Political and Legal Institutional Impact on
Bank Loans and Yankee Bonds (Working Paper)

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Abstract

This paper examines the effect of political and creditor rights on the cost of issuance (yield spreads) of debt issued by a sample of non-U.S. firms. Creditor rights and the sovereign credit rating are found to be significant determinant of the yield spreads for both bank loans as well as Yankee bonds (bonds issued in the U.S. in U.S. Dollars). In contrast, political rights are not significantly related to the yields. Finally, political and creditor rights appear to be complementary in their impact on bank loan spreads but not so in their impact on Yankee bond spreads.

1. Introduction

Prior research suggests that country institutions such as political and creditor rights are important factors that help determine financial and economic development. For example, North (1990) suggests that country institutions reduce economic and financial uncertainty. La Porta, Lopez-de-Silanes, Shleifer, and Vishny, hereafter LLSV (1997, 1998) show that legal origins or legal institutions have an impact on cross-country financial development and Roe (2006) advocates the importance of political institutions in the way the financial sector operates in the world. Similarly, several researchers (see, e.g. Qi, Roth, Wald, 2008; Quian & Strahan, 2007) have suggested that political and creditor rights influence bond issuance and the cross-listing of equity. This paper attempts to see how institutions from various countries impact the cost of debt for firms that have issued a Yankee bond (bond denominated in U.S. Dollars and issued in the U.S.) and also have a bank loan with a U.S. bank. Specifically, we look at (i) the relative importance of political and legal institutions on the cost of issuance (yield spread) for Yankee bonds and bank loans and (ii) if political institutions subustitute, complement, or are independent of legal institutions from the perspective of lenders (for both bank loans and Yankee bonds).

Further research will be conducted to see if covenants plays a role on yield spread and if an international company issues a Yankee bond and had a previous bank loan in the U.S., if there's monitoring provided by the bank which will have a direct impact on yield spreads.

We use a sample of companies from 41 countries that issued Yankee Bonds and have U.S. bank loans to study the impact of country-level institutions on the Yield Spread for both transactions.

A first test was conducted to see whether political and creditor risks affect a firms' yield spread at issuance for both bank loans and yankee bonds. We use the political rights index from LLSV (1999) as the primary measure of political institutions. This particular index measures how freely people and political parties can participate in the political process. The primary advantage for using the index is

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that it represents an ex-ante proxy of future outcomes of the political bargaining process. Creditors looks at risk on expected cash flows when assessing bond value and bank loans. This forward looking measure is more efficient than one which only looks at past outcomes. The main measure for legal institutions is a creditor rights index, which measure to what degree creditors are protected in a country (see i.e. LLSV, 1998). We find that creditor rights play an important impact the cost of debt for firms that have both a bank loan and issued a Yankee bond. Political institutions provided insignificant results for both bank loans and Yankee bonds.

Secondly, following models presented by Qi , Roth, and Wald (2008) and Djankov, Glaeser, La Porta, Lopez-de-Silanes, and Shleifer (2003), we test to see if political institutions complement or subsititute for legal protections or if they have independent effect on the cost of debt. Our results suggest that for a firm that has a bank loans in the U.S., the relationship between political and legal institution are statiscally significant where political and legal institutions are complements suggesting that a marginal improvement in political institutions will cause a greater reduction in the cost of debt if the firm is from a country with better creditor rights. As for Yankee bonds, the relationship is insignificant.

The findings have great implication for firms, governments, and policymakers. The results highly suggest that countries should continue to improve political and legal rights since it has significant impact on the cost of issuance of debt for both banks and bonds. This will lead to greater opportunities in international financial and economical development.

The paper is divided as follows. Section 2 present the literature review and specifies the hypotheses we test in greater detail. Section 3 details the data and empirical method. Section 4 presents the empirical results, and Section 5 concludes.

