITUTIONAL STRUCTURE AND THE COST OF BANK LOANS: AN INTERNATIONAL COMPARISON

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# The Institutional Structure and the Cost of Bank Loans: An International Comparison

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Version 2

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## The Institutional Structure and the Cost of Bank Loans: An International Comparison

#### **Abstract**

In recent years international comparisons emphasized the importance of institutional and legal factors in capital market development and the performance of private firms. Here that approach is applied to the pricing of bank loans .Loan rates depend on contract parameters such as risk, the existence of covenants and loan size. Syndicate structure and the number of lenders also determine the cost of borrowing. Loan prices are also negatively impacted if the lending banks operate as part of larger conglomerates. Loan prices are also shown to depend on a number of institutional factors, such as the quality of protection of creditor rights and the quality of law enforcement. Curiously, we find that contracts with customers in "French tradition" countries were priced lower, as if having lower risk, than others, other things held equal. This is not in line with other segments of the literature on international capital market differences and institutional factors. It suggests that differences across legal traditions are more complicated than previously understood.

### The Institutional Structure and the Cost of Bank Loans: An International Comparison

#### 1. Introduction:

Considerable knowledge on the economic prospect of firms relies on country-level indicators of the business environment. The literature uses proxy indicators such as regulations, disclosure, degree of political corruption, law and order tradition etc. Most of these proxies are relatively stable and hence represent country or region effects. Industry level research such as Rajan and Zingales (1998) and Klapper and Love (2004) estimate the effects of environmental factors on the performance of industry. The attempts to identify the impact of environmental features led to many studies that rely on cross -country comparisons.

In this paper we carry out a cross-country analysis of the loan market. We explore the impact of legal requirements and enforcement policy on the cost of loans to non- financial entities. Specifically, we ask how differences in ownership structure and regulatory practices, such as those that are described by Cremers and Nair (2005) and Demirguc-Kunt, Love and Maksimovic (2006), impact the pricing of loans to business borrowers. In particular we are interested in how legal restrictions change the relationship between banks and industrial and commercial corporations. These relationships are likely to affect loan prices and contract terms as noted by Prowes (1990) and Park (2000). The integration of banking and commerce, in past studies focused on a few leading countries such as the US, UK and Japan. In this paper we extend the investigation to a much wider cross-country study.

We also examine the impact of the industrial structure of the banking industry on loan pricing. The classical "Structure -Conduct -Performance" (SCP), as noted by Carlton and Peloff (2000), follows the theory of industrial organization. Highly concentrated markets are less competitive than markets in which small firms operate. Banks in less competitive markets are expected to pay less for their inputs and sell their outputs at a higher price. According to Berger (1995), Rhoads (2000) and Corvoisier and Gropp (2002) when the industry is concentrated, banks may collude and behave like a cartel that uses market power to extract monopoly rents.

The main findings of our research can be summarized as follows. The degree of banking and commerce integration is an important determinant of loan prices. Market concentration has a much lower impact than the legal and institutional variables which are important determinants of lending rates. Loan rates are lower in countries that have strong creditor rights. Similarly traditions of law and order are negatively related to loan prices. This is in line with findings of earlier studies.

This paper contributes to the literature in two modest ways. First, we explicitly examine the impact of the legal restrictions on the ownership of non-financial firms by banks on loan rates in a cross-country setting. Second, by using firm level data we utilize an international sample to show that different legal requirements and different regulations have different impacts on loan pricing.

The remainder of the paper is organizing as follows. In section 2 we review the related literature. In section 3 we present a summary of the research hypotheses. Section 4 describes the data and presents some summary statistics. Results are reported on section 5 and section 6 concludes.

#### 2. Review of the Literature :

A large and growing literature in finance has addressed questions about the role of institutional and legal factors in explaining differences in capital markets across countries. One of the pioneering works in this "around the world" analytic approach was an early paper by La Porta, Lopez-de-Silanes, Shleifer, and Vishny (hereafter LLSV), published in 1998. That paper attempted to explain differences in the degree of development of capital markets across many (49) countries based on legal institutions, and in particular on institutional protections of property rights and investor rights. That paper was quickly followed by many works investigating the role of institutions in growth and development of capital markets, using similar international "around the world" comparisons.

