

## The Transactions Costs of Primary Market Issuance: The Case of Brazil, Chile, and Mexico

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**Abstract:** This paper documents the precise costs of debt and equity issuance, both domestically and internationally, for firms in Brazil, Chile and Mexico. Costs include investment banking and legal fees, regulatory and exchange listing costs, rating agency fees, and expenditures for marketing and publishing. The findings suggest that Brazilian firms face similar costs in issuing debt locally or abroad, whereas domestic equity issuance is nearly twice as expensive as debt. While the Chilean domestic corporate debt market is well developed by emerging market standards (size of the market and maturity of issues), Chilean firms can issue debt more cheaply internationally than at home. In addition, while equity financing is cheaper in Chile from a transaction cost perspective, over the past decade most firms have used bonds rather than shares to raise capital. This financing trend is true in all three countries. Finally, Mexican firms can issue debt at the lowest costs of the three, but face the highest equity issuing costs. In addition to documenting these features, this paper sheds light on how the investor base in these countries plays a strong role in influencing the ability of firms to access domestic capital markets.

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## **I. Introduction**

A substantial and growing literature suggests that there are substantial benefits to having low transactions costs associated with raising equity. We emphasize the word “suggests” because this study is the first to attempt to document fully the transactions costs borne by firms when accessing primary equity and debt markets. The word “suggests” also means that a large literature provides a conceptual and empirical link between aggregate measures of equity market development and economic outcomes. Unfortunately, due to the paucity of data on local debt markets in developing countries, especially corporate debt, there is little literature investigating the links between debt market development and the economies. That said, as data below will illustrate, in the past five years most firms in emerging markets have used debt markets rather than equity when accessing funds through capital markets.

In the realm of equity related research, recent studies show that access to well-functioning equity markets facilitates the ability of new firms to form, and existing firms to expand (Rajan and Zingales, 1998; Demirguc-Kunt and Maksimovic, 1998; Beck and Levine, 2000). Similarly, the ability to raise equity capital tends to increase the efficient allocation of capital (Wurgler 2000; Levine 2002). Beck, Demirguc-Kunt, and Maksimovic (2002) hold that relatively low fixed costs of raising capital enhances the ability of small firms to raise capital, with positive implications on economy-wide competition. In conceptual terms, since both debt and equity can be used to raise capital, an analogous extension is to relate well-functioning primary capital markets in both of these areas to the growth of firms, with an economy-wide impact.

There are potentially large indirect benefits to having lower transactions costs associated with issuing securities, because these lower costs in the primary market are likely to have positive spillover effects in secondary markets. Existing work shows that well-functioning securities markets promote economic growth (Levine and Zervos, 1998; Beck and Levine 2003). Thus, low costs of issuing debt and equity are likely to facilitate the overall level of securities market development (as measured by market liquidity, breadth and depth) with positive implications on firm growth, small firm opportunities, and overall economic growth. Furthermore, another substantial avenue of research shows that well-functioning equity markets enhance corporate governance, firm valuation, the efficiency of resource allocation, and economic growth. Specifically, efficient equity markets improve corporate governance by facilitating takeovers and revealing information in public markets (Shleifer and Vishny 1997).

The logical next step which this paper takes is to document more completely the specific transactions costs that raise the costs of issuing debt and equity. This data can be used to further knowledge in many areas. First, the data can be used to study the impact of costs on the firm’s financing decision, especially in respect to its ability to access capital markets. The transactions costs measures can also be correlated with indicators of financial development, especially as pertaining to the size and functions of stock and bond markets. The nature of these costs can highlight some of the motivational factors driving these markets’ path of development, and whether there are regulatory or investor

issues that are influencing firm issuance. Finally, a detailed study into the costs of issuance across many countries could help augment the literature concerning listings and issuance on foreign markets over domestic markets, by identifying whether costs drive the firm's decision.

This paper takes a first step by studying the primary markets for firms in Brazil, Chile and Mexico, and calculates the components of issuing costs for corporate debt and equity domestically. In addition, the paper highlights specific features of the demand and supply of these assets, which have an impact on both the costs of issuance and the nature of the debt and equity markets in the aggregate. Finally, the paper also presents the costs to these firms of accessing international debt markets, in order to investigate the relative incentives (especially pertaining to cost) that a firm faces when deciding to issue securities.<sup>1</sup>

The paper is organized as follows. Section II documents the methodology of the data collection and discusses the types of costs incurred by firms when issuing. Sections III, IV and V present primary market characteristics of Chile, Mexico and Brazil, and the cost data. International issuance costs are shown in Section VI, while Section VII concludes with a comparison across countries.

## **II. Measuring the Costs of Issuance**

### **A. Types of Costs**

When contemplating issuing debt or equity securities, a firm faces several types of direct and indirect costs. The firm typically contacts an investment bank at the beginning of the process which will advise the company through the necessary steps, and will make it more aware of the out-of-pocket expenses which will be incurred. The company will already have undergone an internal process of analysis, where it has determined that the raising of outside sources of capital is a good alternative, given the nature of the business and the capital requirements. It will normally have decided to pursue either a debt or equity issue, but will rely on the investment bank to help in its decision of the security characteristics, the process, and the timing.

The lead investment bank charges a fee as a percentage of the issue size, which comprises structuring, placement, and underwriting. The range of fees is wide, and depends on a host of firm and issue characteristics. The level of complication of the deal is the primary driver of the fee; for debt, a plain vanilla bond is the cheapest, while structured deals invoke the highest costs. The credit quality and market reputation of the firm also plays a significant role in fee determination, as the more unknown and risky firm's securities will be more difficult to place, and more risky to underwrite. In the case of fixed income, typically the longer maturity bonds command higher fees as well, again due to the extra risk of the security. Finally, market conditions can supercede all normal pricing methodologies. In a highly competitive environment, some investment banks will charge fees below costs, in order to gain reputation and elevate their status on league tables.

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<sup>1</sup> Data on the costs of international equity issuance is pending and will be added soon.

Another significant cost to the firm comes from legal fees. All securities issues must be presented as a legal document, including a prospectus and/or offering memorandum. A firm engages outside legal counsel specializing in issuance, in addition to the internal legal team which usually is responsible for all background work. If the firm is issuing internationally, the legal costs are multiple times higher, as the firm must hire both domestic and international lawyers in order to comply with both sets of law.

