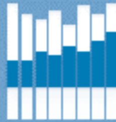

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Centro para la Estabilidad Financiera
Center for Financial Stability

"Which Economic Policies can Reduce the Cost of Capital in Latin America?"

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Center for Financial Stability

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Agenda

Motivation

The Project Objectives, Tools and Implementation Steps

Main Conclusions and Policy Lessons

Policy Recommendations for the Forum discussion

Objectives and Structure of the Project

Cost of Equity Financing (COE)

Objectives

I. To derive a unique dataset of the COE estimates for Latin American stock markets: Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela. This database provides COE figures by firm, time period, country and sector.

II. To identify the main determinants of the COE, including systematic (non-diversifiable) and firm idiosyncratic variables, testing alternative equity pricing models.

Implementation Steps

i. Collection and treatment of relevant financial information.

ii. Review of the literature and alternative methodologies to estimate the COE.

iii. Estimates based on systematic (non diversifiable) risk. Analysis of their limitations.

iv. Beyond the traditional approach: Testing international and common risk models, and idiosyncratic risk determinants of the COE.

Cost of Bonds Financing (COB)

Objectives

III. Producing similar database reporting the COB financing (corporate spread) per firm and country.

IV. To identify the main determinants of the firm's COB financing, focusing on the sovereign spreads and the applicability of the sovereign ceiling rule by market participants, liquidity and firm-level variables.

Implementation Steps

i. Construction of database conciliating bond market and balance sheet information.

ii. Test the sovereign ceiling hypothesis.

iii. Estimate the idiosyncratic determinants of the COB.

Objectives and Structure of the Project

Objectives

Implementation Steps

Regulatory Assessment and Policy Revision

(III) To produce a preliminary assessment of Latin American securities markets regulatory and tax systems asymmetries. Hence, to advance awareness on the benefits of regional convergence with international best practices. These asymmetries might account for the inter-country differences in firms' cost of capital not attributable to but complementary with systematic risk and firm idiosyncratic variables.

i. Regulatory assessment
ii. Policy brief for COSUDE
iii. Policy note

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Main Conclusions and Policy Lessons

Cost of Equity Financing (COE)

- COE estimates revealed that, for Latin America as a whole, 32% of COE risk is attributable to systematic (non-diversifiable) risk.

- Several robustness checks have been performed in order to identify additional factors that may add to the explanation of COE. On this account, the study empirical findings are:

  i) Global systematic risk factors (i.e. global portfolios and currencies) do not add information to domestic market risk to explain COE. Home bias or lack of international diversification.

  ii) Absence of common (group of firms) risk factors related to size and value.

  iii) Although there is scarce diversification (e.g., illiquidity, low free floating, constrained trading volume), the study does not find meaningful idiosyncratic (firm level) risk attributes.

→ Although it may still not be the only source of risk that affects the COE in Latin America, as far as we know, systematic (non diversifiable) risk is the most important variable to explain COE.