La Porta, Lopez-De-Silanes, Shleifer and Vishny, (1997, 2000) found that "French tradition" countries have a comparatively weak protection of investor rights and the weakest capital markets. LLSV (1998) found that "French tradition" legal systems protected investors the least well. Capital markets in those "French tradition" countries tended to be the least developed, based on a number of indicators, including diffusion of share ownership. French tradition countries also seem to be deficient compared with others when it comes to constitutional checks and balances, which are crucial for economic freedom and - by implication - for economic growth.

La Porta, Lopez-De-Silanes, Shleifer and Vishny (1997) showed that poor quality of legal protection and enforcement is associated with small and poorly developed capital markets.

Quite a few other institutional and legal factors have been assessed in terms of their impact on capital market differences across countries. La Porta, et al (1998) attribute international differences in capital market performance to differences in the nature of the legal resolution of agency problems between investors and entrepreneurs. La Porta, Lopez-De-Silanes, Shleifer and Vishny (2000) attribute these differences to a dispersion in equity ownership concentration. Similar conclusions are reached by Beck, Levine, and Loayza (2000) who point to the role of financial intermediaries in economic growth. These authors emphasize the importance of protecting the law enforcement institutions from coercion and bribery. Shleifer and Wolfenzon (2002) attribute international differences in the incidence of going public to differences in law enforcement. Demirguc-Kunt, Love and Maksimovic (2006) used a similar international comparison to analyze incorporation decisions.

While most of this literature on institutional explanations for development of capital markets has focused on equity and debt markets, there have been only few attempts to apply this approach to banking markets as well. Papaioannou (2005) showed that institutional factors play an important role in international flows of bank funds. La Porta, Lopez-de-Silanes and Shleifer (2002) asked which factors, including legal traditions, tend to generate higher rates of government ownership of banks. They found that such ownership is associated with low levels of GDP/capital, interventionist government policies, and poor protection of property rights. Government ownership is also a factor in causing slower economic growth.

In addition to the legal factors, group relationship between banks and non-banking firms are likely to influence loan pricing. Earlier studies, such as Haubrich and Santos (2005), Johnson, La Porta, Lopez-de-Silanes and

Shleifer (2000) and Dyck and Zingales (2004), "examined the costs and benefits of the integration between banking and commerce. The literature noted a few reasons for restricting the integration of banking and commerce. First, as notes by Barth, Caprio, and Levine (2004) and others, when banks hold large equity portfolio in non-financial firms they have an incentive to finance risky project of their related firms. This, in turn, leads to larger debts holding and thereby increases the risk of the banks loan portfolio. Second, universal banks that hold a large portfolio of industrial subsidiaries may became "too big to discipline" in the political sense. Third, as noted in the literature, universal banks or similar financial conglomerates may restrict competition.

The finance literature dealt with the possible merits and deficiencies of bank led business groups. Some studies emphasis the impact of internal capital markets that exist in business groups (see Rajan Servaes and Zingales (2000)). Shin and Stulz (1998) claim that the internal capital markets may miss-allocate capital among members of the groups. The empirical literature did not produce consistent results. Many studies examine the effects of group diversification on firm performance. In some cases the costs of diversification were found too outweigh its benefits (Lins and Servaes (2002). On the other hand, operating within a group might provide some benefits to the member firms (Khanna and Palepu (2000)) and Kahanna and Rivkin (2001)). They argue that, in developing economies, an internal capital market have an advantage. Banks have much better information on the quality of projects that members of their own group wish to finance.

This would mean, in turn, that they may lend to group members at a discount compared with the interest rates that they would charge to external borrowers.

The above argument is also related to general transaction cost theory. In fact, the importance of legal institutions is generated mainly by causing a reduction of transaction cost. This was stated by Williamson (1975) and stressed by others. If the economic or institutional setup reduces information asymmetries and conflicts of interest between buyers and sellers, transaction costs will be lower. This means, by extension, that lending rates within the groups will also be lower.

In many countries firms can create value to share holders by focusing on a specific (narrow) activities and conduct financial transactions with other group members. So, highly diversified business groups can confer benefits on their members. One of the main benefits is low cost loans. In such environments business groups create value for owners by using available funds in one sector to finance new ventures in another. Thus, when banks own non-financial firms they eliminate some of the results of markets imperfections that prevail outside of the group structure.