In most countries a firm must be registered with the supervisory body prior to any issuance. The majority of firms considering issuance have become registered firms well before commencing an issuing process. In permitting a company to register, the regulatory body in each country has its own requirements pertaining to audited accounting statements, information publication, etc. When registering a specific security issue, the firm must pay the regulator a fee almost always based on issue size and issue type. In some countries the regulator also orders a technical study to be performed (at the company's cost), of the company and issue, which will be made available to the public. Finally, some regulations require the company to hire either a trustee or a bondholder representative to act on behalf of the security holders.

Either regulations or customary practice require credit ratings. The number and source of ratings required depends on the country and the nature of the investor. For example, market regulators may require a firm to engage one domestic rating, while institutional investor regulators (like pension funds) may require an issue to have two independent ratings from international rating agencies to be considered a valid investment. Consequently, in practice, the firm may need to pay for two ratings in order to reach a target investor base even though regulations do not mandate them.

Most firms wish to have their securities listed and traded on a stock exchange, which will charge its own fees based on security type and size. The firm must also pay a depository fee if there is a central depository facility available.

Finally, the firm will incur marketing and publishing costs. Some forms of publishing are forced by law, and give the company a minimum standard for creating public awareness. For marketing purposes, the company will have to print prospectuses and offering memorandum to deliver to potential clients. Finally, the company bears the costs of any road shows, either domestic or international, used to market the deal.

## **B. Methodology**

The cost data was gathered from a combination of web site searches of stock exchanges and regulatory bodies, security information from Bloomberg and Bondware, and heavily relied on interviews with securities lawyers, investment bankers, regulators, and companies themselves (typically the CFO). The process itself, when applied across countries, helped to formulate a questionnaire to be followed in the interviews.<sup>2</sup>

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<sup>2</sup> This questionnaire is available from the author on request.

In order to adequately measure and interpret the cost data, it was necessary to gather detailed information about primary markets in each country. Global and country specific conditions can have an effect on whether a firm can access capital markets. Excessive liquidity conditions can result in an increase in investors' desire for riskier products, and perhaps allow a host of other issuers to access the market. A wider selection of firms, an increased level of risk, and high investor demand can each in turn affect the pricing of investment bank services to these companies. The nature of the domestic investor base can also play an important role in determining the ability and process by which companies can place debt, and therefore can influence the cost structure of issuing securities. In addition, recent or upcoming changes in regulations have the potential of creating incentives (or disincentives) for firms to incur the costs of public registration or issuance. Furthermore, the actual statistical data about quantities and characteristics of securities can help direct subsequent interview questions; this data also helps to quantify appropriate issuance sizes to benchmark the costs.

The contacts for the interviews were found primarily through word of mouth. Along with personal contacts, initial emails and phone calls to the stock exchanges and regulatory bodies typically yielded additional names of investment bankers responsible for new issues.

Rating agencies are typically quite guarded about the fees they charge, but were able to give pricing parameters under the guarantee of privacy. Both the investment banks and companies were able to provide the range of rating fees as well, to corroborate the results.

### **C. Difficulties and Assumptions**

As much of the information was gleaned from interviews, two or more sources for the qualitative data were needed to verify and refine the cost data. In particular, the investment bankers and lawyers all represented their fees as a rather wide range (for example, 1-2.5% of the face amount issued). In each country's case, several discussions occurred to clarify the nature of the pricing mechanism and the state of the market in order to create a more precise estimate of fees. Both in domestic and international deals, a few characteristics tend to filter into the pricing methodology employed by the investment banks. In general, the more risky the deal, the higher the fee the issuer must pay. Risk here can be measured in a few ways: credit quality of the issuer / deal, the maturity of the bond, any options embedded into the security, the size of the deal, and the general state of the market. Furthermore, a plain vanilla bond (or equity) issue is clearly less costly for the lawyer or banker to effect a transaction. A well known, highly rated company will typically pay lower fees. A ten year bond will likely command more fees than a two year.

The state of the market and competition (or lack of) among investment banks can have a large impact on fees charged. For example, after the Argentine crisis in 2001, most investment banks reduced exposure to emerging markets, and the market for new issues dried up. At these times, investment banks charged the high end of the range of fees. Conversely, during the second half of 2003, investor demand for emerging market

corporate debt began to surge as interest rates globally were at lows, and companies across the credit spectrum began to issue (primarily debt). At the same time, some investment banks were buying their way into the league tables, and charging abnormally low fees to the issuers. As such, this type of information has to be considered in order to determine the appropriate fee structure charged to companies.

To be able to compare fees and costs across countries, we had to make an assumption about the type of company and/or deal to measure. For the purposes of the data presented here, all bond deals are plain vanilla, i.e., non-structured, no complicated call or put options, and coupon paying instruments with principal due at maturity. Equity issues are for common shares as part of an initial public offering. Since fees can depend on credit quality, we ascertained the appropriate amounts payable by a typical firm who was not at either the high end or the low end of the credit range, neither AAA nor junk. For reasons discussed below, a firm with a rating much below investment grade doesn't have much of a chance to access capital markets, and as such, the findings represent the costs of a firm or deal with a minimum of a BBB rating.

Finally, this study does not document certain implicit costs, which by their nature are difficult to measure. In particular, when analyzing whether to come to market, and in what form, firms incur internal costs such as staff time and internal legal counsel. In addition, firms accessing the market for the first time incur a cost of "going public," where various accounting statements and auditors reveal information about the firm, and where equity issues can permit some outside control over firm actions. However, in most cases, the firm incurs the information disclosure costs when it decides to publicly register the firm, which occurs well before a securities issue takes place. We therefore exclude these types of costs (which are not measurable anyway) from the costs of issuance calculated here. Only in situations where specific audited statements are mandated by the regulators do we add them to the template, as we assume accountants and auditors are employed in the general state of running the business.

### **III. Chile**

#### **A. Primary Market Background and Characteristics**

Over the last few decades, primary market activity in Chile has vacillated between equity and debt markets, and between local and international issuance. On the domestic front, after a spate of privatizations in the 1980's, IPO activity on the domestic stock exchange surged. Structural reforms along with sound monetary and fiscal policies provided a backdrop for the deepening of the financial system that began with the reform of the pension system in 1982 and with subsequent banking system regulatory improvements. Up through the early 1990s there was also a tax advantage for retail investors to participate in the equity market; the elimination of this tax benefit took most of these investors out of the market. The 1998 global economic shock, induced by the Russian crisis, then caused corporate access to capital markets to disappear, both home and abroad. Mirroring the dearth of equity issuance globally, and the initial tightness of bank credit, Chilean corporates began to rely on bond issuance as a source of financing. As

interest rates began to drop post-2000, private corporate bond issuance rose dramatically. The value of new issues for both security types is shown below in Table 1.

