

Determinants of Corporate Debt Structure:
an Examination of the Latin American Capital Markets

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Abstract

This paper investigates how publicly traded firms in Latin America decide to allocate their debt between bank debt, non-bank private debt, and public debt. Due to the lack of activity in the equity markets within this region, debt financing comprises the principal source of financing for many of these firms. I found that the strongest determinants of a firm's debt structure were its country's GDP growth rate and the firm's reliance on fixed assets and overall level of debt.

Introduction

Firms mainly finance themselves through the use of internal capital, equity issuance, or debt. The use of internal cash doesn't generate obligations, as the firm uses its own (excess) capital to finance projects. In equity issuances, investors understand that they now own a small stake in the company. The firm has no obligation to repay those funds, but it does have a fiduciary duty to generate shareholder value. Debt financing comes with the obligation to repay those funds at a later date with an added interest. Debt provides the largest upside for the firm as it can leverage a small amount of money into a much larger sum, enabling larger returns than through the use of equity or cash. However, debt does generate a higher possibility of financial distress, increasing the firm's vulnerability to financial complications, missed obligations, and bankruptcy.

In Latin America (LatAm), firms have an even more limited array of options to finance their projects. The LatAm equity capital markets lag the developed world's securities markets due to the 1) small trading volume, 2) high transaction costs and 3) in many cases, large mismatches between the firm's intrinsic value and market value. This phenomenon complicates equity issuances to the point where their unpredictability outweighs the benefits. As such, debt has become the main source of financing when firms cannot depend on equity capital markets.

I extend the existing literature to publicly traded Latin American firms. This set will include firms in Mexico, Brazil, Colombia, Chile, Argentina, and Peru. Within Latin America, the selected countries have the most publicly traded companies both in domestic stock exchanges and international stock exchanges. The decision to use publicly traded firms will facilitate the collection of financial information such as revenues, credit ratings, and balance sheet items. Within my model, I will include cross-country and cross-industry examinations, which will further identify how more macroeconomic and country-specific factors influence a firm's debt financing decision.

The goal of this paper is to shed further light on the Latin American debt capital markets by investigating the relationship between a firm's country and main corporate characteristics and its main sources

of debt. The country-specific information will not only provide further important controls to my analysis but also reflect the country's economic history and the development of its financial markets.

The structure of the paper is as follows. The Literature Review will provide context on the source and use of debt and current developments in the LatAm debt capital markets from past studies and papers. Then the Methodology will discuss the economic theory behind the model and the collected data. The results will be presented and interpreted. The conclusion will discuss the results' economic relevance and summarize the findings of the paper.

Literature Review

The existing literature finds that the strongest determinants of a firm's choice of debt have to do with the firm's financial health and track record. Denis and Mihov (2003) examine the choice of new debt for publicly traded firms during 1995-1996 and find that firms with the highest credit quality exhibit a strong preference for public debt, while firms with non-investment grade ratings borrow from banks, and firms with speculative ratings opt to borrow from non-bank private sources. Besides, firms that have opted for the use of public debt once will be more willing to continue on that path in the future. This reinforces the current theory that less financially stable firms benefit from the additional monitoring from private institutions, such as banks and other private institutions.

This is due to banks being more efficient in information gathering and monitoring, better positioning them to provide debt to riskier firms. Fama (1985) argues that firms who benefit or rely on effective monitoring are more willing to pay for the additional costs of gathering information from banks. Growth firms or highly leveraged firms will face such agency costs, so they will find bank monitoring valuable. Additional monitoring instills financial discipline within management to ensure that the provided capital is used more responsibly. This decision relates to small firms as well, as banks can more readily gather information from their accounts and transactions than other private institutions. In contrast, Rajan (1992) argues that the use of non-bank private debt lowers the hold-up cost of borrowing from banks. This is more often the case with large firms who can

more cheaply provide company information to creditors and do not need constant monitoring from banks. Additionally, large firms operate with a known track-record, allowing them to borrow from non-bank sources at an affordable cost. Thus, I expect a significant relationship between a firm's size and its proportion of bank debt and non-bank private debt.

Economic conditions also impact firms' financing considerations. Diamond's (1991) model shows that in times of high real interest rates or an expected economic downturn, the demand for bank debt rises. He attributes it to the requirement of a higher credit rating to borrow without monitoring under these conditions. So, the average bank loan will go to a firm with a higher credit rating. Thus, I expect the level of debt and debt sources to vary with the country's economic conditions. Consequently, even if firms exhibit financial health that is considered investment grade, they are limited by the financial health of the country they reside in. More prevalent in emerging economies, firms are seldom rated higher than the country's sovereign rating and face an additional complication of its rating being pegged to the sovereign credit rating. Almeida, Cunha, et al. (2016) find that firms reduce their investment and reliance on credit markets due to the rising cost of debt following a sovereign rating downgrade. In examining Latin American firms in particular, political and economic instability has come to be a major influence on the country's credit rating. This provides an interesting opportunity to examine if Latin American firms demonstrate a shift in their financing strategy following sovereign downgrades. The added risk of political and economic uncertainty creates another decision that firms have to undertake regarding the use of domestic or foreign debt. Dalmazzo and Marini (2000) examine the impact of political instability on corporate investment during the 1980s. During this time, firms from Less Developed Countries (LDCs) faced the possibility of a hostile government depleting their capital investment by appropriating part of full of an investment's surplus. They find that firms, to shield themselves from political risks, decide to use foreign debt to finance their investment projects, "when a government...repudiates foreign debt, it violates an international agreement and...is liable to trade sanctions."¹ Thus, I expect foreign ownership

¹ Dalmazzo, Alberto, Marini, Giancarlo, "Foreign Debt, Sanctions and Investment: A Model with Politically Unstable Less Developed Countries.

of a Latin American firm's debt to be prevalent across the data.

In addition to the ratings provided by credit rating agencies, investment banks also influence the demand for a firm's or a country's debt by providing recommendations. Nieto-Perra (2014) examines the activity of investment banks in Latin America and finds that investment banks with substantial underwriting activity are associated with more optimistic recommendations provided to investors in the sovereign bond market. Primarily in the equity markets, this conflict of interest has extended into the sovereign bond market. I aim to record investment bank activity in each country to examine if such it influences a firm's decision to issue public debt.

However, beyond a firm's financial health, the relationship between a firm's financing behavior and ownership structure has also been examined. Lin, Ma et al. (2013) find that firms controlled by large shareholders with excess control rights, and strong tunneling incentives, prefer public debt financing over bank debt to evade the enhanced monitoring and scrutiny from banks.

Data

The sample focuses on LatAm firm financing from 2001-2015. This time frame captures the rippling effects of important capital market developments in the region during the 1990s. In 1990, the US Securities and Exchange Commission allowed American depository receipts for Mexican shares to be listed on the New York Stock Exchange. In 1994, Brazil launched its new currency, the "Plano Real", to combat triple-digit. In 2005, Argentina's sovereign debt-restructuring process was completed after it defaulted on its sovereign debt in 2001. In addition, the last 5 years allow for analysis of how firms in Latin America behaved after the 08-09 Financial Crisis. By focusing on this time period, I aim to capture and analyze the impacts of similar events on the structuring, cost, and overall use of debt financing among LatAm firms.