#### 3. The sample:

The loan contract data are taken from the DealScan data base. This data base is compiled by the Loan Pricing Corporation. The data base was used in the past by Dennis and Mullineaux (2000) and Hubbard, Kuttner and Palia (2002) among others. The data base includes borrowers and lenders location code in addition to various loan transaction parameters. We use data for the

13 years period from 1992 to the end of 2004. We use the borrower's location code to link the contracts to the 42 countries that are listed in **Table**1. For each country we use legal and institutional characteristics offered by LLSV(1997), LLSV(1998) and Beck Levine and Loayza (2000). Only

18,367 contracts that include information on all the required variables and all the listed countries are used for our analysis. All contracts are local in the sense that both borrowers and lenders are registered as transaction parties from the same country.

The loan sample and loan pricing variable are described in summary form in Table 1. The entire sample consists of 18,367 loan contracts, or loan facilities made between the years 1992 and 2004. The United States represents more than half of these. All loan contracts in the sample are expressed in US dollar terms. For the ease of comparison, the main pricing variable is the markup over the LIBOR or over a prime base. The markup has been adjusted for any fixed facility fees, assumed to be spread evenly over the duration of the loan. The markup, which abstracts from the country's macro-determined interest rate, is expressed in basis points.

The mean markup for the sample is about 122 basis points, with the median slightly less, suggesting a slightly asymmetric distribution with a broader right-hand tail. Contracts with American clients, were on average, more expensive than non-American clients, (about 177 basis points), with the median above the mean, suggesting that for US clients the right-hand tail of the distribution is thinner than the left-hand tail. For most other countries, the curve is skewed in the other direction. The UK represents the second largest set of borrowers, followed by France and Canada. The average markup over the benchmark varies across national borrowing groups. South

American countries tend to have the highest mean markups. Several European countries, together with South Africa and Israel have the lowest.

In Table 2 a number of institutional features are described. A detailed description of the data is provided in the appendix. Using the La Porta, Lopez-De-Silanes, Shleifer and Vishny (1998) basis for categorization, each country of borrowers is assigned to either the "English", "French", or "Continental" legal tradition. The countries belonging to the three sets are not homogeneous across the categories. Countries in the French legal tradition exhibit high inflation rates, while continental have lower inflation rates. The fact that higher Inflation countries tend to be in the French legal tradition is outside the scope of the present analysis.

A private credit variable, which follows Beck, Levine and loayza (2000), represents the share of credit granted to the private sector out of GDP. The index ranges from about 0.2 to 1.2. Rule of law is as describe in La Porta, Lopez-De-Silanes, Shleifer and Vishny (1998) and, for the countries in our sample, ranges from 2 to 10. Creditor rights range from 0 to 4. In addition Table 2 contains a column that defines the banking industry concentration. This is the concentration of asset in the largest 5 top banks (i.e. their share of total bank assets).

#### 4. Results:

In **Table 3**, regression results are presented for the entire sample. The definitions of all the variables that we use appear in the appendix. The dependent variable is the interest rate spread above an appropriate benchmark. It includes prorated facility fees measured in basis points. Six

different versions of the regression are shown. Explanatory variables consist of three sets, including loan contract variables, national institutional and legal variables, and banking sector variables. Because clients from the

United States represent such a large portion of the entire sample and because the US is unique in many ways, a dummy variable for US borrowers is also included. It is positive and significant, indicating that US business borrowers paid a higher interest rate than others, all other factors being held constant. The regressions explain almost 30% of the variation in loan markup values across contracts.

In Table 3, the group of loan contract variables behaves as expected. The credit rating of the borrower is negatively and significantly associated with the interest rate charged. A better rating is rewarded with a lower interest rate, other things equal. Each full-grade improvement generates a drop in the interest markup by about 130 basis points. The size of the loan facility is also negatively and significantly associated with the interest rate. Larger facilities carry significantly lower interest rates, other things equal. A probable reason for that is that loan size serves as a surrogate for the size of the borrower. It too is negative and significant.

Syndication measures are basically supply side measurements, although they may be affected also by demand side factors. The structure of the lending side, for business loan contracts, appears to affect loan pricing in a non-linear and non-monotonic manner. Accordingly, we included two different indicators in the regressions. First, simply providing funds via a syndicate rather than by a single lender has a significant negative impact on loan costs, other things equal. However, given that a syndicate is already in operation, additions to the number of lenders in the syndicate appear to raise

loan interest charged. This could be because contracts with a larger number of lenders in the syndicate tend to be somewhat riskier for the lenders. As in Melnik and Plaut (1996), larger syndicates are being recruited to serve

riskier borrowers. Finally, the presence of loan restrictions, or covenants, in the contract appears to be a negative quality indicator and is associated with an increase in interest costs of 90 basis points. Loan maturity does not have a significant impact on loan pricing in the present sample.