**Table 1: New Corporate Issuance, in US\$ millions**

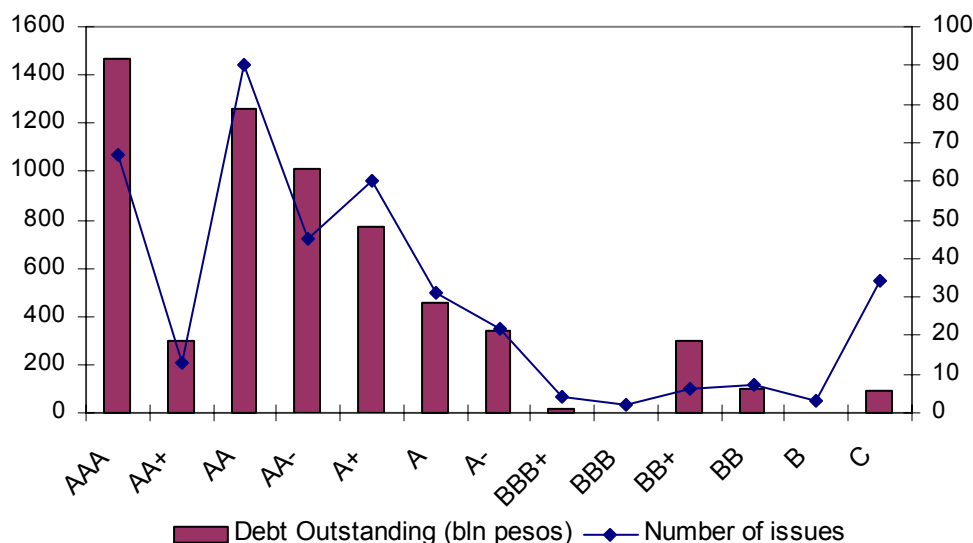
	Equity			Debt	
	IPOs	Capital Increases	Intl.	Local	Intl.
1989	20.0	-		n.a.	n.a.
1990	0	-	98.3	n.a.	n.a.
1991	20.0	-	0.0	n.a.	n.a.
1992	121.5	-	129.2	n.a.	n.a.
1993	179.5	7.0	290.0	n.a.	321.85
1994	91.1	22.0	798.5	n.a.	155.0
1995	237.4	321.0	224.3	70.5	300.0
1996	418.5	199.9	296.9	178.2	1090.0
1997	170.0	133.6	563.4	109.1	1478.0
1998	0	14.6	72.4	827.0	1063.0
1999	0	133.5	85.0	776.6	1432.0
2000	0	52.7	0	1345.0	300.0
2001	0.0	0	n.a.	2978.9	1606.0
2002	100.0	0	n.a.	1812.4	982.7
2003	32.3	696.8	n.a.	2504.8	2300.0

**Source: SVS, Larrain Vial Brokerage, Euromoney, Bloomberg, Bondware**

Relative to many emerging markets, Chilean corporates have in general enjoyed good access to international capital markets. That said, there have been on average four bond issuances per year by Chilean companies that are domiciled in Chile; 19 companies have issued the roughly 40 distinct issues in the past 10 years. As the data in the above table illustrates, international bond issuance doubled in 2003 compared to the last 10 years. Mirroring domestic equity issuance, global equity (non-ADR) issues by Chilean companies had their peak in the early 1990s, dried up upon the Russian crisis, followed by a single issue in 2002 and 2003. ADRs have been slightly steadier, with a marked absence in 1998, with four new issues in 2003.

Both domestic and foreign issuance is dominated by highly rated companies and/or securities. With the exception of a few state owned company issues, all securities issued abroad were in the range of a BBB+/- rating. Figure 1 below shows an even bigger clustering of credit ratings for the domestic outstanding issues, where the bulk in both size and quantity lie in the AAA to A range.

**Figure 1: Outstanding Bond Issues by Credit Rating, October 2003**



Source: SVS Chile

This clustering of credit quality is attributable to the nature of the investor base in Chile. The pension reform in 1982 created a mandatory contributory system with pensions managed by AFPs (Administradores de Fondos de Pension), and a payout phase for retirement which is offered either via a particular product by the AFPs or through annuities offered by insurance companies. As a consequence, assets managed by these two institutional investors have grown dramatically in the past two decades. Total AFP assets outnumber those of the insurance companies by a factor of nearly three (US\$35 billion vs US\$12bn), though insurance companies have been more actively investing in corporate debt in the past few years. However, from 2000 to 2001, insurance companies nearly doubled their exposure to corporate debt, both in total amount held and as a share of their portfolio. At the end of 2002, insurance companies held 24.2% of their portfolio in debentures, at just over US\$3 billion. AFPs have held a relatively constant share of their portfolio in corporate debt since 1995, climbing to just over 7% (roughly US\$3 bn) at end 2003.

These two institutional investors combined dominate the demand side for corporate debt, as all other investors comprise only trivial holdings in comparison. As a result, companies in Chile are heavily swayed by the wishes of this concentrated investor base; 2 of the 7 AFPs and the largest 5 of the 17 insurance companies that sell annuities hold the majority of the corporate investments. There is very little deviation between portfolios across AFPs.<sup>3</sup> The dominance of these firms has shaped the nature of both the primary and secondary markets. First, the liability duration of AFPs is roughly 8 years, and that of insurance companies is about 18-20 years, so that any corporate wishing to place large amounts of paper typically has to issue two tranches in these maturities. Second, due to the investment regulations in these institutions, only highly rated issues

<sup>3</sup> In mid-2002 AFPs began to offer five different funds (Type A through Type E) with different risk levels and investment limits. However, across AFPs, the portfolio composition of each fund type remains very similar.



can be held. Consequently, if a lower rated company wishes to place debt with an AFP, for example, it must structure or securitize its debt to obtain a higher issue rating. Finally, both of these institutions are buy and hold investors, so that there is limited secondary market activity in these instruments, since the two groups combine hold about 80% of outstanding issues (as of end 2002).<sup>4</sup>

Until 2002, AFPs were allowed to hold a maximum of 37% of the portfolio in equity. With the new range of fund type offers, Type A funds can hold up to 70% in equity (Type E can hold no equity). On the aggregate, shares still represent only about 14% of the total assets of all AFPs. Institutional investor characteristics thus hold little influence over firms' IPO decisions at this time.