The full data set can be divided into two main components. I used Trading Economics to obtain GDP growth rates, inflation rates, interest rates, and credit ratings of each country. The second component is comprised of firm-specific information. I utilized Thomson Reuters Eikon to pull financial and industry information from each company, focusing on capital structure and balance sheet information. S&P Capital IQ

was most useful in pulling long-term and short-term credit ratings on the firms within the sample.

The biggest issue within the data collection process was the lack of complete information for firms within the specific timeframe. A recurrent issue was finding a firm's Market Capitalization, Total Debt Outstanding, and Revenues, but no information regarding its credit rating, the value of its assets, or book value. To obtain consistent results, firms experiencing such issues were dropped from the sample.

The final sample contained 7.368 firms across 2001-2015.

Model

To thoroughly examine the determinants of a firm's debt structure, I include variables that account for the firm's size, reputation, financial health, and country characteristics.

Given these control variables, I will run three different sets of regressions, with separate focuses on the macroeconomic, industry, and firm-specific factors that can impact a firm's debt financing.

Debt Type Allocation

$$\begin{aligned}
 &= \beta_0 + \beta_1(\text{Mexico} * \text{GDP Growth}) + \beta_2(\text{Mexico} * \text{Investment Grade}) \\
 &+ \beta_3(\text{Mexico} * \text{Inflation Rate}) + \beta_4(\text{Mexico} * \text{Interest Rate}) + \beta_5(\text{Argentina} * \text{GDP Growth}) \\
 &+ \beta_6(\text{Argentina} * \text{Investment Grade}) + \beta_7(\text{Argentina} * \text{Inflation Rate}) + \beta_8(\text{Argentina} \\
 &* \text{Interest Rate}) + \beta_9(\text{Colombia} * \text{GDP Growth}) + \beta_{10}(\text{Colombia} * \text{Investment Grade}) \\
 &+ \beta_{11}(\text{Colombia} * \text{Inflation Rate}) + \beta_{12}(\text{Colombia} * \text{Interest Rate}) + \beta_{13}(\text{Chile} * \text{GDP Growth}) \\
 &+ \beta_{14}(\text{Chile} * \text{Investment Grade}) + \beta_{15}(\text{Chile} * \text{Inflation Rate}) + \beta_{16}(\text{Chile} * \text{Interest Rate}) \\
 &+ \beta_{17}(\text{Peru} * \text{GDP Growth}) + \beta_{18}(\text{Peru} * \text{Investment Grade}) + \beta_{19}(\text{Peru} * \text{Inflation Rate}) \\
 &+ \beta_{20}(\text{Peru} * \text{Interest Rate}) + \beta_{21}\text{GDP Growth} + \beta_{22}\text{Investment Grade} + \beta_{23}\text{Inflation Rate} \\
 &+ \beta_{24}\text{Interest Rate}
 \end{aligned}$$

Debt Type Allocation

$$\begin{aligned}
 &= \beta_0 + \beta_1\text{Accommodation} + \beta_2\text{Administrative} + \beta_3\text{Agriculture} + \beta_4\text{Entertainment} \\
 &+ \beta_5\text{Construction} + \beta_6\text{Educational} + \beta_7\text{Finance} + \beta_8\text{Healthcare} + \beta_9\text{Information} \\
 &+ \text{Manufacturing} + \beta_{11}\text{Mining} + \beta_{12}\text{Professional Services} + \beta_{13}\text{Real Estate} \\
 &+ \beta_{14}\text{Retail Trade} + \beta_{15}\text{Transportation} + \beta_{16}\text{Utilities} + \beta_{17}\text{Wholesale Trade}
 \end{aligned}$$

Debt Type Allocation

$$\begin{aligned}
&= \beta_0 + \beta_1 \text{Total Assets} + \beta_2 \text{Log}(\text{Market Capitalization}) + \beta_3 \text{Leverage} + \beta_4 \text{Debt Maturity} \\
&+ \beta_5 \text{Tobin's } Q + \beta_6 (\text{Market} - \text{to} - \text{Book}) + \beta_7 (\text{Cost of Debt} - \text{to} - \text{Cost of Equity}) \\
&+ \beta_8 \text{Fixed Assets Ratio} + \beta_9 \text{Profitability} + \beta_{10} \text{Investment Grade} + \beta_{11} \text{Not Rated} \\
&+ \beta_{12} \text{Upgrade} + \beta_{13} \text{Downgrade} + \beta_{14} \text{Sovereign Upgrade} + \beta_{15} \text{Sovereign Downgrade}
\end{aligned}$$

Industry

It is needless to say that all firms, and as a consequence, business models, are not equal. I adjust for a firm's industry as each demand different levels of machinery and human/physical capital, and as a result, different levels and sources of debt. One reason is the collateral included in debt contracts. Firms that have a high percentage of fixed assets, such as firms in Mining, Manufacturing, Transportation, and Construction will naturally be more highly leveraged as they require expensive machinery for day-to-day operations. However, the cost of acquiring debt is also lower for these firms, all else being equal, as they have lower costs of financial distress compared to firms in Information and Trade. If faced with a financially difficult situation, fixed asset-heavy firms can sell those same assets to ease downturns. Thus, I expect high levels and lower cost of debt for firms in Manufacturing, Transportation, Construction, and Transportation.

Country factors

As discussed in the literature review, a country's economic conditions can impact a firm's financing strategy. While there is strong empirical evidence highlighting the impact of a country's financial health (GDP and credit rating) and current interest rates on debt issued, there is mixed evidence behind the strength of the impact of inflation on corporate debt levels. However, following economic reasoning, if firms are faced with smaller profit margins during inflationary times, I expect debt levels to rise.

Firm-Specific Factors

The chosen variables are meant to convey information about a firm's size, financial health, reliance on fixed assets, debt maturity levels, and overall performance. Table 1 includes the definition of each variable and what financial metrics are used to arrive at each value.

Debt Type Allocation

The independent variables of each regression will be the firm's allocation to Public Debt, Bank Debt, and Non-Bank Private debt, measured in percentage terms. The amount issued in dollars will contain very high variation, so looking at the relative allocation of each source of debt will provide a clearer picture of the role of each type of debt in the firm's debt structure.

Summary of Data

As stated before, many firms were dropped from the samples due to missing information. Thus, to work with large enough sample sizes, I decided to group annual information into three time periods: 2001-2005, and 2006-2010 and 2011-2015. Doing so not only mitigates the stated issue but still allows for the analysis of the proposed relationships across time and economic conditions by better aligning the model to the long-term credit cycle. Such observations would be more difficult to spot on a per-year basis. Given this setup, I will run the proposed regressions on each time-period.

Table 2 shows the industry makeup of firms in each time-period. The most represented industries are Finance & Insurance, Manufacturing, and Utilities, which sheds further light on the strong presence of global financial institutions within Latin America and the region's strong exporting businesses.