2. Literature Review and Hypotheses

The paper is motivated by financial bank loans, domestic and international debt issuance, and law literature. Most of the research in the area of the relationship between bank and public debt was conducted in the United States market. There is room for a more international perspective research in this area of finance. Decision making in the choice of new debt issuance in the United States is highly influenced by current and history credit quality (Denis & Mihov, 2002). Firms with the highest credit quality borrow in the public bond market whereas firms with medium credit quality borrow from banks and firms with the lowest credit quality from non-private lenders. Beside credit quality, reputation and monitoring are key factors to the choice of debt (Diamond, 1991). Diamond's (1991) model predicts that new debt borrowers will begin to build their reputation by being monitored by a bank which is normally middle-rated borrowers. Later, firms will switch to the issuance of directly public placed debt. Within the veins of Diamond's (1991) research, Datta, Datta, Patel (1999) have demonstrated that firms will have the opportunity to lower its cost of debt in the public bond issuance if the firm has been previously monitored by a bank through a loan.

For the U.S. market, there has been key research on the impact of a firm that has both a loan(s) and public bond(s). Diamond (1993) and Rajan (1992), have examined how a mix of private (inside debt) and public (arm's length) debt can improve investment decisions and increase overall firm value. From these researches, we can conclude that bank lenders exercise power over the firm's investment decisions represent both the primary cost and benefit of bank financing. Rajan (1992) argues that bank monitoring and control can improve investment decisions, however a single bank lender may become an information monopoly which will in fact inadequately affects investment incentives. Public markets borrowing limits bank bargaining power and can improve investment efficiency. Diamond (1993) states that a proper mix of public

and private debt can improve investment incentives by limiting bank control over insolvency decisions. Houston & James (1996) find that, in the case of a firm with a single bank relationship, the reliance on bank debt is negatively related to the importance of growth opportunities. On the other hand, firms borrowing from multiple banks, the relationship is positive. Information asymmetry and agency cost are other factors that we have to take into account as for the mix of private and public. Firms that manage under a greater level of information asymmetry rely more on private debt (Krishnaswami, Spindt, Subramaniam, 1999). Also larger firms and firms with larger issue sizes exploit the scale economies in flotation cost of public debt, and have lower proportion of private debt.

For the international bond market, there has been relevant research conducted, more precisely for Yankee bonds. Worldwide privatization of state-owned industries, infrastructure development, and capital investment driven by economic growth are all factors to the demand for international long-term capital bonds (Johnson, 2000). Yankee bonds can be issued under 3 financing methods: publicly traded SEC registration bonds; traditional private placements; and underwritten Rule 144A private placements. Miller & Puthenpurackal (2001) claims that: "the Yankee bond market provides non-U.S. firms an avenue for raising public debt that is often unavailable in their own domestic markets (p.7)" which is often due to low demand of its domestic market. When an international firm adheres to the U.S. and SEC regulations, it can benefit from access to the largest liquid bond market and have an opportunity to arrange to long-term financing.

Law literature has proposed several studies on legal, ownership, and political rights. LLSV (1997, 1998) have found that differences in legal origin and legal institutions help to explain cross-country differences in the financial development and economic growth. They have also demonstrated that legal systems with common law origins offer greater protection to

creditors and shareholders, therefore proving to be better environments for financial market development. The differences of legal and institutional laws around the world have a lot of impact on bank loans and public debt. Under strong creditor protection, loans have more concentrated ownership, longer maturities, and lower interest rates (Quian & Strahan, 2007). Furthermore, banks appear sensitive to the legal and institutional environment, where we can perceive ownership declining relative to domestic banks as creditor protection falls. Esty and Megginson (2002) have made a link between legal risk and debt ownership concentration to understand the various governance roles played by banks as large creditors. Researchers used a sample of 495 project finance loan tranches of $151 billion to borrowers of 61 different countries, and they have found high absolute levels of debt ownership concentration. The largest single banks holds 20.3% while the top five banks collectively hold 61.2% of a typical loan tranche. Country-level political rights for different countries have a significant impact on the cost of public debt. (Qi, Roth, and Wald, 2008). Using a sample of Eurobonds and Yankee bonds from 1980 to 2006, they have found that there key relations between rights (both legal and political) and lower yield spreads. As political right increases by one standard deviation, there will be an 18.6% decline in bond spreads. Political and legal institutions are substitutes (Qi, Roth, and Wald, 2008). If there is a marginal advance in political rights, this will produce greater reductions in the cost of debt for firms from countries with weaker creditor rights.