## **B. Costs of Issuance for Chilean Firms**

As mentioned above, characteristics of the investor base dictate which firms or what type of issues can be successfully placed in the Chilean market domestically. When examining the costs of issuing debt, the analysis of issuing a plain vanilla bond essentially means a study of the cost of accessing capital markets for companies with a high credit rating, which in turn usually means the firm is well known and credible in the market. The following table (Table 2) documents the costs of a plain vanilla domestic bond issue for face values of debt ranging from US\$10 million to \$US200 million. Costs are measured here in US\$ to facilitate comparison, though locally almost all issues are done in UFs (unidad de fomento), which are an inflation linked unit of account.

Investment banking fees and taxes make up the bulk of the costs the firm faces. For small issue sizes (less than US\$50 mn), investment banking fees tend to hover around 2% of face value. As issue size grows, fees drop to around 1%.<sup>5</sup> On all bond issues companies must pay a tax of 1.6% of the issue size, representing a sizable debit for the company on large issues. Even when a company wishes to issue a new bond on maturity of an old one, essentially rolling over the debt into a new instrument, it must pay this fee. On the contrary, a firm rolling over a bank loan does not have to pay the tax again – giving a fairly large incentive for firms to seek bank financing for capital requirements they intend to renew.

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<sup>4</sup> Mutual funds have been growing as well, comprising over 10% of GDP. However, holdings are usually concentrated in short duration fixed income securities, as mutual funds tend to manage the cash flows for the corporates as a substitute for banks (estimated at 75% of mutual fund assets) .

<sup>5</sup> In “normal” market conditions the fee would be more like 1.5%, but recent competition has driven these costs to 1% or even lower for well know repeat issuers.

**Table 2: Costs of a Plain Vanilla Domestic Bond Issue (in US\$)**

<b>Cost Category</b>	<b>Face Value Issued (1000s US\$)</b>				
	10,000	20,000	50,000	100,000	200,000
Investment Banking Fees	200,000	400,000	500,000	1,000,000	2,000,000
Legal Fees	50,000	50,000	50,000	50,000	50,000
Regulatory fee	5,576	6,336	6,336	6,336	6,336
Taxes	160,800	321,600	804,000	1,608,000	3,216,000
Stock exchange registration	2,498	4,784	6,367	7,200	7,200
Bond Market Rep	11,520	11,520	11,520	11,520	11,520
Printing	8,576	8,576	8,576	8,576	8,576
Road Show	8,640	8,640	8,640	8,640	8,640
Rating Agency (2 in total)	27,960	27,960	27,960	35,000	35,000
<b>Total Costs</b>	<b>475,570</b>	<b>839,416</b>	<b>1,423,399</b>	<b>2,735,272</b>	<b>5,335,272</b>
<b>% of Issue Size</b>	<b>4.76%</b>	<b>4.20%</b>	<b>2.85%</b>	<b>2.74%</b>	<b>2.67%</b>

While legal fees can range according to any complications that arise, most parties quoted an approximate \$50,000 for completing a straightforward deal. In cases of structuring deals, legal fees can be another 1-1.5% of the face amount. In total, the costs of domestic issuance for a plain vanilla bond range from 2.67%-4.76% of the issued amount. Costs of nearly 5% for issuance are quite high, and are unlikely to be incurred unless a company is seeking non-material benefits from issuance, such as reputational effects. In practice, it is unusual for companies to issue domestically in amounts less than US\$40 million. Most market participants conclude that cost is not the primary factor keeping companies out of the market, but rather the high credit rating requirement.

Costs of issuing equity are slightly more difficult to estimate given the fact that there have been only two IPOs in the last six years. There is less data to narrow the ranges of legal and investment banking fees, but the costs presented in Table 3 are indicative of what fees were charged during the last period of high activity, which are consistent with the fees levied in the most recent few deals (one in 2003). Interestingly, investment banks in Chile charge similar fees for helping companies issue debt or equity. In terms of direct outlays, the chief benefit of issuing equity instead of debt is the avoidance of the 1.6% tax. On aggregate, the fees for a US\$200 issue fall around 1.6%, and for small issues of US\$10 still only come to around 2.5% of face value. All else equal, cost considerations would suggest companies would favor equity over bond issuance.

**Table 3: Costs of an Ordinary IPO (in US\$)**

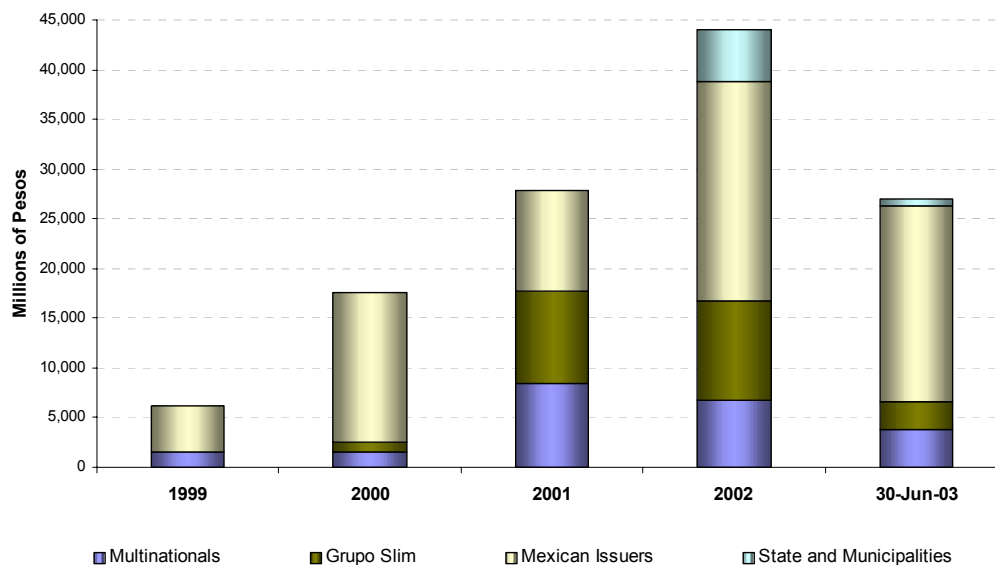
<b>Cost Category</b>	<b>Face Value Issued (1000s US\$)</b>				
	10,000	20,000	50,000	100,000	200,000
Investment Banking Fees	150,000	300,000	750,000	1,500,000	3,000,000
Regulatory fee	5,576	6,336	6,336	6,336	6,336
Stock Management Fee	15,000	15,000	15,000	15,000	15,000
Stock exchange registration	2,498	3,240	5,402	7,200	7,200
Legal Fees	50,000	50,000	50,000	50,000	50,000
Marketing / Disclosure	20,000	20,000	20,000	20,000	20,000
Rating Agency	27,960	27,960	27,960	40,000	65,000
<b>Total Costs</b>	<b>256,034</b>	<b>407,536</b>	<b>859,698</b>	<b>1,623,536</b>	<b>3,148,536</b>
<b>% of Issue Size</b>	<b>2.56%</b>	<b>2.04%</b>	<b>1.72%</b>	<b>1.62%</b>	<b>1.57%</b>