Table 3 shows that Brazil, Mexico, and Chile have the most firms in each sample, reinforcing the fact that these countries have the most active capital markets in Latin America. By adding interaction variables between each country and its economic characteristics (GDP, Inflation, Interest Rates, Credit Rating) we mitigate overweighting our results on the strong firm presence of these countries in our samples.

Figures 1.1-1.3 indicate that there is no significant shift in the distribution of Investment Grade firms,

Non-Investment Grade firms, and Not Rated firms in our sample. However, there is a consecutive fall in the share of Investment Grade firms. While Mexico, Colombia, and Argentina did experience reduced growth during 2006-2010 and 2011-2015, as shown in Table 4, it is not enough to measure the strength of sovereign GDP growth rate's effect on the firm's credit rating. Per the supporting literature, the fall in Investment Grade firms could signify a rise in the use of bank debt. We see this exact result in Table 5, showing a significant rise in Average Bank Debt to \$255 million in 2001-2005 and \$584 million in 2006-2010. While all debt sources rose between the same periods, bank debt experienced the most significant rise.

When we switch our focus on each country and time-period, we obtain a more detailed view. Interestingly, we see a fall in leverage levels in 2006-2010 and a subsequent rise in 2011-2015. I attribute this to the rapid, extreme changes in debt levels in 2008-2010, as firms entered into sustained periods of financial distress stemming from the Financial Crisis, and the rise in debt levels as global economies recovered in the following years. This shift is also reflected in the rising cost of debt in 2006-2010. Higher debt levels signaled riskier firms, which led to higher costs in obtaining further debt. Mexican firms demonstrated significant jumps in bank debt and private non-bank debt, as did Colombian firms. Colombia's sustained fall in GDP growth could partially explain firms' growing use of non-public debt, but further analysis is required to make additional claims.

When we see the allocation to each type of debt, we see a much clearer picture. Allocation to bank debt didn't shift much across countries and time-periods. However, each country, except for Mexico, experienced significant rises in public debt reliance. Argentina and Chile displayed the largest reductions in allocation to private non-bank debt, as Argentinian firms lowered their allocation to 87% from 95%, and Chilean firms from 86% to 77%. The high allocation to private non-bank sources is a reflection of interest conditions in Latin America. During 2001-2015, Latin American countries were characterized by high interest rates, with Brazil, Colombia, and Argentina having double-digit interest rates, as shown in Table 9. These stringent economic conditions lead to firms to rely less on public borrowing and opt to institutional monitoring,

Table 10 provides the most interesting summary of our data. Across all years, Finance & Insurance firms

are the only firms that used Bank Debt. An average of 20%, it's reasonable that such firms would obtain a significant portion of their debt from banks or other financial institutions given the role of debt in their business model. Unlike other firms, financial institutions do not use debt to invest in their business but instead use it as a product that allows them to borrow at one rate, lend at a higher rate, and make money on that spread.

As discussed beforehand, Manufacturing and Transportation & Warehousing firms did exhibit high leverage levels, along with Finance & Insurance. These types of firms displayed very low allocations to public debt, reinforcing the trend that highly leveraged firms can more cheaply acquire debt from private sources than from the public markets.

Results

A total of 9 regressions were run to test the questions proposed at the beginning of this paper and the relationships found in previous studies. For the discussion of the results, Model 1 will refer to the results from 2001-2005, Model 2 will refer to results from 2006-2010, and Model 3 will refer to the results from 2011-2015. For each model, the first column reports the allocation to bank debt, the second column reports the allocation to public debt, and the third column reports the allocation to non-bank private debt.

Industry Results

Table 10 displays the results of regressing the allocation of each type of debt on each firm's sector, determined by the Global Industry Classification Standard (GAICS).

Within the Bank Debt models, an important thing to point out is that across all models, only Finance firms had allocations toward bank debt. Thus, we can only focus on the Constant term. The increase in the constant term in Model 2 does relay information regarding the need for bank debt during 2006-2010. Possibly due to the Financial Crisis, the need for bank debt, and the monitoring that comes with it, increases as financial distress among firms became more widespread. The fall in bank debt allocation in Model 3 signals that need falling is economic rebuilding began to gain momentum among Latin American countries. In addition, the

negative and significant relation with private non-bank debt in Model 3 also reflects the operational nature of financial institutions. Borrowing from other banks is the norm among these firms and a large reliance on other private institutions is seldom.

Overall, the results from these models didn't reveal much information about the cross-industry differences in debt sources. There is too much variation within each industry, with respect to corporate and country-specific economic conditions, which makes identifying direct statistical relationships difficult.

Country Specific Results

Table 11 displays the results of regressing the allocation of each type of debt on macroeconomic factors and country identifiers. Each country identifier equals 1 if the firm is from that country. Constructing interaction variables between country and macroeconomic indicators allows for a more granular view of debt type allocation across changing economic conditions.

The interaction variable with GDP was found to be positively, significantly related to Public Debt, and negatively related to Private Non-Bank Debt for Peru and Colombia in Model 2. These findings reinforce Diamond's (1991) findings, which demonstrated that in economic downturns, firms opt to use bank debt for the monitoring benefits. Thus, rising GDP growth rates indicate a healthier economy which creates more suitable conditions for borrowing from the public markets.

The interaction variables with Inflation provided contrasting results across different models and countries. For Mexico, it was found to be positively, significantly related to Bank Debt in Model 3, while it was found to be negatively, slightly significantly related to Brazil and Peru. While I can interpret Mexico*Inflation's impact as a signal of a weakening economy, therefore increasing the need for bank monitoring, the impact is not sustainable throughout the models. More consistent results are needed to specify a direct explanation.

The results from the interaction variables with Interest Rate provided contrary results to Diamond's (1991) initial findings. While he found that firms opt to use bank debt with rising interest rates, that was not the

case here. Among the statistically significant results, a negative relation was shown towards bank debt allocation for Mexico and a positive relation for Colombia in Model 3.

Firm-Specific Results

Table 12 displays the results of regressing the allocation of each type of debt on firms' characteristics. This is where I expected to find the most robust effects on the sources of debt.

While Total Assets is found to be significantly, positively correlated with an increase in bank debt allocation but negatively correlated with the remaining sources of debt, the lack of economic significance leaves little room for further interpretation.

I expected Log(Market Capitalization) to be correlated with an increase in private non-bank debt. However, contrary to Rajans (1992), it was negatively, significantly correlated with Bank Debt and Private Non-Bank Debt in Model 1 and Model 2. The economic significant results on bank debt, however, do follow his findings. Serving as a proxy for a firm's size, the negative correlation indicates that larger, more established firms don't require bank's monitoring and information collecting practices. While not economically significant, the fall in private non-bank debt can also be an indication that healthy firms, which are usually larger, can cheaply obtain debt from the public markets.