The literature proposes that both political institutions and creditor rights play a role in the cost of external capital for an international firm (Qian and Strahan, 2007; Demirguc-Kunt and Maksimovic, 1998). Given the significant amount of research in this field of finance, it will be interesting to see if previous empirical research holds for international firms that have both a bank loan(s) and issued a Yankee bond(s) in the United States.

2.1. Mathematical Models

The first question that we examine is if political rights and legal institutions have an impact for firms that issued a Yankee bond and have a bank loan. We use a linear regression analyst to test this question. The dependent variables, yield spread, are regressed on variables describing political and legal institutions, country-level variables, firm-level measures, and bond characteristics.

This is the regression equation:

$$(1) \quad \textit{Yield Spread}_{i,t} = Y_0 + Y_1 \textit{Political Institutions}_{i,t} + Y_2 \textit{Legal Institutions}_{i,t} + \beta' \textit{Controls}_{i,t} + e_{i,t}$$

Where i identifies a particular bond or bank issue, and t denotes the time of the bond or bank issue. The control variables include country-level, firm-level, bond or bank-level characteristics, and dummy variables for the year of issuance and for each industry. The primary measure of political institutions is a political right index and the primary measure of legal institutions is a creditor rights index.

The results expected are that both Y_1 and Y_2 to be significantly negative in the equation. As presented by Roe (2006) and Roe and Siegel (2007), political institutions and political stability are key in a country's economical and financial development. By having strong political institutions, it protects creditors from bad government actions that could have a negative impact on bondholders. The anticipated results should signify that stronger political institutions would result in a lower yield spread. Moreover, if legal institutions variables are sufficient to explain the country environment for creditors, political institutions will not have an impact on the yield spread. If so, the Y_1 coefficients will not be significant.

The last question for this working paper is to see if political rights and legal rights are complements, substitutes (as suggested by Qi, Roth, Wald, 2008; Djankov et al., 2003; Glaeser and Shleifer, 2003), or more or less independent from the point of view of credit markets. The equation to test this question is:

$$(2) \quad \textbf{\textit{Yield Spread}}_{i,t} = Y_0 + Y_1 \textbf{\textit{Political Institutions}}_{i,t} + Y_2 \textbf{\textit{Legal Institutions}}_{i,t} + Y_3(\textbf{\textit{Political Institutions}}_{i,t} x \textbf{\textit{Legal Institutions}}_{i,,t}) \beta' \textbf{\textit{Controls}}_{i,t} + e_{i,t}$$

A positive (negative) Y_3 in equation indicates that political rights substitute (complement) for legal institutions. A marginal enhancement in political institutions will cause a smaller (greater) reduction in the cost of debt if the firm is from a country with better legal institutions. An insignificant Y_3 states that the impacts of political and legal institutions are independent. The projected results are based on the research by Qi, Roth, and Wald (2008) where political and legal institutions are substitutes in determining the cost of debt.

3. Data and Method

We collected political and legal variables, other country specific characteristics, and bond and firm characteristics from multiple sources. Appendix A provides detailed definitions of the variables as well as their sources. In this section, we talk about the data collection, our measures of key variables, the selection of control variables, and econometric issues.

3.1. Sample

This research analysis is based on a non-U.S. sample companies **that have both** issued a Yankee bond(s) and have a Bank loan(s) in the U.S. from 43 of countries from 1983 to 2008.

First we obtained data on Bank loans from *Dealscan Reuters* database. Yankee bond sample was generated from *FISD* database. We require bank loans to be denominated in U.S. dollars to mitigate potential problems related to currency conversion and the estimation of different benchmark interest rates. Furthermore, we restrict our sample to fixed-rate and floating-rate bonds and notes issued by corporations; agencies, government, financial companies, or quasi-government issuers are excluded. Moreover, asset-backed securities and convertible bonds were ignored. The initial sample of companies that have both issued a Yankee bond and have a bank loan includes 192 of firms incorporated in 43 of countries.