## IV. Mexico

### A. Primary Markets Characteristics

Primary market activity in Mexico has mirrored that of Chile in several ways. After the crisis in 1994, there was a boom in equity market issuance. As in Chile's case, the 1998 Russian crisis dried up equity issuance, and subdued bond issuance in the short run. As interest rates started to fall, companies started to look at domestic financing options on a greater scale. However, while the total size of issuance has grown, there have been only a limited number of names which have accessed the market, as discussed below.

**Figure 2: Domestic Debt Issuance in Mexico, 1999-June 2003**



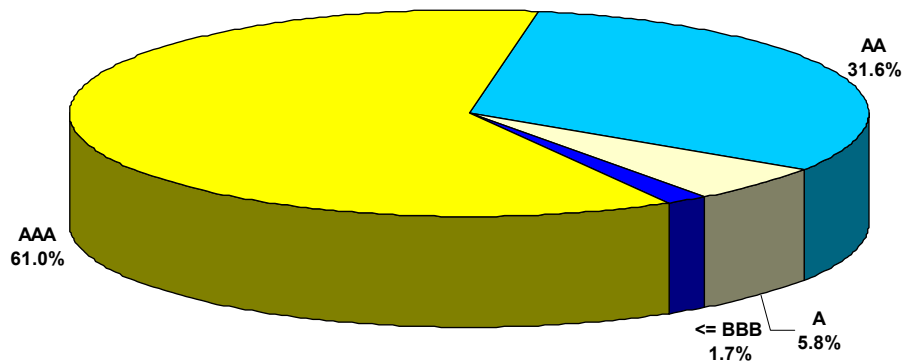
**Source: Bancomer**

In 1999, the new social security law created new pension fund companies, called Afores, which have grown to be the largest institutional investor in Mexico. The rise of these institutions, along with a growing mutual fund industry, has accounted for a large growth in domestically invested funds. At the end of 2003, the size of the invested portfolio of the Afores was \$401.5 billion pesos (just under US\$40 billion). Every few months, the Afores receive about US\$500 million in mandatory contributions, suggesting that even without compounded returns, the relative size of these institutions in the market will continue to drive market dynamics.

Mirroring the Chilean environment, one of the largest ways these investors sway the market is due to the impact of their investment restrictions. Currently, the Afores can only invest in debt securities, and have fairly strict rating restrictions as well. While allowed to invest in AA and above, in practice the pension companies conservatively restrict their purchases to securities with a AAA rating (to allow for credit deterioration). Consequently, the market for securitization / structuring is growing, as companies seek to

elevate the credit status of their issues and access the Afores funds. Figure 3 shows the nearly MX\$ 100 billion of market issuance from 2001-June 2003, broken down by credit rating, and illustrates how the market is heavily biased toward highly rated debt. Corporate debt represents a 11% share of the Afores portfolios (higher than Chile AFP's holdings of 6%), though concentration is high; 55% of this amount was invested in securities of only six companies.<sup>6</sup>

**Figure 3: Fixed Income Issuance Activity by Rating, Chile, 2001-2003**



Source: Bancomer

Mutual funds also represent a significant source of investable funds, with about MX\$370.5 billion under management in December 2003. About 10% of these funds are invested in private paper, but most tends to be short term (such as commercial paper). There are no rating restrictions placed on mutual funds, but in practice these funds tend to mimic the holdings of the pension funds, at least as far as corporate names are concerned.

## B. Costs of Issuance for Mexican Firms

Table 4 shows the costs a typical Mexican firm faces when issuing a plain vanilla bond, in pesos. Investment banking fees typically fall below 1% of the face value in these type of deals; for large sizes (near US\$400 million) fees drop to around 0.4%. One reason behind these low fees is due to the low placement fees as a result of the investor structure of the Mexican market, as discussed above. Investment bankers do not have to search across many investors to place a highly rated deal; phone calls to a few of the twelve Afores can likely place the entire issue. However, for deals that are not highly rated, issuing companies often seek the securitization route, and thus incur structuring costs up to another 1.5% of the issue size. Companies who have lower ratings and do not

<sup>6</sup> These companies are Cemex, America Movil, Telmex, Bimbo, Coca-Cola Femsa, and Televisa.

structure their issues typically pay a higher investment banking fee, of a total of near 2-2.5%, to offset the higher placement costs and/or underwriting services, if necessary.