A firm's leverage proved to be economically, positively correlated with bank debt allocation in Model 1, and negatively correlated with public debt in Model 2. Further expanding on Fama's (1995) findings, as firms become more leveraged, the benefit from bank monitoring increases as well. While the findings are found in separate models, they are complementary. However, this contradicts the effect of the Cost of Debt to Cost of Equity, as it also shows a negative, significant correlation with bank debt. A higher overall ratio would reflect a firm with a high cost of debt, an indication that the firm is in a precarious financial position. Given that the negative impact isn't paired with a similar rise in the other remaining sources, we can deduce that the firm opts to issue equity to raise funds. This, as a result, can lower their leverage levels and help create further financial health.

Debt Maturity, which shows the ratio of long term debt to total debt, is strongly correlated with a rise in private non-bank debt and negatively correlated with bank debt and public debt across the models. Given the long maturity of their debt obligations, firms might seek to avoid the constant monitoring that arises from borrowing from banks. The economic significance of bank debt also caught my attention. The longer a debt's maturity, the higher its interest rate risk. As such, the market can demand a higher return on the debt to account for the added risk, which increases the cost of debt to the issuing firm.

Tobin's Q expresses the relationship between a firm's market valuation and the value of its assets. So, a ratio of less than 1 means that the cost to replace a firm's assets is larger than the value of its stock, signifying undervaluation. If the ratio is greater than 1, it signifies that the firm is overvalued, meaning more expensive than the replacement cost of its assets. Tobin's Q was only significantly and economically significant on bank debt in Model 2. However, it calls to question the interpretation of the Q ratio. A higher ratio can imply a firm that is performing well in the market, signifying strong financial health, and consequently, and as a consequence, decrease the costs of borrowing from private sources. However, that was not the case, making further analysis questionable.

Fixed Asset Ratio is positively significantly related to the allocation of non-bank private debt across all models. This again can reveal information about a firm's cost of financial distress. As earlier discussed, firms with large fixed assets face lower costs of financial distress, as they can sell such assets to pay any outstanding obligations. Thus, it can be another indicator of a firm's credit health. High ratios of fixed assets will reveal the strong financial health of a firm and facilitate borrowing from private sources.

Investment Grade did provide interesting results in Model 1 and Model 3. Being negatively related to bank debt in Model 1 and positively related to public debt in Model 3. As Denis and Mihov (2003) found in their studies, firms that demonstrate investment-grade credit quality will opt to borrow the public markets and obtain little benefit from monitoring from banks.

The omission of Downgrade and Upgrade means that firms throughout the models mean that there weren't firms that were upgraded to Investment Grade or downgraded to Non-Investment Grade. I didn't expect

this to occur in Model 2 as firms could've lost investment grade quality due to the rippling effects of the Financial Crisis. Sovereign Upgrade, however, did show a positive, significant impact on private non-bank debt allocation in Model 1 and Model 3. While it wasn't the impact that I expected, it can indicate that in light of a country's upgrade to Investment Grade reduces the cost from borrowing from private institutions, making the monitoring aspect of borrowing from these institutions more attractive.

Conclusion

After controlling for industry-specific, macroeconomic, and firm-specific factors that can influence a firm's debt structure, I found the following results. Across industries, the most robust result was the strong positive relationship between financial firms and the allocation of bank debt. It simply highlighted the nature of debt in the operations of financial institutions.

Across countries, the most robust results indicated a strong relationship between a country's GDP growth rate and the allocation of non-bank private debt and the aversion of public debt markets with rising interest rates. These relationships reveal information about how an agent, whether that be the overall public market, a bank, or a private institution, prices debt in face of certain economic conditions. Rising GDP growth rates indicate a strong economy, which consequently, indicates financial health within corporations and lowers the cost of borrowing from non-bank private institutions.

Within corporate characteristics, rising leverage was the strongest determinant in the use of bank debt. Highly leveraged firms by nature need to operate with more financial discipline, which is facilitated by monitoring from banks in their role as lenders. Long debt maturities, fixed asset ratios, and profitability were the strongest determinants in the use of non-bank private debt and aversion to the other types of debt. Long debt maturities indicate a firm that cannot deal with immediate revenue limitations and, as a result, also do not want to deal with constant bank monitoring over extended periods. Profitability and the fixed assets ratio, however, function as the strongest indicators of a firm's financial health in both healthy and failing economies. Firms with high profitability and fixed assets ratios do not only indicate a high return on their assets but also provide a

higher level of assurance that they will be able to pay debt obligations when revenues fall through the sale of its assets.

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Tables and Figures

Table 1: Descriptions for Control Variables

Control Variables	Variable Definition
<i>Debt Structure</i>	
Public Debt	Amount of public debt issued by firm
Public Debt vs Bank Debt	Log-odds ratio of probability of Issuing Debt relative to Bank Debt
Non-Bank Debt vs Bank Debt	Log-odds ratio of probability of issuing Private Debt relative to Bank Debt
Public Debt vs Non-Bank Debt	Log-odds ratio of probability of Issuing Debt relative to Non-Bank Private Debt
Debt Maturity	The ratio of long-term debt due after three (or five) years to total debt
<i>Firm Characteristics</i>	
Leverage	Ratio of Total Debt to Market Capitalization
Fixed Assets Ratio	Ratio of Net Property, Plant, & Equipment to Total Assets
Tobin's Q	Ratio between of physical asset's market value and its replacement value)
Investment Grade	1 if firm has an S&P Long Term Credit Rating greater than BBB
Market-to-Book	Total Assets minus Book Value of Equity plus Market Value of Equity
Profitability	Ratio of EBIT to Total Assets
Not Rated	1 if firm has no Credit Rating
Market Capitalization	Share Price * Shares Outstanding
Cost of Debt vs Cost of Equity	Derived from the Weighted Average Cost of Capital (WACC) model, the ratio of the Cost of Debt relative to the Cost of Equity
<i>Country Characteristics</i>	
Sovereign Investment Grade	1 if country has an S&P Long Term Credit Rating greater than BBB
Sovereign GDP Growth	Country's yearly GDP growth
Sovereign Interest Rate	Country's yearly Interest Rate
Sovereign Inflation Rate	Country's yearly Inflation Rate

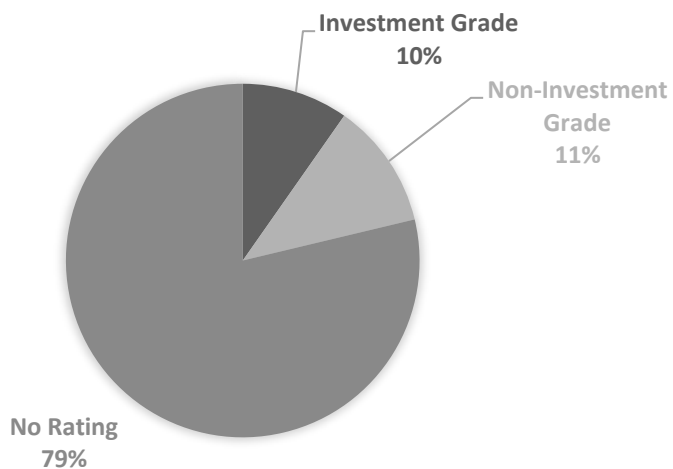
Table 2: Industry Makeup

Industry	2001-2005	2006-2010	2011-2015
Accommodation and Food Services	39	41	56
Administrative and Support and Waste Management and Remediation Services	9	11	13
Agriculture, Forestry, Fishing and Hunting	73	79	90
Arts, Entertainment, and Recreation	27	34	34
Construction	115	172	198
Educational Services	5	11	18
Finance and Insurance	211	242	394
Health Care and Social Assistance	18	25	32
Information	81	95	111
Manufacturing	844	908	1022
Mining, Quarrying, and Oil and Gas Extraction	74	77	83
Professional, Scientific, and Technical Services	16	25	39
Real Estate and Rental and Leasing	44	88	108
Retail Trade	116	140	170
Transportation and Warehousing	87	125	144
Utilities	274	324	346
Wholesale Trade	22	27	26