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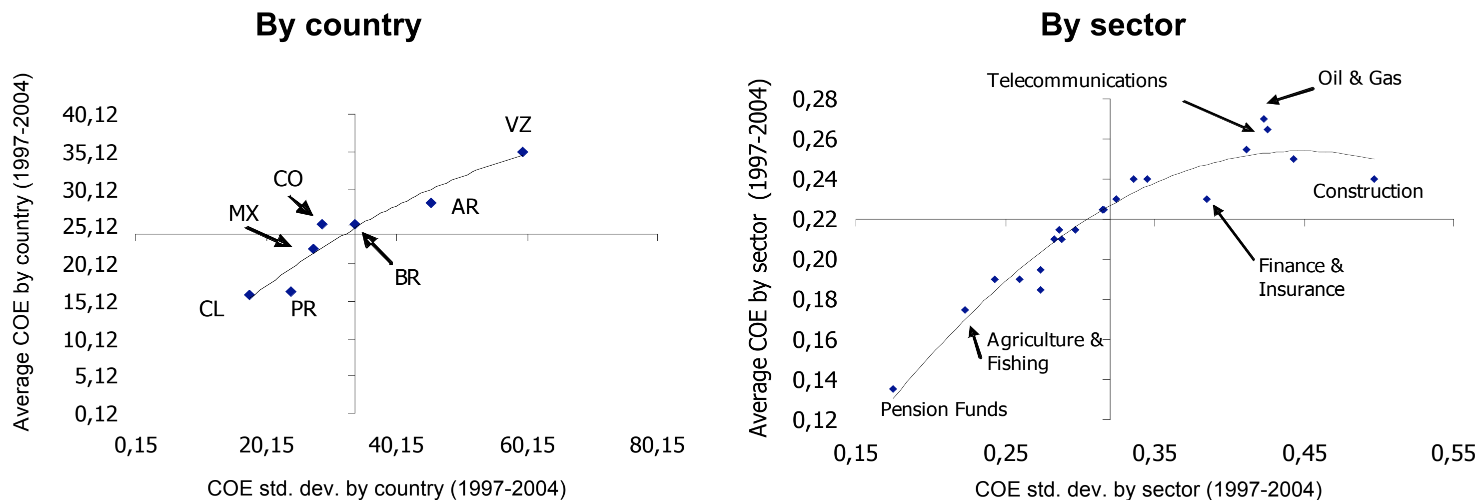
Main Conclusions and Policy Lessons

Cost of Equity Financing (COE)

- Higher systematic risk drives to higher COE levels.
    - In particular, Argentina and Venezuela exhibit the highest and more volatile COE. While Chile and Peru exhibit the lowest and less volatile COE estimates.
    - Also, in terms of economic sectors, Pension Funds, Textile, and Agriculture & Fishing are those exhibiting the lowest sensitivity towards systematic risk. That is, they exhibit the less volatile and lowest COE levels. On the contrary, Construction and Oil & Gas portray the highest and more volatile COE.

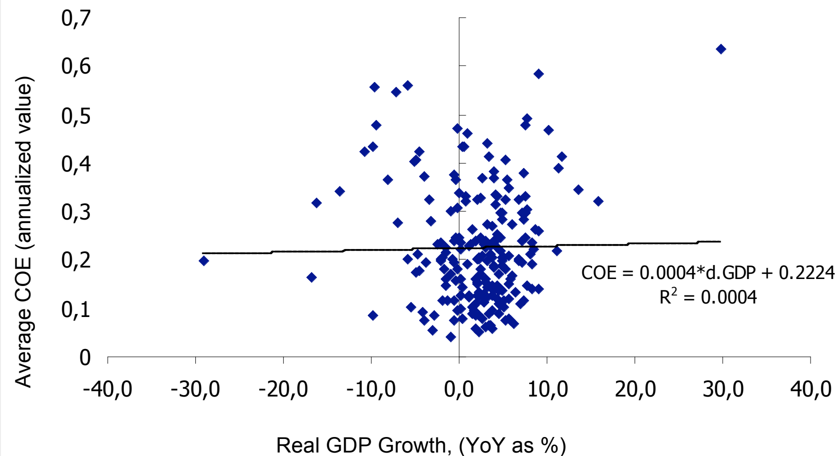
COE estimates for Latin America: Cross-plots of averages and standard deviations



Main Conclusions and Policy Lessons

Cost of Equity Financing (COE)

- The COE is a-cyclical (figure on the left). This implies that Latin American firms do not enjoy from lower cost of financing in bad times. This differs from the pro-cyclical pattern observed in developed markets.