**Table 4: Costs of a Plain Vanilla Domestic Bond Issue (in Mexican Pesos)**

<b>Cost Category:</b>	<b>Face Value Issued - 1000s Mexican Pesos, (approx US\$1000s below)</b>				
	200,000	500,000	1,000,000	2,000,000	4,000,000
	(18,180)	(45,500)	(91,000)	(181,800)	(363,640)
Investment Banking Fees	2,000,000	5,000,000	8,000,000	15,000,000	16,000,000
Regulator Fee	360,000	900,000	1,558,288	2,458,288	4,258,288
Technical Study	14,456	14,456	14,456	14,456	14,456
Bondholder Representative	287,299	287,299	287,299	621,000	621,000
Stock exchange registration	232,500	500,000	500,000	500,000	500,000
Depository	625	625	625	625	625
Legal Fees	425,000	425,000	425,000	425,000	425,000
Marketing / Disclosure	150,000	150,000	150,000	150,000	150,000
Rating Agency	504,850	642,850	872,850	1,150,000	1,150,000
<b>Total Costs</b>	<b>3,974,730</b>	<b>7,920,230</b>	<b>11,808,517</b>	<b>20,319,369</b>	<b>23,119,369</b>
<b>% of Issue Size</b>	<b>1.99%</b>	<b>1.58%</b>	<b>1.18%</b>	<b>1.02%</b>	<b>0.58%</b>

As is the case in Chile, the corporate climate, outside the small group of large (and often international) companies, consists of many family owned businesses that are reluctant to incur the indirect costs of “going public” via regulatory registration or external auditors. As such, the fees represented in this table are for companies who have already registered, and thus have complied with the standards for the initial opening of the company to the public’s eye.

Consequently, the table illustrates that for the standard high rated, plain vanilla bond, issuing costs in Mexico are not very high (about half that of Chile). On a nominal level, most of each category’s fees are higher in Mexico than Chile, but Mexico does not impose the issuing tax on the securities. Given the fee structure shown above, most banks advertise the minimum deal size for a local issue at about MX\$ 200 million (around US\$18 mn), though there have been a few smaller issues in the past five years. For these small deals, total issuance costs amount to roughly 2% of face value. For large issues near US\$200 million, the fees drop to 1%; for those US\$400 million the costs are as low as 0.58%. As mentioned above, total fees for a structured deal or for a newly registered (unknown to the market), lower rated firm would amount to 2-3.5% due to the added complexity. Over the past two years, approximately 20% of all issues were structured.

Firms wanting to issue into the Mexican equity market face much higher costs than with debt, ranging from 3.68%-4.73%, depending on issue size. These costs are detailed in Table 5. There have not been many IPOs in the last five years, as many companies had been waiting to “time” the market and were faced with a global decline in equity market interest. The investment banking fees again dwarf the other components of costs, comprising between 3-4% of issue size. A company that is doing an IPO, but which has been known in the market (through previous registration, product awareness, etc) can expect to pay 3-3.5%, where a 4% fee is common for the unknown corporations. For a company who wants to issue additional shares, subsequent to an IPO, the investment banking fees total around 2%.

As mentioned earlier, the Afores at this time are unable to purchase equity. However, foreigners are free to buy shares in the Mexican stock market, and Mexico represents over a 7% share in the S&P/IFC global composite emerging market equity index. However, this diverse potential investor base contributes to an increased cost of placement for new issues.

**Table 5: Costs of an Ordinary IPO (in Mexican Pesos)**

<b>Cost Category:</b>	<b>Face Value Issued - 1000s Mexican Pesos, (approx US\$1000s below)</b>				
	200,000 (18,180)	500,000 (45,500)	1,000,000 (91,000)	2,000,000 (181,800)	4,000,000 (363,640)
Investment Banking Fees	7,000,000	17,500,000	35,000,000	70,000,000	140,000,000
CNBV	360,000	900,000	1,558,288	2,458,288	4,258,288
technical study	14,456	14,456	14,456	14,456	14,456
Stock exchange registration	232,500	500,000	500,000	500,000	500,000
Indeval (depository)	625	625	625	625	625
Legal Fees	800,000	800,000	800,000	800,000	800,000
Prospectus	280,000	280,000	280,000	280,000	280,000
Road Show	200,000	200,000	200,000	200,000	200,000
Publications and Press	71,500	71,500	71,500	71,500	71,500
Rating Agency	504,850	642,850	872,850	1,150,000	1,150,000
<b>Total Costs</b>	<b>9,463,931</b>	<b>20,909,431</b>	<b>39,297,719</b>	<b>75,474,869</b>	<b>147,274,869</b>
<b>% of Issue Size</b>	<b>4.73%</b>	<b>4.18%</b>	<b>3.93%</b>	<b>3.77%</b>	<b>3.68%</b>

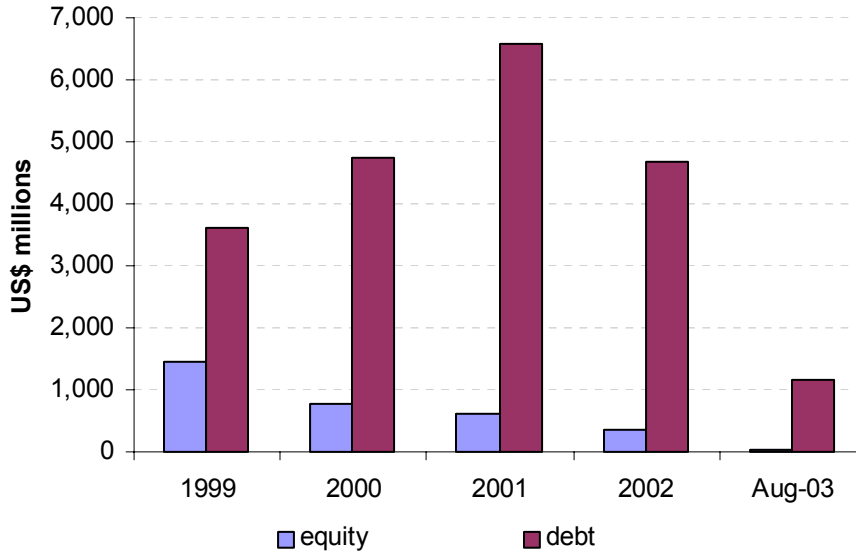
## V. Brazil

### A. Primary Markets Characteristics

While the size of the Brazilian markets is not too different from those of Mexico and Chile, the security markets have not been a significant source of corporate finance for Brazilian firms. Through the past 5 years, the total value of new equity issues on an annual basis has been below US\$1 billion, while the highest value of bond issues over this period annually has been just under US\$7 billion. For comparison purposes, the development bank BNDES lent over this amount alone in the year 2001.

That said, despite global events in 1998-1999, and election worries within the country in 2002, four to ten equity IPOs have taken place each year, along with 25-42 corporate bond issues. As the following chart shows, activity slowed substantially in 2003. While Brazil has substantial market capitalization in its equity market, it suffers from low free float, and substantial de-listings. As a result, the number of registered companies on the stock exchange has been falling. However, unlike Chile and Mexico, institutional investors (including pension funds, insurance companies and various investment funds) are more involved with equity than private company debt. On the aggregate, equity has comprised 13% of these investor's portfolios, in contrast to the 4% held in private debentures.