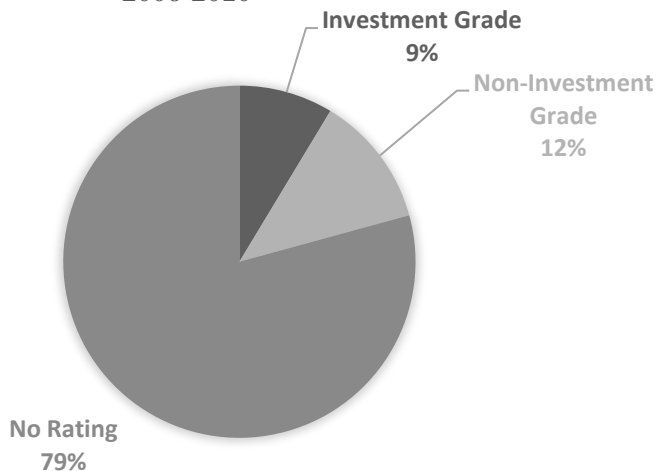
Table 3: Country Representation

Country	2001-2005	2006-2010	2011-2015
Argentina	210	218	275
Brazil	701	916	1055
Chile	493	519	551
Colombia	54	96	169
Mexico	290	369	498
Peru	307	311	342

**FIGURE 1.1: COMPOSITION OF SOVEREIGN RATINGS,
2001-2005**



**FIGURE 1.2: COMPOSITION OF SOVEREIGN RATINGS,
2006-2010**



**FIGURE 1.3: COMPOSITION OF RATING GRADES,
2011-2015**

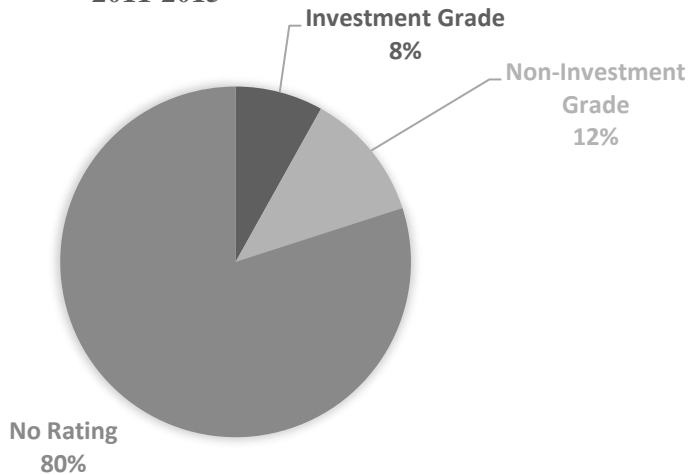


Table 4: Annual GDP Growth

Year	Mexico	Peru	Colombia	Brazil	Chile	Argentina
2001	-0.40%	0.62%	1.68%	1.39%	3.30%	-4.41%
2002	-0.04%	5.45%	2.50%	3.05%	3.11%	-10.89%
2003	1.45%	4.17%	3.92%	1.14%	4.09%	8.84%
2004	3.92%	4.96%	5.33%	5.76%	7.21%	9.03%
2005	2.31%	6.29%	4.71%	3.20%	5.74%	8.85%
2006	4.50%	7.53%	6.78%	3.96%	6.32%	8.05%
2007	2.29%	8.52%	6.85%	6.07%	4.91%	9.01%
2008	1.14%	9.13%	3.26%	5.09%	3.53%	4.06%
2009	-5.29%	1.10%	1.21%	-0.13%	-1.56%	-5.92%
2010	5.12%	8.33%	4.35%	7.53%	5.84%	10.13%
2011	3.66%	6.23%	7.36%	3.97%	6.11%	6.00%
2012	3.64%	6.14%	3.90%	1.92%	5.32%	-1.03%
2013	1.35%	5.85%	4.57%	3.01%	4.05%	2.41%
2014	2.80%	2.38%	4.73%	0.50%	1.77%	-2.51%
2015	3.23%	3.25%	2.96%	-3.55%	2.30%	2.73%

Table 5: Debt Source Summary (in millions)

	2001-2005	2006-2010	2011-2015
Average Total Debt	540.07	1180.05	2051.68
Average Bank Debt	82.56	260.31	603.81
Average Public Debt	39.14	116.36	112.96
Average Private Non-Bank Debt	418.37	803.38	1334.91
Average Cost of Debt	4.43%	4.64%	4.46%

Table 6: Annual Inflation Rates

Year	Mexico	Peru	Colombia	Brazil	Chile	Argentina
2001	6.37%	1.98%	7.97%	6.84%	3.57%	-1.06%
2002	5.03%	0.19%	6.35%	8.45%	2.49%	25.93%
2003	4.55%	2.26%	7.13%	14.71%	2.81%	14.85%
2004	4.69%	3.66%	5.90%	6.60%	1.05%	4.40%
2005	3.99%	1.62%	5.05%	6.87%	3.05%	9.63%
2006	3.63%	2.00%	4.29%	4.18%	3.39%	10.90%
2007	3.97%	1.78%	5.55%	3.64%	4.41%	8.85%
2008	5.13%	5.79%	7.00%	5.68%	8.72%	8.58%
2009	5.30%	2.94%	4.20%	4.89%	0.35%	6.28%
2010	4.16%	1.53%	2.27%	5.04%	1.41%	10.46%
2011	3.40%	3.37%	3.42%	6.64%	3.34%	9.78%
2012	4.11%	3.66%	3.18%	5.40%	3.01%	10.04%
2013	3.81%	2.81%	2.02%	6.20%	1.79%	10.62%
2014	4.02%	3.24%	2.90%	6.33%	4.72%	38.00%
2015	2.72%	3.55%	4.99%	9.03%	4.35%	26.70%

Table 7: Debt Source Summary by Country & Period (in millions)