The next set of variables is the focuses of these paper .The first two entries are French origin dummy and continental origin dummy. The default category in the regression is English tradition. In Table 3, loan contracts for borrowers from countries having a French legal tradition were priced below those of others. The coefficient for the dummy for "Continental" tradition (which Includes Scandinavian countries) is also negative.

The other national institutional indicators include two legal measures that presumably affect bank lending friskiness and readiness. The first is a measurement of creditor rights, indicating how easily a creditor may exercise his or her rights or how easy it is to foreclose on collateral. The coefficient for this variable is negative and significant. An improvement in this measure by one grade lowers interest costs significantly. The measure of "rule of law" is an indicator of the efficiency and transparency of the law enforcement system in place in the country of question. It is also statistically significant and carries a minus sign.

The variable of "Bank Ownership" of industrial and commercial firms essentially reflects restrictions on the ability of banks to be part of a business group. The coefficient of this dummy variable is significantly negative (see

equations 3 and 6 in the table). Evidently borrowers pay lower loan rates to their lenders in countries that allow group ownership. The results are consistent with the view that cross ownership, or membership in the same

group, facilitates the transfer of information between borrowers and lenders, and thereby reduce loan contract costs.

The other variables of importance in our study are loan propose, private sector credit and bank concentration. The loan proposes variable is a dummy variable. It takes the value of one if the main loan proposes is debt repayment (which does not increase financial leverage) and zero for all other loan use declarations. As shown in equation 2 it is not statistically significant.

Surprisingly the private sector credit variable does not seem to have much importance. The size of the private sector credit, relative to the entire economy, does not seem to have any significant impact. In fact, it shows up with negative sign in some regressions and positive sign in the others. The concentration ratio for bank assets (equation 4) appeared without much significance. Following the SCP theory we expected that domestic lenders would extract monopoly rents. In our case the results do not support the market power theory.

**Table 4** shows similar regression results. The equations, in Table 4, replicate equations 2, 3, and 4 in Table 3. For the sample with US contracts excluded. Given the large portion of the sample consisting of US borrowers, this could clearly affect the relative pricing position of "English legal tradition" countries relative to the others. But as seen in Table 4, the results do not

Change much. The coefficients for most explanatory variables are generally Similar to these of the comparable regressions that appear in Table 3.

#### 5. Summary and Conclusions:

Cross-national differences in bank loan markets are explained, in part, by legal and institutional factors. The quality of law enforcement and of creditor rights protection are associated with lower lending costs, as would be expected to be the case. Restrictions on the ability of banks to own commercial enterprises and join larger "business groups" that include non-bank firms seems to be associated with higher costs of borrowing.

The contract-specific explanatory variables examined here seem to operate, in bank loan contracts, in ways that are consistent with previous research. However, the facility size appears to be also a borrower quality surrogate, where larger facilities are priced at lower risk markups. Syndicate structure, whose impact on loan pricing has been the focus of relatively little previous empirical analysis, appears to operate in a complex non-monotonic manner. The very existence of a lending syndicate is associated with lower costs of lending, other things equal. But given that a syndicate exists, larger syndicates are associated with higher costs, suggesting that syndicate size grows when borrowers are riskier, other things equal.

In contrast with what has been found in much previous cross-national analyses of capital market development and performance, "French tradition" in this paper is found to be associated with cheaper borrowing from banks. It may be that certain institutional factors affect securities markets in ways that are very different from how they affect banking markets, and indeed

these affects can even be in opposite directions. This is an intriguing possibility that should be explored further in future research. It seems to be consistent with the fact that countries in which commercial borrowers rely

mainly on bank financing tend also to be those with less developed securities markets. In different countries, different sorts of selection may be operating in channeling borrowers to bank borrowing as opposed to issuing of securities. Such selection then would produce differences in pricing.

The "institutional approach" to analyzing international differences in financial markets has emerged as an important tool of economic development research. Inclusion of banking markets in such analysis may contribute to our understanding of the economic role of institutions and provide insights into international differences in levels of financial development.