3.2. Measuring Bond Yield Spreads

An adjusted yield spread (basis points) will serve as the dependent variable in every regression. Bank loans yield spreads are from *Dealscan* which were calculated on Libor plus premium whereas FISD Yankee Bonds were calculated on Treasury plus premium. Since the beginning of the Credit Crisis, the TED spread has been very volatile. Therefore, we have decided to adjust the differences between Libor and the Treasury spread by using the TED spread for robustness purposes:

(1) TED Spread = Libor 3 months – U.S. Treasury 3 months
(2)Libor Spread = Bank Loan – Libor
(3)Treasury Spread = Bond offering yield – Treasury Spread
(4)Adjusted Yield Spread (for only bank transactions) = TED spread + Libor Spread

3.3. Measuring Bond Yield Maturity Matching

We have decided to match Bonds and Bank loans on a duration maturity matching. We have used this formula for duration matching:

$$Duration = A/(1-R) + [DR(1-R^{n-2})/(1-r)^2] - [A + (N-1)D]R^{n-1}/(1-R)$$
$$Where: A = D = Coupon\ Rate$$
$$N = Years$$
$$r = Rate\ ;\ R = 1/(1+r)$$

3.4. Measuring Political and Legal Institutions – Independent Variables

We use an index of political rights as our primary variable to quantify a country's overall political environment. This measure was obtained from LLSV (1999). We also measure the effectiveness of the legal system of a country with an index of aggregate creditor rights using LLSV (1998) and Djankov, McLiesh, and Shleifer (2007). This is an index that is compiled for each year from 1978 to 2003. Starting from a score of zero, the creditor rights index is increase by one as each of the following requirements is met: (1) there are limits, such as creditor consent or minimum dividends, for a debtor to file for reorganization; (2) secured creditors are able to seize their collateral after the reorganization petition is approved, i.e., there is no automatic stay or asset freeze; (3) secured creditors are paid from the proceeds of liquidating a bankrupt firm before other creditors such as the government or workers; and (4) management does not retain administration of is poverty during the resolution of the reorganization (Qi, Roth, Wald, 2008). The creditor rights index ranges from zero to four and a higher score means stronger creditor rights.

We merge the bond and bank loans data with country level political and legal variables. We use the country of incorporation of the borrowing firm's ultimate parent as the relevant country under investigation.

3.4. Control Variables – Independent Variables

We control for bond characteristics, firm characteristics, and country factors. The duration for maturity matching measures the linear relation between price and yield.

We collected firm-level controls from *Datastream – Worldscope* database. This database contains balance sheet and income statement data for a large number of publicly listed firms across different countries. We extract data to construct firm-level controls that measure firm size (log total assets), return on assets or ROA (net income divided by total assets), leverage (total debt divided by total assets), and growth opportunities as approximated by market-to-book (defined as the market value of equity plus the book value of debt divided by total assets). The data are obtained at the end of the quarter prior to the bond issue. We also include year and 2-digit SIC industry dummies in all regressions.

The country level controls include sovereign rating. We measure the overall country risk with the *Standard & Poor's* sovereign debt ratings, which are changed into comprehensive credit ratings with values ranging from 22 (AAA with positive outlook) to 0 (C with negative outlook) (see Gande and Parsley, 2007).

We are able to match about 79% of the Yankee bonds and 81% bank loans with firm-level data from *Datastream/Worldscope*. The sample size is further reduced because of missing bond rating information, missing bond yield spread, and incomplete firm-level information. Our final sample corresponds to 490 of Bank loans and 368 of Yankee bonds from 43 of countries.

3.5. Econometric Issues

Equations posed in Section 2 were addressed by using linear regression OLS. Using yield spread with the TED spread adjustments adds an element of robustness to the results. The equations have both a firm industry and year specific dummy to catch omitted variable bias.

4. Empirical Results

4.1. Summary statistics

The sample consists of 490 of Bank loans and 368 of Yankee bonds from 43 of countries which 432 of those transactions are before 2000 (243 Bank, 189 Yankee) and 426 after 2000 (247 Bank, 179 Yankee). The top three countries with issuance in the U.S. are the United Kingdom (230), Mexico (161), and Canada (55). See Table 1 for a list of means for selected variables by country.