	Leverage	Average Total Debt	Average Bank Debt	Average Public Debt	Average Private Non-Bank Debt	Average Cost of Debt
Argentina						
<i>2001-2005</i>	1.21	327.63	3.53	9.87	314.23	5.76%
<i>2006-2010</i>	0.59	176.60	2.35	19.07	155.18	5.31%
<i>2011-2015</i>	1.75	288.23	4.73	36.79	246.71	4.92%
Brazil						
<i>2001-2005</i>	2.45	851.50	224.13	36.28	591.09	5.67%
<i>2006-2010</i>	1.52	2058.36	594.17	150.22	1313.97	5.89%
<i>2011-2015</i>	1.87	3583.56	1416.67	76.95	2089.94	5.59%
Chile						
<i>2001-2005</i>	1.06	420.06	11.82	54.02	354.22	3.45%
<i>2006-2010</i>	0.86	694.27	18.47	121.35	554.45	3.72%
<i>2011-2015</i>	0.88	1175.85	37.04	223.84	914.97	3.76%
Colombia						
<i>2001-2005</i>	0.62	377.53	42.13	33.20	302.20	3.53%
<i>2006-2010</i>	0.58	1075.52	193.08	229.35	653.09	3.81%
<i>2011-2015</i>	0.73	2178.12	200.50	259.98	1717.65	3.25%
Mexico						
<i>2001-2005</i>	0.91	658.27	0.31	77.70	580.26	4.02%
<i>2006-2010</i>	1.37	1147.33	144.13	122.11	881.09	4.04%
<i>2011-2015</i>	1.51	1805.28	365.23	109.92	1330.13	3.87%
Peru						
<i>2001-2005</i>	0.82	83.94	11.76	6.43	65.76	2.83%
<i>2006-2010</i>	0.58	178.26	19.95	34.82	123.48	2.98%
<i>2011-2015</i>	0.67	451.54	37.86	38.45	375.22	3.13%

Table 8: Average Debt Type Composition, by Country

	Leverage	% Bank Debt	% Public Debt	% Private Non-Bank Debt
Argentina				
<i>2001-2005</i>	1.20	1%	4%	95%
<i>2006-2010</i>	0.58	1%	12%	87%
<i>2011-2015</i>	1.71	2%	11%	87%
Brazil				
<i>2001-2005</i>	2.45	3%	4%	93%
<i>2006-2010</i>	1.50	2%	11%	87%
<i>2011-2015</i>	1.91	3%	7%	90%
Chile				
<i>2001-2005</i>	1.04	0%	14%	86%
<i>2006-2010</i>	0.84	0%	18%	81%
<i>2011-2015</i>	0.83	1%	23%	77%
Colombia				
<i>2001-2005</i>	0.68	5%	6%	89%
<i>2006-2010</i>	0.59	5%	13%	81%
<i>2011-2015</i>	0.72	3%	12%	84%
Mexico				
<i>2001-2005</i>	0.88	0%	11%	89%
<i>2006-2010</i>	1.34	4%	13%	83%
<i>2011-2015</i>	1.50	5%	10%	85%
Peru				
<i>2001-2005</i>	0.81	3%	7%	90%
<i>2006-2010</i>	0.58	2%	14%	84%
<i>2011-2015</i>	0.67	1%	10%	90%

Table 9: Annual Interest Rate

Year	Mexico	Argentina	Brazil	Colombia	Chile	Peru
2001	11.31%	32%	20.06%	9.79%	4.50%	9%
2002	7.09%	70%	19.35%	6.50%	4.42%	3%
2003	6.23%	1.95%	21.57%	15.23%	2.50%	2.63%
2004	6.82%	3.55%	17.14%	14.33%	6.32%	2.67%
2005	9.20%	7.30%	18.76%	12.01%	6.05%	3.02%
2006	7.19%	8.00%	14.38%	9.18%	6.16%	4.29%
2007	7.19%	10.75%	11.50%	10.02%	6.14%	4.71%
2008	7.68%	12.50%	13.68%	11.90%	7.10%	5.90%
2009	5.43%	14.00%	9.70%	9.56%	5.67%	3.25%
2010	4.40%	11.00%	10.93%	8.48%	6.25%	2.06%
2011	4.24%	13.97%	11.66%	8.10%	5.97%	4.04%
2012	4.24%	12.44%	8.07%	6.82%	5.43%	4.25%
2013	3.75%	15.05%	8.99%	6.50%	5.31%	4.21%
2014	3.00%	26.86%	11.54%	7.06%	4.74%	3.79%
2015	2.98%	33.00%	14.16%	7.87%	4.48%	3.35%

Table 10: Average Debt Type Composition, by Industry

	Leverage	% Bank Debt	% Public Debt	% Private Non-Bank Debt
Accommodation and Food Services				
<i>1996-2000</i>	0.49	-	8%	92%
<i>2001-2005</i>	0.71	-	17%	83%
<i>2006-2010</i>	0.67	-	8%	92%
Administrative and Support and Waste Management and Remediation Services				
<i>1996-2000</i>	0.73	-	12%	88%
<i>2001-2005</i>	1.15	-	19%	81%
<i>2006-2010</i>	0.57	-	19%	81%
Agriculture, Forestry, Fishing and Hunting				
<i>1996-2000</i>	2.83	-	7%	93%
<i>2001-2005</i>	1.08	-	22%	78%
<i>2006-2010</i>	0.85	-	15%	85%
Arts, Entertainment, and Recreation				
<i>1996-2000</i>	0.38	-	8%	92%
<i>2001-2005</i>	0.63	-	12%	88%
<i>2006-2010</i>	0.68	-	12%	88%
Construction				
<i>1996-2000</i>	1.19	-	11%	89%
<i>2001-2005</i>	0.87	-	21%	79%
<i>2006-2010</i>	1.41	-	16%	84%
Educational Services				
<i>1996-2000</i>	1.71	-	0%	100%
<i>2001-2005</i>	1.30	-	4%	96%
<i>2006-2010</i>	0.59	-	14%	86%
Finance and Insurance				
<i>1996-2000</i>	1.27	18%	7%	75%
<i>2001-2005</i>	1.65	21%	9%	70%
<i>2006-2010</i>	1.83	18%	6%	76%
Health Care and Social Assistance				
<i>1996-2000</i>	0.33	-	14%	86%
<i>2001-2005</i>	0.61	-	10%	90%
<i>2006-2010</i>	0.45	-	10%	90%
Information				
<i>1996-2000</i>	1.53	-	7%	93%
<i>2001-2005</i>	1.10	-	10%	90%
<i>2006-2010</i>	0.85	-	11%	89%
Manufacturing				
<i>1996-2000</i>	1.96	-	9%	91%
<i>2001-2005</i>	1.05	-	13%	87%