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#### **Appendix - description of the data:**

#### 1. Dependent Variable

The dependent variable is the loan price, above a base rate such as prime or LIBOR measured in basis points. In DealScan, the all-in-spread includes the contract or coupon spread plus an annual fee. An up-front fee (if any) divided by the time to maturity of the loan is also added to the price.

#### 2. Contract Variables

- a. Credit Rating is a measure of the risk of the loan. It is based on Moody's credit ratings of the borrower's senior debt. The top rank, AAA, is assigned number 5. The second group of AA+ and AA is noted as 4. The third group (rank number 3) includes the rating AA- and A+. The fourth rank includes the group of A to be BBB and has the mark of 2. The final group covers the range below BBB and is marked as 1.
- b. Loan amounts are expressed in millions. We use a natural logarithm of the amount. The amount represents the size of the loan. It also may serve as a proxy to the size of the borrower.
- c. A syndicated loan dummy variable is included. The data set contains both syndicated and non-syndicated loans. Syndicated loans are granted by several banks and may carry a lower rate due to risk diversification.
- d. The number of lenders, in a log form, reflects the idea that more lenders are invited to join a syndicate if the loan is perceived to be more risky.
- e. A restriction dummy variable equals 1 if the loan contract specifies a restrictive covenant. Restrictions could be viewed as a sign that the loan is viewed as more risky and requires the future transmission of information from the borrower to the lender.
- f. Maturity is the number of years to the formal maturity date. It is entered with a logarithmic transformation.

#### 3. <u>Legal Variables</u>

- a. Legal origin dummy variables. We include a distinction between French hw, Continental law (German and Scandinavian) and English Law (the default option). The list is compiled by La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998).
- b. Rule of law variable evaluates the tradition of law enforcement. It is an index that ranges from zero to ten and higher scores are allocated for a stronger tradition of law and order. Taken from La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997)

- c. Creditors rights is an index constructed by La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) and measures such things as creditor consent to file for reorganization, rights to take over securities posted as guarantees etc. The index ranges from 0 to 4. Higher values indicate stronger creditors rights
  - d. Bank ownership is a measure of the abilities of Banks to own and control non-financial firms. If bank ownership of commercial and industrial firms is permitted the variable takes on a value of 1.

#### 4. Other Variables

- a. Loans propose is a dummy variable that takes the value of 1 if the main loans propose is debt repayment and 0 otherwise. The loan repayment propose indicates a constant loan burden and is expected to be less risky compared with other loans that increase the overall amount of debts.
- b. Private sector credit is a proxy for financial development variable. This is the value of credit granted by financial firms to non-financial (private) sector divided by GNP. It was compiled by Beck, Demirguc-Kunt, and Levine (2000) (BDL) and used by Beck et.al (2004) and others.
- c. Concentration measure is taken from the World Bank Survey We use two measure of concentration. The first is the share of assets held by the five largest banks in the borrower's country. In our sample it ranges from 0.214 in Germany to 0.994 in Finland. The second is the ratio of deposits held by the five largest Banks in the borrower's country. In our sample it ranges from 0.297 to 0.997. In the literature such as Berger (1995) it is argued that banks with larger market power (high concentration) tend to charge higher rates.
- d. A dummy of 1 if concentration of assets of the five largest banks is greater then the average sample value. Zero otherwise.

Table 1-Summary statistics of loan prices by country 1992-2004.

Loan price is expressed in basis points above LIBOR

Country	N	Mean	Std.dev	Median
Argentina	225	223.4	141	191
Australia	119	101.6	82.4	98.5
Austria	112	132.5	90.5	105
Belgium	84	120.7	91.5	102.1
Brazil	178	264.4	148.6	243.5
Canada	634	181.8	143.6	163.5
Colombia	58	230.3	131.3	202
Chile	160	112.2	103.7	70.5
Denmark	46	105.9	148	53
Egypt	29	129.1	78.5	79
Finland	122	94.8	87	41.5
France	664	130.3	123.8	94
Germany	335	158.6	168.5	173
Greece	114	99.9	81.9	65.5
Hong Kong	257	113.1	74.6	96
India	121	99.8	101.2	77
Indonesia	102	157.6	77.9	150.5
Ireland	101	130.6	145.7	87.7
Israel	29	79.5	58.6	45
Italy	331	114.7	93.6	60.5
Japan	52	87.2	88.4	64.5
Malaysia	37	137.5	91.8	120.5
Mexico	304	220.9	140.6	200
Netherland	309	140.6	128.9	112.5
New Zealand	27	102.2	133.2	57
Norway	208	76.2	80.7	45
Pakistan	36	104.8	58.2	100
Peru	36	244.1	136.2	229.4
Philippines	34	152.8	90.2	131.5
Portugal	70	78.5	75.2	39
Singapore	36	124.8	57.3	114.5
South Africa	93	79.5	65	65.5
South Korea	94	88	62.7	63
Spain	424	104.3	92.6	75.5
Sweden	230	72.7	77	55
Switzerland	176	103	94.1	66
Taiwan	46	85.5	66.4	65
Thailand	97	105.6	69.3	89.5
Turkey	267	123.3	141.6	95
USA	10,018	176.6	133	198
U.Kingdom	1894	123.4	104.1	100
Venezuela	58	198.9	119.7	201
	18,367	121.8	93.4	109