Table 2 and 3 present correlation coefficients for each variable of interest for both bank and bond respectively. As expected, for both bank and bond, yield spread is negatively correlated with political rights (-0.24; -0.25) and creditor rights (-0.35; -0.35). A surprising result comes the correlation between political and creditor rights where they are both positively correlated for both bank loans and bonds (0.77; 0.60). Table 4 and 5 provides descriptive statistics of the variables used in the regression analysis for both bank loans and Yankee bonds. Median yield spreads are 186 bps and 251 bps.

4.2. Institutions and the Cost of Debt Capital for Bank Loans and Yankee Bonds

Table 6 and 7 presents estimates from regressions of the yield spread over treasury bonds on political and legal variables, country characteristics, and firm characteristics for both bank loans and Yankee bonds.

As for bank loans, we see no statistically significant impact on yield spreads from changes in political rights. This result signifies that creditors pay more attention to creditor rights. In fact, the impact of changes in creditor rights is highly statistically significant. An increase of 1.0 in creditor rights decreases yield spread by 33 bps. The same can be said for Yankee bonds where political rights are insignificant, which is the opposite of the conducted research by Qi, Roth, and Wald (2008). However, 1.0 increase for creditor rights decrease yield spread by 21 bps. Comparing bank loans and Yankee bonds, bank creditors see creditor rights more important than Yankee bond creditors by 12 basis points.

Sovereign ratings are another important factor to both Bank loans and Yankee bond issuance. One increase of 1.0 in sovereign rating implies a spread decrease of 4.4 and 7.5 in yield spreads in bps for both bank loans and Yankee bonds. Adding sovereign rating fails to capture the impact of creditor rights.

Log of total assets & leverage has a statistical impact on yield spread for banks loans. This implies that bank creditors see total assets and leverage key indications of tangibility and risk of an international company. The same can be said for Yankee bonds but also, ROA is statistically significant for every increase of 1.0 unit.

4.3. Interaction between political and creditor rights

Table 8 and 9 considers the interaction between political and creditor rights for both bank loans and Yankee bonds. A surprising result for bank loan transactions shows a positive statistically significant coefficient (-26.7) for creditor and political rights which means they are complements. This signifies for bank loans that a marginal improvement in political institutions will cause a greater reduction in the cost of debt if the firm is from a country with better creditor

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rights. Another surprising result is generated from an insignificant positive coefficient (4.8) in interaction between political and creditor rights for Yankee bond. This results are opposite of Djankov et al. (2003) and Qi, Roth, Wald (2008) where their research have demonstrated a positive statistically significant interaction for Yankee bonds. This can be due to limited data in the sample. For Yankee bonds, the impacts of political and legal institutions are independent.

5. Conclusions

This paper examines the effect of political and creditor rights on the cost of issuance (yield spreads) for firms who have both bank loan(s) in the U.S. and issued bond(s) in the U.S. in USD currency (Yankee bonds). We find that creditors from bank loans and Yankee bonds have little different positions on factors they consider important in evaluating cost of issuance for an international firm. They both see country creditor rights as important but little on political rights. Furthermore, the country sovereign rating is another key factor in assessing the cost of debt. Firm characteristics such as total assets, leverage, and ROA (only for Yankee bonds) are seen as key important firm characteristics.

Lastly, the interactions between political and creditor rights are seen as complements for bank loans and insignificant for Yankee bonds. This means for bank loans that a marginal improvement in political institutions will cause a greater reduction in the cost of debt if the firm is from a country with better creditor rights. For Yankee bonds, the impacts of political and legal institutions are independent.

There is a lot of research remaining to be done for this paper. One key component is to examine the different impact of covenants for both bank loans and Yankee bonds' yield spreads. Also, to test the monitoring impact of a bank on a Yankee bond issuance's cost of debt for an international firm would entail more interesting research. Lastly, we will have to test for biases

such as selectivity bias using the Heckman selection model. The richer set of variables that we propose are likely to be correlated as well and so result in an endogeneity bias. I will attempt to correct for this using the two stages least squares model. I will attempt to learn about and apply these and potentially other regression models in order to gain a better understanding of the international corporate lending market.

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Table 1
Descriptive Statistics by Country

The table reports means for the variables used in the out main regressions for Bank loans and Yankee bonds. Yield spreads are measured in basis points.