<i>2006-2010</i>	1.46	-	12%	88%
Mining, Quarrying, and Oil and Gas Extraction				
<i>1996-2000</i>	0.67	-	5%	95%
<i>2001-2005</i>	0.82	-	18%	82%
<i>2006-2010</i>	0.53	-	18%	82%
Professional, Scientific, and Technical Services				
<i>1996-2000</i>	0.41	-	14%	86%
<i>2001-2005</i>	0.60	-	20%	80%
<i>2006-2010</i>	0.67	-	14%	86%
Real Estate and Rental and Leasing				
<i>1996-2000</i>	0.87	-	5%	95%
<i>2001-2005</i>	1.00	-	19%	81%
<i>2006-2010</i>	1.18	-	10%	90%
Retail Trade				
<i>1996-2000</i>	1.01	-	9%	91%
<i>2001-2005</i>	1.17	-	13%	87%
<i>2006-2010</i>	1.13	-	13%	87%
Transportation and Warehousing				
<i>1996-2000</i>	1.23	-	5%	95%
<i>2001-2005</i>	1.45	-	15%	85%
<i>2006-2010</i>	2.66	-	11%	89%
Utilities				
<i>1996-2000</i>	1.00	-	7%	93%
<i>2001-2005</i>	1.19	-	9%	91%
<i>2006-2010</i>	1.37	-	9%	91%
Wholesale Trade				
<i>1996-2000</i>	0.81	-	8%	92%
<i>2001-2005</i>	0.74	-	13%	87%
<i>2006-2010</i>	1.18	-	14%	86%

Table 11: OLS Regression of Debt Type Allocation on Firm Sector

Variables	Model 1			Model 2			Model 3		
	(1) Bank Debt	(2) Public Debt	(3) Private Non-Bank Debt	(4) Bank Debt	(5) Public Debt	(6) Private Non- Bank Debt	(7) Bank Debt	(8) Public Debt	(9) Private Non- Bank Debt
Finance		3.767 (10.17)	-24.96*** (8.915)		1.662 (12.43)	-13.05 (10.74)		-7.376 (10.35)	-4.440 (9.017)
Utilities		4.767 (10.10)	-6.700 (8.891)		1.570 (12.37)	8.108 (10.71)		-3.619 (10.34)	10.66 (9.026)
Mining		-5.530 (10.64)	-5.300 (9.104)		22.70* (12.92)	-1.345 (10.97)		9.035 (10.74)	2.505 (9.267)
Manufacturing		7.363 (9.839)	-8.747 (8.837)		7.071 (12.23)	3.797 (10.66)		3.282 (10.24)	7.956 (8.975)
Construction		13.40 (10.44)	-10.99 (9.001)		14.36 (12.41)	-4.365 (10.78)		8.809 (10.44)	4.113 (9.083)
Wholesale Trade		4.258 (12.88)	-8.160 (9.761)		4.969 (13.92)	4.308 (11.57)		-3.206 (11.51)	5.612 (9.928)
Real Estate		8.937 (12.88)	-4.931 (9.298)		18.59 (12.74)	-2.084 (10.93)		3.159 (10.78)	9.716 (9.194)
Retail Trade		10.14 (10.48)	-9.278 (8.999)		10.74 (12.60)	3.892 (10.82)		3.085 (10.49)	6.956 (9.105)
Transportation		5.082 (11.17)	-5.081 (9.061)		9.372 (12.56)	1.747 (10.84)		0.773 (10.57)	9.012 (9.133)
Healthcare		7.760 (12.32)	-14.41 (9.960)		6.490 (14.63)	6.920 (11.64)		-2.211 (11.86)	10.49 (9.752)
Information		0.708 (10.64)	-7.229 (9.079)		2.406 (12.77)	6.958 (10.90)		-0.0399 (10.66)	8.796 (9.187)
Accommodation		12.82 (12.32)	-7.950 (9.359)		11.24 (13.29)	0.298 (11.26)		0.714 (11.58)	12.53 (9.416)
Agriculture		6.671 (10.99)	-7.490 (9.108)		22.48* (12.77)	-5.207 (10.96)		2.229 (10.67)	5.152 (9.242)
Professional Services		9.972 (12.88)	-14.08 (10.09)		5.019 (13.40)	-2.973 (11.64)		1.693 (11.33)	6.182 (9.613)
Arts		0.0652 (11.93)	-8.110 (9.592)		12.28 (14.06)	5.069 (11.38)		9.887 (12.12)	8.068 (9.706)
Administrative			-12.12 (10.99)		2.767 (14.63)	-2.646 (12.82)		25.32* (14.40)	1.058 (10.82)
Education					0.191 (21.09)	12.97 (12.82)		18.33 (13.79)	5.918 (10.33)
Constant	45.18*** (3.155)	18.18* (9.739)	100*** (8.811)	51.27*** (2.959)	21.04* (12.18)	83.17*** (10.63)	39.05*** (2.094)	24.06** (10.18)	79.95*** (8.949)
Observations	84	679	2,055	99	1,106	2,429	183	1,289	2,890
R-squared	0.000	0.026	0.069	0.000	0.054	0.061	0.000	0.046	0.044