**Figure 4: Value of Domestic Equity and Debt Issuance**



Source: CVM

In Brazil, the various types of institutional investors are all similarly active, while the retail investor base is rather inactive, so that no single investor type dominates the demand side, and hence sets the standards for issuance. There exist issues across the spectrum of credit ratings, and maturities range from the short term to over ten years. Roughly 95% of all bond payments are indexed (usually to inflation), indicating the continuing concern over the value of the currency. In addition, a popular vehicle for financing has been through the commercial paper market, which is out of the scope of this paper.

## **B. Costs of Issuance for Brazilian Firms**

In contrast to the other two countries in this paper, the investment banking costs of a new debt issue have been well recorded in Brazil. This is due to the existence of a self-regulated bond market association, called ANBID, which keeps data on structuring, placement, and underwriting fees charged in each domestic bond deal. As a result, the historical data on issuance was used to create average fees based on issue size, which are represented in the table below. These fees averaged around one percent for the larger issue sizes (over US\$200 million), but increase to almost 3% of issue size for those under US\$20 million.

**Table 6: Costs of a Plain Vanilla Domestic Bond Issue**  
(in BRL\$ mns; US\$ mns in brackets)

	50	150	300	600	1,200
<b>Cost Category:</b>	(17)	(51)	(101)	(203)	(405)
Investment Banking Fees	1,480,000	3,255,000	6,240,000	7,200,000	14,400,000
Regulatory fee - CVM	82,870	82,870	82,870	82,870	82,870
Commercial registry	127	127	127	127	127
ANBID (certification)	5,000	15,000	30,000	30,000	30,000
BOVESPA fee	7,800	23,400	61,200	122,400	244,800
Depository	24,000	24,000	24,000	24,000	24,000
Legal Fees	80,000	80,000	80,000	80,000	80,000
Marketing / Disclosure	269,421	269,421	269,421	269,421	269,421
Rating Agency	326,000	414,800	414,800	414,800	414,800
<b>Total Initial Costs</b>	<b>2,275,218</b>	<b>4,164,618</b>	<b>7,202,418</b>	<b>8,223,618</b>	<b>15,546,018</b>
<b>Costs as % of Issue Size</b>	<b>4.55%</b>	<b>2.78%</b>	<b>2.40%</b>	<b>1.37%</b>	<b>1.30%</b>

Table 6 shows the breakdown for issuance costs for domestic bonds. Surprisingly, one of the highest costs of issuing in the Brazilian debt case stems from the fixed fees associated with publication. In particular, the required publishing fees from start to finish in the newspaper Gazeta amount to over BRL\$142,000, and for the Valor Economico, an additional BRL\$ 93,000 (as of 2002). These can represent significant fees for small issues.

The total fees for small issues are thus quite high (though slightly smaller than Chile's case, since there is no large tax). Small issues still exist in the market, however. In 2001-early 2003 about 18% of all issues were less than BRL\$150 million.

**Table 7: Costs of an Ordinary IPO**  
(in BRL\$ mns; US\$ mns in brackets)

	50	150	300	600	1,200
<b>Cost Category:</b>	(17)	(51)	(101)	(203)	(405)
Investment Banking Fees	2,250,000	6,750,000	12,000,000	18,000,000	36,000,000
Regulatory fee - CVM	82,870	82,870	82,870	82,870	82,870
Depository	24,000	24,000	24,000	24,000	24,000
Quarterly Enforcement fee	13,259	13,259	13,259	13,259	13,259
BOVESPA fee	4,160	12,480	24,960	49,920	99,840
Internal Registry	240,000	240,000	240,000	240,000	240,000
External Auditor	180,000	180,000	180,000	180,000	180,000
Legal Fees	45,000	45,000	45,000	45,000	45,000
Marketing / Disclosure	175,000	175,000	175,000	175,000	175,000
Rating Agency	100,000	300,000	370,500	370,500	370,500
<b>Total Initial Costs</b>	<b>3,114,289</b>	<b>7,822,609</b>	<b>13,155,589</b>	<b>19,180,549</b>	<b>37,230,469</b>
<b>Costs as % of Issue Size</b>	<b>6.23%</b>	<b>5.22%</b>	<b>4.39%</b>	<b>3.20%</b>	<b>3.10%</b>

Perhaps due to a relative lack in competition and to a slow equity market, the fees for issuing equity are much higher, as illustrated in Table 7. For the largest deals, the banking fees alone amount to 3% of face value, and go as high as 4.5% for small issues. When issuing equity, firms are required to hire an external auditor, and pay different types of regulatory fees. In addition, they must maintain an internal registry for



ownership, which is costly. In total, issues around BRL\$50 million (US\$20 million) run over 6% of face; the largest issues still cost over 3%.

## **VI. International Issuance**

In order to issue securities internationally, firms must comply not only with their own domestic regulatory standards, but those in the foreign country as well. Consequently, the due diligence and legal standards faced present a whole new level of complexity, and requires legal teams in both locations, in addition to an international investment bank as an advisor / deal manager. Given the typical higher costs and higher wages demanded in the international business centers, the costs of these banking and legal services are much higher, even for a plain vanilla deal.

Fees charged by investment bankers tend to be cyclical, depending on the new issue cycle in the market as a whole. As mentioned earlier, emerging market crises tend to dry up new issuance, and not only do firms cease issuing, but investment banks cease allocating risk capital and resources to enacting deals in these regions. In times of low activity, the institutions which are still “active” in the market tend to charge higher fees for their underwriting, structuring, and placement services, for a total of 1-2.5% of the issue size. However, when emerging market assets outperform, companies waiting to “time” the market become active issuers, and this typically coincides with many more investment banks seeking mandates. This has been the case in 2003, and as a result, competition has forced fees very low. Given the state of competition, well known corporations from Mexico are paying 50-75 bps for deals at or above US\$200mn, while those in Chile and Brazil are averaging around 50 bps or below. Small deals are charged about 1.25%, while low rated or unknown firm’s issues are in the 1.25-1.5% range.