Country	Yield Spreads (bps)	Political Rights	Creditor Rights	Sovereign Rating	Observation
Argentina	305.3	2.	1.1	10.1	27
Australia	136.8	3.9	2.9	19.5	27
Belgium	340.8	7	2	20	5
Bahamas	364	0	0	0	1
Bermudas	398.1	1	2	18.7	23
Brazil	339.5	3.9	0.7	10.0	23
Canada	218	3.6	1.	20.3	55
Chile	124.1	4	2	15	47
China	300	5	4	17	2
Colombia	300.2	3	1	21	5
Costa Rica	250	0	1	9	1
France	203.7	3.4	0.02	21	47
Finland	148	3.5	1	21	1
Germany	881	3.5	3	21	1
Hong Kong	233.2	5	4	17	5
Indonesia	460.2	4.5	2.7	14.6	8
India	241	5	2	11.5	4
Ireland	252.4	5	1.4	19.8	7
Italy	115.1	2	2	17.6	10
Japan	52.3	4.5	3	21	6
Korea (south)	163.5	4.2	2.6	16.7	23
Mexico	229.6	3	0.01	11.8	161
Malaysia	86.4	5	3	17.2	9
Netherlands	455.1	2.5	3	20.6	6
Norway	143.8	3.5	2	21	25
New Zealand	137	3	1	21	12
Panama	290.9	2.9	0.02	9.5	23
Philippines	326.6	3.8	1	12.2	10
Poland	426.7	2	1	13	4
Qatar	123.8	0	0	0	6
Russia	359.8	4	1.2	8.2	5
Singapore	225.7	5	3	21	10
Slovakia	115	4	3	16	1
South Africa	701	0	3	16	1
Spain	119.2	5	2	20	21
Sweden	268.3	3.5	1.3	20.3	3
Switzerland	124.1	3	1	21	1
Thailand	149	4	2	14	2
Taiwan	65	3	2	20	2
United Kingdom	185.1	4.2	2.8	20.9	210
Venezuela	182.5	1	3	7	12
Wallis and Futuna Island	108.67	0	0	0	3
Total	251.36	3.30	1.80	15.64	855

Table 2
Correlation Coefficients
This table provides correlation coefficients of key variables for Bank Loans.

	Yield Spreads	Political Rights	Creditor Rights	Sovereign Rating	Log Total Assets	ROA	Leverage
Yield Spreads	1.00						
Political Rights	-0.24	1.00					
Creditor Rights	-0.35	0.78	1.00				
Sovereign Rating	-0.30	0.41	0.47	1.00			
Log Total Assets	-0.43	0.09	0.12	-0.02	1.00		
ROA	-0.10	0.07	0.11	-0.02	0.05	1.00	
Leverage	0.06	0.02	0.07	0.19	-0.16	0.09	1.00

Table 3
Correlation Coefficients
This table provides correlation coefficients of key variables for Yankee Bonds.

	Yield Spreads	Political Rights	Creditor Rights	Sovereign Rating	Log Total Assets	ROA	Leverage
Yield Spreads	1						
Political Rights	-0.2533	1					
Creditor Rights	-0.3511	0.6012	1				
Sovereign Rating	-0.3069	0.2446	0.3665	1			
Log Total Assets	-0.3959	0.1486	0.2243	0.2471	1		
ROA	-0.0599	-0.0232	-0.0568	-0.1791	-0.2547	1	
Leverage	0.3579	-0.2169	-0.2053	-0.069	-0.2148	-0.247	1

Table 4
Descriptive Statistics of Regression Variables
The table reports summary statistics for the sample of Bank Loans.