Standard errors in parentheses

*** p<0.01, ** p<0.05, *

p<0.1

Table 12: OLS Regression of Debt Type Allocation on Country Characteristics

Variables	Model 1			Model 2			Model 3		
	(1) Bank Debt	(2) Public Debt	(3) Private Non- Bank Debt	(4) Bank Debt	(5) Public Debt	(6) Private Non- Bank Debt	(7) Bank Debt	(8) Public Debt	(9) Private Non- Bank Debt
Mexico*GDP	-1.101 (10.73)	0.0908 (1.628)	-0.342 (1.049)	3.286 (4.422)	0.0780 (0.875)	-1.212** (0.568)	5.090** (2.253)	1.795 (2.163)	-0.882 (1.245)
Mexico*Inflation	-12.70 (59.62)	3.492 (8.267)	-0.357 (4.672)	-2.578 (7.855)	0.586 (4.595)	-8.112** (3.313)	66.52*** (16.29)	-0.489 (3.636)	0.812 (2.144)
Mexico*Interest Rates	-2.311 (18.24)	2.631 (2.464)	-0.161 (1.352)	6.023 (7.466)	1.267 (1.443)	-0.971 (0.989)	11.54*** (4.106)	0.302 (3.305)	-0.662 (1.985)
Argentina*GDP	5.453 (22.13)	4.406 (2.881)	-0.517 (1.213)	-4.722 (8.650)	0.421 (1.097)	-0.124 (0.642)	-0.0419 (4.111)	-0.0430 (1.094)	0.228 (0.679)
Argentina*Inflation	-0.618 (3.655)	-1.076 (0.808)	0.135 (0.310)	-3.427 (4.024)	4.148 (5.430)	-1.346 (3.214)	0.398 (30.44)	-0.301 (0.620)	0.481 (0.376)
Argentina*Interest Rates	0.858 (6.344)	1.495 (1.043)	-0.140 (0.427)	-1.396 (3.015)	2.043 (2.962)	-0.269 (1.791)	4.767 (18.95)	0.00348 (1.118)	0.210 (0.693)
Chile*GDP	-4.682 (9.898)	-0.538 (1.790)	-0.816 (1.061)	2.999 (9.284)	-0.153 (0.518)	0.414 (0.413)	-11.45 (15.66)	1.050 (1.792)	-0.223 (1.411)
Chile*Inflation	-9.158 (15.48)	0.333 (2.546)	-1.583 (1.544)	5.922 (8.614)	2.105* (1.101)	-0.976 (0.897)	3.923 (7.750)	0.549 (1.714)	-0.459 (1.391)
Chile*Interest Rates	-0.953 (8.763)	0.673 (1.508)	0.144 (0.929)	16.47 (30.60)	-12.74* (7.244)	4.793 (5.863)	148.0 (202.8)	-2.519 (5.915)	-2.747 (4.051)
Brazil*GDP	4.222 (10.66)	-1.697 (2.245)	0.269 (0.838)	2.616 (3.071)	-0.231 (0.546)	-0.147 (0.322)	-0.999 (1.890)	0.179 (0.738)	-0.239 (0.449)
Brazil*Inflation	0.375 (3.267)	-0.709 (1.365)	-0.0860 (0.429)	-9.187 (16.39)	-0.527 (9.979)	2.867 (6.431)	-41.11* (24.35)	3.240 (4.650)	-0.163 (2.708)
Brazil*Interest Rates	4.063 (15.81)	-2.182 (2.758)	0.600 (1.081)	3.474 (4.839)	0.282 (2.287)	-0.657 (1.429)	5.114 (5.644)	-1.516 (1.550)	0.329 (0.869)
Per	-3.965 (8.451)	-1.445 (2.903)	-0.312 (1.618)	-1.627 (7.770)	2.116** (0.990)	-1.223** (0.515)	0.223 (2.158)	0.526 (2.205)	-0.735 (1.227)
Peru*Inflation	-2.851 (6.419)	-1.934 (2.191)	0.609 (1.140)	22.12 (35.50)	2.924 (9.902)	3.124 (6.591)	-43.05* (24.99)	9.809 (7.667)	-2.783 (4.358)
Peru*Interest Rates	-2.309 (6.613)	-1.590 (2.364)	0.0793 (1.272)	-0.662 (41.92)	-0.153 (11.08)	-7.358 (7.348)	50.56* (27.86)	7.621 (11.10)	0.850 (6.328)
Colombia*GDP	32.45 (44.21)	-15.60 (25.21)	2.607 (10.35)	38.55 (26.75)	5.314** (2.606)	-3.556** (1.486)	-0.204 (4.010)	-17.36* (9.893)	9.994 (6.716)
Colombia*Inflation	48.42 (41.65)	-20.59 (23.28)	2.267 (9.829)	81.21 (58.90)	-17.74* (10.06)	8.341 (6.545)	17.53 (17.73)	-39.37* (21.53)	23.98* (14.51)
Colombia*Interest Rates	-16.17 (16.75)	3.946 (8.076)	-1.399 (3.049)	-131.3 (95.05)	25.53* (14.33)	-13.37 (9.287)	-23.23 (24.49)	59.48* (34.17)	-37.34 (22.99)
Constant	-24.83 (293.5)	49.46 (37.00)	76.39*** (17.06)	-65.13 (117.9)	0.823 (91.21)	69.76 (59.15)	423.9* (224.3)	36.53 (22.41)	91.11*** (14.92)
Observations	84	679	2,055	183	1,106	2,429	99	1,289	2,890
R-squared	0.395	0.046	0.030	0.316	0.035	0.029	0.507	0.041	0.055

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

Table 13: OLS Regression of Debt Type Allocation on Corporate Characteristics

Variables	Model 1			Model 2			Model 3		
	(1) Bank Debt	(2) Public Debt	(3) Private Non- Bank Debt	(4) Bank Debt	(5) Public Debt	(6) Private Non- Bank Debt	(7) Bank Debt	(8) Public Debt	(9) Private Non- Bank Debt
Total Assets	1.58e-10** -7.23E-11	-3.78e-10*** -1.33E-10	-3.61e-10*** -6.74E-11	0 0	-5.45e-11* 0	-8.91e-11*** 0	0 0	0 0	-1.09e-10*** 0
Log(Market Capitalization)	5.296*** -0.965	0.591 -0.529	-0.632*** -0.229	4.251*** -0.838	-0.624 -0.417	-0.526** -0.264	1.106 -1.01	1.365*** -0.388	-0.606** -0.236
Leverage	2.257** -1.018	-0.235 -0.384	-0.0699* -0.0381	0.953 -0.606	-0.833*** -0.264	-0.0953 -0.161	0.453 -0.794	-0.118 -0.176	0.109 -0.0912
Debt Maturity	77.66*** -4.178	-7.984** -3.558	10.29*** -1.599	98.41*** -5.032	-1.257 -2.958	10.64*** -1.874	83.11*** -4.301	-3.077 -2.655	10.56*** -1.639
Tobin's Q	0.0627 -1.468	-0.0706 -0.298	0.0614* -0.0351	29.69*** -7.26	0.139 -0.246	0.031 -0.181	4.884 -12.23	2.740** -1.158	1.339** -0.644
Market to Book	0.616** -0.249	0.104 -0.157	-0.00041 -0.00133	1.705*** -0.58	-0.044 -0.0734	0.0621* -0.037	1.148 -1.784	-0.291 -0.32	-0.145 -0.163
Cost of Debt to Cost of Equity	17.18*** -4.265	2.866*** -1.077	-1.052** -0.492	11.88*** -4.403	-0.0505 -0.432	-0.183 -0.166	7.326*** -2.507	-0.428 -0.302	0.0987 -0.21
Fixed Assets Ratio	123.6 -94.8	-9.973*** -3.713	10.43*** -1.657	-124.6 -102.8	-4.514* -2.674	8.862*** -1.771	150.3 -118.3	2.077 -2.552	5.145*** -1.577
Profitability	-3.034 -25.34	7.88 -13.36	-6.403 -5.185	-78.46** -35.84	0.0882 -8.079	7.056 -4.83	23.88 -42.2	26.28*** -8.701	-8.302 -5.353
Investment Grade	-9.409** -4.313	-2.168 -3.738	0.074 -1.925	0.204 -3.937	5.035 -3.134	-2.106 -2.198	-3.66 -4.304	7.658*** -2.715	-2.856 -1.877
NotRated	15.79*** -3.243	0.35 -3.2	3.994*** -1.497	14.25*** -3.076	3.547 -2.466	2.977* -1.627	-0.132 -2.901	8.864*** -2.118	-3.404** -1.359
Sovereign Upgrade	-1.82 -3.877	5.799 -6.062	5.305*** -1.815				-0.705 -3.33	-5.110** -2.378	5.066*** -1.291
Sovereign Downgrade	3.926 -3.013	4.941 -3.161	2.447* -1.337	-1.755 -3.289	5.541** -2.501	-1.899 -1.616	-5.012 -5.641	2.76 -2.319	-9.067*** -1.892
Constant	200.1*** -20.79	20.10* -10.87	89.46*** -4.796	195.8*** -18.75	41.34*** -8.773	82.53*** -5.479	58.40*** -21.34	44.04*** -7.919	92.64*** -4.816
Observations	84	679	2,055	99	1,106	2,429	183	1,289	2,890
R-squared	0.926	0.056	0.092	0.902	0.032	0.051	0.773	0.074	0.068

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