Table 2- Legal Variables

Country	Legal Orgin	Private Credit Size	Rule of law	Creditor rights	Asset ratio of top 5 Banks	Bank own of c& i
Argentina	French	0.246	5.36	1	0.49	Restricted
Australia	English	0.514	10	1	0.76	Permitted
Austria	Cont	0.985	10	3	###	Permitted
Belgium	French	0.756	10	2	0.88	Permitted
Brazil	French	0.272	6.32	1	0.536	Permitted
Canada	English	0.661	10	1	0.801	Permitted
Colombia	French	0.253	2.08	0	0.41	Restricted
Chile	French	0.623	7.02	2	0.608	Prohibited
Denmark	Cont	0.34	10	3	0.902	Restricted
Egypt	French	0.486	4.17	4	0.618	Restricted
Finland	Cont	0.508	10	1	0.994	Permitted
France	French	0.82	8.98	0	0.647	Permitted
Germany	Cont	1.136	9.23	3	0.214	Permitted
Greece	French	0.26	6.18	1	0.739	Permitted
Hong Kong	English	###	8.22	4	0.42	Permitted
India	English	0.224	4.17	4	0.435	Restricted
Indonesia	French	0.333	3.98	4	##	###
Ireland	English	0.507	7.8	1	##	Permitted
Israel	English	0.771	4.82	4	0.934	Restricted
Italy	French	0.57	8.33	2	0.574	Permitted
Japan	Cont	1.164	8.98	2	0.464	Restricted
Malaysia	English	0.935	6.78	4	0.556	Restricted
Mexico	French	0.153	5.35	0	0.802	Restricted
Nether land	French	1.055	10	2	0.881	Permitted
New Zealand	English	0.942	10	3	0.856	Permitted
Norway	Cont	0.614	10	2	0.84	Permitted
Pakistan	English	###	3.03	4	0.647	Permitted
Peru	French	0.271	2.5	0	0.825	Permitted
Philippine	French	0.425	2.73	0	0.43	Permitted
Portugal	French	0.902	8.68	1	0.796	Restricted
Singapore	English	1.061	8.57	3	0.685	Prohibited
South Africa	English	0.663	4.42	4	0.752	Permitted
South Korea	Cont	0.726	5.35	3	0.701	Restricted
Spain	French	0.857	7.8	2	0.532	Permitted
Sweden	Cont	0.471	10	2	0.62	Permitted
Switzerland	Cont	1.637	10	1	0.72	Permitted
Taiwan	Cont	1.405	8.52	2	0.384	Restricted
Thailand	English	1.09	6.25	3	0.648	Restricted
Turkey	French	0.184	5.18	2	0.556	Permitted
USA	English	0.56	10	1	0.304	Restricted
U.Kingdom	English	1.181	8.57	4	0.243	Permitted
Venezuela	French	###	6.37	1	0.568	Restricted