Variable	Obs	Mean	Std. Dev.	Min	Max
Yield Spreads (bps)	490	186.42	126.73	27.00	656.00
Maturity (years)	490	-110.53	465.31	-2008.00	11.00
Log Total Assets	395	6.98	0.81	5.32	9.47
Market to Book Value	381	2.23	2.61	0.59	14.05
ROA	395	0.14	0.14	-0.09	1.28
Leverage	395	33.93	20.46	4.69	198.04
Ebitda (million$)	389	12	50.5	-.358	481
Ebit (million$)	389	9.8	3.8	-6	353
R&D (thousand$)	395	66.9	413.9	0	3961.4
PPE (thousand$)	395	2797.7	7452	0	63000
Creditor Rights	465	1.24	1.37	0.00	4.00
Sovereign Rating	483	16.80	4.62	8.00	21.00
Political Rights	465	3.57	0.84	2.00	5.00

Table 5
Descriptive Statistics of Regression Variables
The table reports summary statistics for the sample of Yankee Bonds.

Variable	Obs	Mean	Std. Dev.	Min	Max
Yield Spreads (bps)	368	251.73	203.67	0.00	920.00
Maturity (years)	368	-99.83	443.38	-2005.00	11.00
Log Total Assets	298	6.98	0.70	4.78	8.59
Market to Book Value	272	2.55	4.41	0.17	33.57
ROA	295	6.19	16.77	-27.91	188.77
Leverage	271	34.65	16.26	0.00	95.12
Ebitda (million$)	268	3.1	5.9	-2	37
Ebit (million$)	271	1.1	5.2	-2.8	28.3
R&D (thousand$)	297	19	72.9	0	750.2
PPE (thousand$)	297	1305	173.1	0	9874.8
Creditor Rights	344	2.09	1.37	0.00	4.00
Sovereign Rating	347	17.19	4.67	0.00	21.00
Political Rights	342	3.77	1.08	1.00	5.00

Table 6
Bank Loan Yield Spreads and Political and Legal Institutions
The table shows regression estimates of bank loan yield spreads on political and legal conditions, and firm and country characteristics.

$$Yield\ Spread_{i,t} = Y_0 + Y_1\ Political\ Institutions_{i,t} + Y_2\ Legal\ Institutions_{i,t} + \beta' Controls_i + e_{i,t}$$
*

Number of OBS	343

Independent Variable	Dependent Variable: Yield Spread		
	Coefficient	T-Stats	P>t
Political Rights	18.934	1.250	0.212
Creditor Rights	-33.815	-4.070	0.000
Maturity	0.011	0.680	0.497
Log_Total Assets	-136.629	-5.560	0.000
ROA	-100.717	-1.070	0.286
Leverage	0.857	2.670	0.008
Ebitda	0.000	-0.290	0.774
Ebit	0.000	0.410	0.679
Sovereign Rating	-4.375	-1.930	0.055
R&D	0.000	-0.170	0.862
PPE	0.000	1.070	0.285
MTBV	1.838	0.380	0.703

*Regression was run with Industry and Year Dummies

Table 7
Yankee Bond Yield Spreads and Political and Legal Institutions
The table shows regression estimates of Yankee Bond yield spreads on political and legal conditions, and firm and country characteristics.

$$Yield\ Spread_{i,t} = Y_0 + Y_1\ Political\ Institutions_{i,t} + Y_2\ Legal\ Institutions_{i,t} + \beta'Controls_{i,t} + e_{i,t}\ *$$

Number of OBS   257

Independent Variable	Dependent Variable: Yield Spreads		
	Coefficient	T-Stats	P>t
Political Rights	-2.915	-0.230	0.818
Creditor Rights	-20.927	-2.080	0.039
Log_Total Asset	-94.845	-3.990	0.000
ROA	-1.307	-2.520	0.012
Leverage	1.768	2.030	0.044
Sovereign Rating	-7.492	-2.510	0.013
MTBV	3.996	1.810	0.072

*Regression was run with Industry and Year Dummies

Table 8
Interaction Between Political and Creditor Rights for Bank Loans

$$Yield\ Spread_{i,t} = Y_0 + Y_1\ Political\ Institutions_{i,t} + Y_2\ Legal\ Institutions_{i,t} + Y_3(\ Political\ Institutions_{i,t}\ x\ Legal\ Institutions_{i,,t}\ )\ \beta'Controls_{i,t} + e_{i,}\ *$$