The fees also tend to increase with the maturity of the deal, adding around 25 bps when moving from a sub-five year term to a ten year. Across Brazil, Chile and Mexico, there was little variation in investment banking costs due to the country location. On the aggregate, the pattern again follows the rule where the higher the risk (of the deal, of the issuer), the higher the fees. Chilean and Mexican firms tended to be charged marginally less than the Brazilian on the international market historically, but in the past year, these fees haven’t shown a country specific pattern.

Companies must usually incur a higher level of disclosure when they issue internationally, due to varying degrees of regulatory requirements. As such, they will face additional indirect fees in the form of internal auditors, etc. In some cases, as with Chile, the disclosure requirements are actually more severe domestically, so that this does not present a big hurdle.

Not all issues are listed on an exchange, but these fees are marginal compared to the total. International rating fees are much higher than the domestic. Finally, roadshow costs are variable, and depend on whether the company and/or investment bank decides to go to Europe and America to advertise the deal. The costs in this table are indicative of bringing the company executives to the U.S. and touring various important U.S. cities.

**Table 8: Costs of Issuing Debt Internationally**

Cost Category	Issue Size, US\$ Millions				
	100	150	200	300	400
Underwriter	1,250,000	1,125,000	1,500,000	2,250,000	3,000,000
Legal	550,000	550,000	550,000	550,000	550,000
SEC fee	12,670	19,005	25,340	38,010	50,680
Listing (Lux)	6,250	6,250	6,250	6,250	6,250
Rating	300,000	300,000	300,000	300,000	300,000
Roadshow	50,000	50,000	50,000	50,000	50,000
Publication	20,000	20,000	20,000	20,000	20,000
Printing	25,000	25,000	25,000	25,000	25,000
Trustee	10,000	10,000	10,000	10,000	10,000
<b>Total Costs</b>	<b>2,223,920</b>	<b>2,105,255</b>	<b>2,486,590</b>	<b>3,249,260</b>	<b>4,011,930</b>
<b>Costs as % of Issue Size</b>	<b>2.22%</b>	<b>1.40%</b>	<b>1.24%</b>	<b>1.08%</b>	<b>1.00%</b>

Table 8 illustrates the total fees per category for a well rated firm entering the market. As such, the underwriter fees are on the order of 1.25% for small deals of US\$100mn, but fall to 75 bps for the larger issues. As mentioned above, in late 2003 these fees were often even lower for firms the banks were aggressively seeking to do business with. The investment banks interviewed in the context of this paper suggested that in order to meet minimum liquidity and size requirements for the buyers, the minimum deal size is usually US\$150 million, though US\$200 million is preferred.

Discussions with these banks and issuing companies suggest that costs are not the factor driving a firm's choice to issue internationally. As corporate finance theory suggests, firms typically want to issue in a currency and tenor that matches their underlying business needs. Hence, within these Latin American companies, the firms that have USD based business flows, or those with multinational ties, are those who tend to issue abroad. These often include firms in the oil, utilities, and telecommunications industries, for example.

## VII. Conclusions: A Look across Countries

As described above, each country has particular features that cause the costs of issuing to differ, both across equity and debt, and across fee categories. Table 9 summarizes the fees a firm in each of the three countries faces when deciding to access capital markets with a US\$100 mn issue. For Brazil, it is almost the same cost to issue debt locally or abroad; while legal costs are much higher when entering international markets, the investment banking costs are much cheaper (and since they depend on issue size, the high domestic investment banking fees have a large impact on the total). Chilean firms can also issue debt more cheaply abroad, due to the 1.6% issuance tax at home. Though it is much cheaper to issue equity than debt domestically, very few Chilean firms have done so in the past 10 years, and corporate debt issuance has continued to climb. Mexican firms can issue debt at low costs either domestically or abroad. Like both other countries, there has been little equity issuance in the past few years as corporations have relied on fixed income when accessing markets.

**Table 9: Total Issuance Costs as Percent of Issue Size (for US\$100 mn issues)**

	Brazil	Chile	Mexico
Domestic debt	2.39%	2.74%	1.18%
Domestic equity	4.39%	1.62%	3.93%
International debt	2.22%	2.22%	2.22%

The next table takes another view of the transactions costs data. For each category of fees, Table 10 shows its percentage contribution to the total fee costs. The first point of note is that investment banking fees clearly dominate the total costs. The exception is Chile, where even though banks charge Chilean firms the usual ballpark range of 1% fees, the tax represents a higher amount (1.6% of face).

**Table 10: Comparative Costs: Category Fees as a Percent of Total Costs**

	Domestic Debt			Domestic Equity			Intl. Debt
	Brazil	Chile	Mexico	Brazil	Chile	Mexico	
Investment Banking	86.93%	36.56%	67.75%	91.22%	92.39%	89.06%	56.21%
Legal	1.11%	1.83%	3.60%	0.34%	3.08%	2.04%	24.73%
Regulatory	1.15%	0.23%	13.32%	0.63%	0.39%	4.00%	0.57%
Tax		58.79%					
Publication	3.75%	0.26%	1.27%	1.33%	1.23%	0.69%	0.90%
Rating	5.78%	0.42%	7.39%	2.82%	2.46%	2.22%	13.49%
Other	1.27%	0.31%	6.67%	3.67%	0.44%	1.99%	4.10%

There are a few other variations of note in the table above. Companies pay more to investment banks for their services in issuing equity than debt in all countries. In Brazil, publication fees account for a much higher percentage of total costs than the other countries (described above in the Brazil section). The regulatory fees in Mexico are high by comparison to the other two countries. Finally, rating agency fees do vary to a small degree by country, though not significantly.

In conclusion, the differences in the costs of issuance across these three countries and across instruments suggest that cost should be a factor in the firm's decision making process regarding security issuance. However, it appears that the nature of the investor base, at least in Chile and Mexico, is an overwhelming factor in determining the cohort of companies that can actually access domestic capital markets. In these cases, it is the firm or issue's credit quality that gains it access to the largest supply of finance, which is typically the pension fund industry. This finding suggests that there should be further investigation into the impact of investment restrictions for institutional investors on the development of local capital markets. Regarding access to international capital markets, the larger firms are those that can access capital abroad, as minimum size issues are more pertinent due to cost and liquidity reasons.

Further work will look at the costs of issuance in other regions, particularly across countries that do not have a substantial institutional investor base and therefore may display different demand and supply dynamics. The issuance costs can then be correlated with a host of firm characteristics and issuance patterns to more narrowly define the role of transactions costs in the firm financing decision.