Table 3- The Determinants of Loan Markup Pricing

	1	2	3	4	5	6
Contract Variables						
Credit Rating	-0.121	-0.131	-0.133	-0.136	-0.137	-0.137
	(0.076)	(0.081)	(0.085)	(0.084)	(0.088)	(0.089)
Ln (amount)	-0.201	-0.196	-0.196	-0.204	-0.206	-0.202
	(0.038)	(0.034)	(0.036)	(0.039)	(0.039	(0.038)
Syndication Dummy	-0.066	-0.068	-0.069	-0.072	-0.065	-0.068
	(0.019)	(0.019)	(0.018)	(0.018)	(0.019)	(0.017)
Ln (number of lenders)	0.041	0.041	0.019	0.019	0.019	0.041
	(0.011)	(0.012)	(0.011)	(0.013)	(0.012)	(0.012)
Restrictions Dummy	0.089	0.089	0.091	0.091	0.089	0.087
	(0.014)	(0.014)	(0.015)	(0.016)	(0.016)	(0.015)
Ln (maturity)		-0.011	-0.009	-0.008	-0.008	
		(800.0)	(0.009)	(0.011)	(0.007)	
Legal Variables						
French Origin Dummy	-0.254	-0.236	-0.231	-0.233	-0.241	-0.239
	(0.184)	(0.186)	(0.189)	(0.199)	(0.195)	(0.198)
Cont. Orgin Dummy	-0.217	-0.214	-0.208	-0.207	-0.201	-0.201
	(0.123)	(0.129)	(0.124)	(0.135)	(0.136)	(0.131)
Rule of Law	-0.173	-0.179	-0.177	-0.178	-0.178	-0.178
	(0.074)	(0.078)	(0.079)	(0.082)	(0.083)	(0.081)
Creditor Rights	-0.214	-0.213	-0.171	-0.201	-0.161	-0.159
	(0.083)	(0.085)	(0.096)	(0.087)	(0.082)	(0.069)
Bank Own of C&I Firms			-0.337			-0.361
			(0.184)			(0.179)
Other Variables						
Loop Dumana di di		0.000				
Loan Purpose dummy		-0.086				
Debugto Control Con III		(0.073)				
Private Sector Credit	-0.077	0.153	0.144	-0.118	-0.129	-0.137
III O Danie i	(0.173)	(0.199)	(0.163)	(0.195)	(0.202)	(0.187)
U.S Dummy	0.101	0.138	0.121	0.147	0.116	0.098
	(0.064)	(0.078)	(0.059)	(0.067)	(0.061)	(0.051)
Concent of Assets				0.119	0.151	
A				(0.111)	(0.109)	
Asset Concent Dummy						0.214
						(0.134)
Constant	0.242	0.251	0.232	0.219	0.201	0.218
A.P. ata I.D.	.(0.178)	(0.164)	(0158)	(0.157)	(0.145)	.(0.121)
Adjusted R square	0.2852	0.2891	0.2924	0.2931	0.2911	0.2992
N	18,367	17,313	18,265	18,164	18,128	18,164

Table 4- The Determinants of Loan Markup Pricing Without Data from the U.S

	1	2	3
Contract Variables			
Credit Rating	-0.097	-0.096	-0.109
	.(0.057)	.( 0.054)	.( 0.056)
Ln (amount)	-0.136	-0.136	-0.139
	.( 0.039)	.(0.048)	.(0.056)
Syndication Dummy	-0.055	-0.048	-0.018
	.( 0.021)	.( 0.025)	.( 0.025 )
Ln (number of lenders)	0.057	0.067	0.062
	.(0.042)	.( 0.046)	.( 0.039)
Restrictions Dummy	0.129	0.138	0.144
	.( 0.085)	.( 0.074)	.(0.075)
Ln (maturity)	-0.004	-0.006	-0.005
	.( 0.003)	.( 0.004)	.( 0.007)
Legal Variables			
French Origin Dummy	-0.181	-0.164	-0.055
	.( 0.161)	.( 0.151)	.( 0.152)
Continental Origin Dummy	-0.241	-0.234	-0.217
	.( 0.159)	.(0.141)	.(0.133)
Rule of Law	-0.182	-0.143	-0.154
	.(0.071)	.( 0.065)	.( 0.062)
Creditor Rights	-0.186	-0.178	-0.181
	.( 0.099)	.(0.084)	.( 0.078)
Bank Ownership of C&I Firms		-0.427	
		.( 0.152)	
Other Variables			
Loan Purpose dummy	-0.121		
	.( 0.053)		
Private Sector Credit	0.291	0.254	0.282
	.( 0.313)	.( 0.259)	.( 0.241)
U.S Dummy			
Concentration of Bank Assets			0.258
			.(0.122)
Constant	0.234	0.247	0.254
	.( 0.118)	.( 0.138)	.( 0.139)
Adjusted R square	0.2886	0.2885	0.2939
N	8349	8247	8146

Numbers in parentheses are White Heteroscedasticity adjusted standard errors.