Number of OBS   343

Independent Variable	Dependent Variable: Yield Spread		
	Coefficient	T-Stats	P>t
Political Rights	55.365	2.410	0.017
Creditor Rights	80.194	1.570	0.118
Political Rights X Creditor Rights	-26.740	-2.160	0.031
Maturity	0.016	1.160	0.249
Log_Total Assets	-110.536	-3.550	0.000
ROA	-99.577	-1.050	0.294
Leverage	1.046	3.180	0.002
Ebitda	0.000	-0.670	0.504
Ebit	0.000	0.880	0.382
Sovereign Rating	-6.922	-3.140	0.002
R&D	0.000	0.120	0.905
PPE	0.000	0.560	0.576
MTBV	0.165	0.040	0.971

*Regression was run with Industry and Year Dummies

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Table 9
Interaction Between Political and Creditor Rights for Yankee Bonds

$$Yield\ Spread_{i,t} = Y_0 + Y_1\ Political\ Institutions_{i,t} + Y_2\ Legal\ Institutions_{i,t} + Y_3(\ Political\ Institutions_{i,t}\ x\ Legal\ Institutions_{i,,t}\ )\ \beta'Controls_{i,t} + e_{i,}\ *$$

Number of OBS   254

Independent Variable	Dependent Variable: Yield Spread		
	Coefficient	T-Stats	P>t
Political Rights	-16.919	-0.660	0.509
Creditor Rights	-38.086	-0.810	0.421
Political Rights X Creditor Rights	4.873	0.440	0.659
Maturity	0.003	0.240	0.810
Log_Total Assets	-104.234	-3.100	0.002
ROA	-1.179	-1.990	0.048
Leverage	1.795	1.870	0.062
Ebitda	0.000	-1.380	0.169
Ebit	0.000	0.810	0.420
Sovereign Rating	-7.572	-2.460	0.015
R&D	0.000	-0.520	0.601
PPE	0.000	2.090	0.038
MTBV	4.244	1.950	0.052

*Regression was run with Industry and Year Dummies

Appendix A
Variable Definition

Variable Name	Description
Political Rights	An index of political rights. Higher ratings indicate countries that come close to the ideals suggested by questions relating to: there are free and fair elections; those who are elected rule, there are competitive parties or other competitive political groups; the opposition has an important role and has actual power; and minority groups have reasonable self-government or can participate in the government through informal consensus. For each country, a score is given from 0 for the smallest degree of rights to 7 for highest degree of rights. *Sources:* LLSV (1999), and Qi, Roth, and Wald (2008).
Creditor Rights	An index aggregating creditor rights. A score of one is assigned when each of the following rights of secured lenders are defined in laws and regulations: (1) there are restrictions, such as creditor consent or minimum dividends, for a debtor to file for reorganization; (2) secured creditors are able to seize their collateral after the reorganization petition is approved, i.e., there is no automatic stay or asset freeze; (3) secured creditors are paid first out of the proceeds of liquidating a bankrupt firm, as opposed to other creditors such as government or workers; and (4) management does not retain administration of its property pending the resolution of the reorganization. The index ranges from 0 (weak creditor rights) to 4 (strong creditor rights) and is 60 constructed for every year from 1978 to 2003. *Sources:* LLSV(1998) and Qi, Roth, and Wald (2008).
Yield Spread	The yield spread (in basis points) for fixed rate bonds is defined as the difference between the yield to maturity on a corporate bond and the yield to maturity on its duration equivalent risk-free bond. As for Bank Loans, the Yield Spread is calculated based on the amount the borrower pays in basis points over LIBOR for each dollar drawn down. It adds the spread of the loan with any annual (or facility) fee paid to the bank group. Yield spreads for both Banks and Bonds were reinforced by the TED spread adjustment and with the maturity matching described in section 3.3. *Source:* SDC, FISD and Dealscan
Total assets	Total assets in U.S. dollars. *Source:* Worldscope Datastream.
Log total assets	Logarithm of total assets.
MTBV	Market-to-book value defined as the market capitalization of stock plus total debt divided by total assets. *Source:* Worldscope Datastream.

ROA   Return-on-assets defined as net income divided by total assets.
                 Source: Worldscope Datastream.

Leverage   Financial leverage defined as the sum of long and short term debt
                 divided by total assets. *Source:* Worldscope Datastream.

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