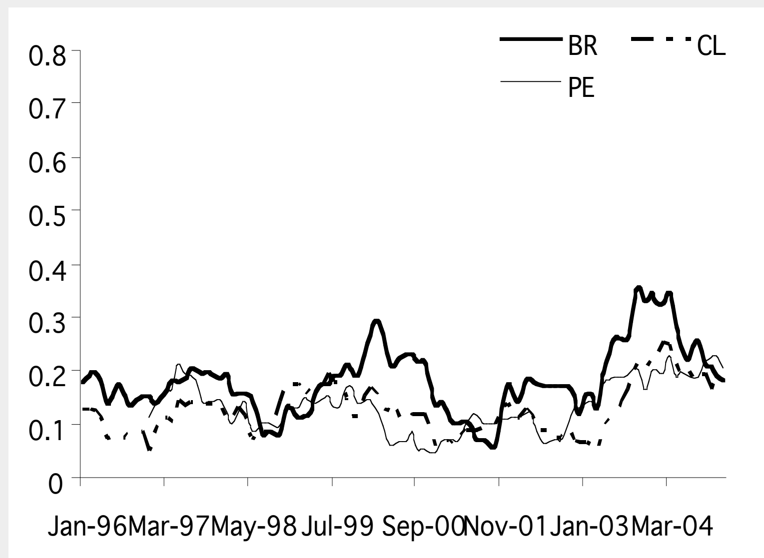


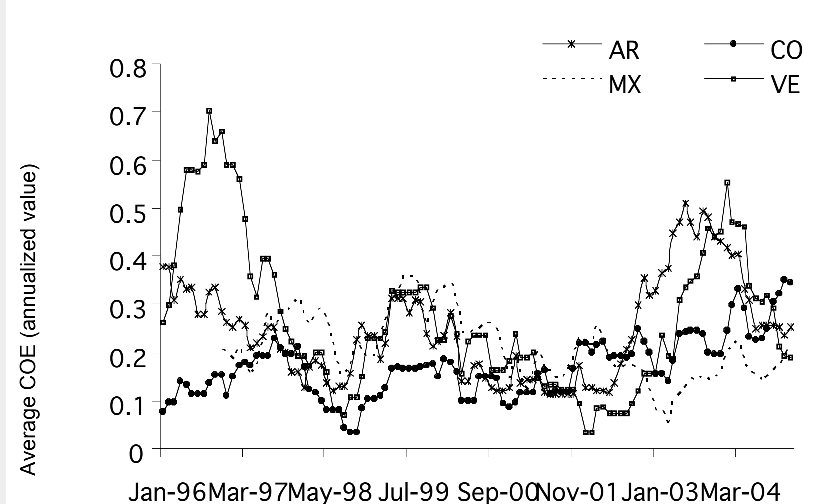
Main Conclusions and Policy Lessons

Cost of Equity Financing (COE)

- A significant amount of this risk is common across Latin American markets, as observed in co-movement patterns.

Common regional shocks: COE co-movement across Latin American countries (1996-2004)

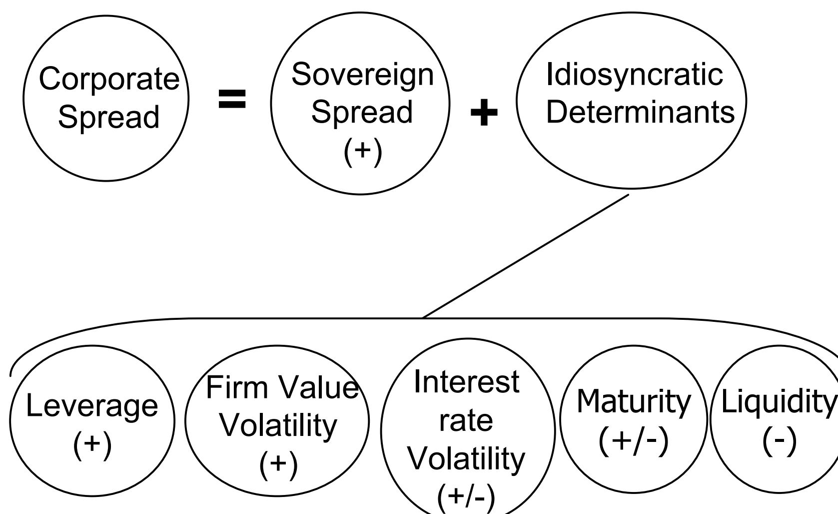




Main Conclusions and Policy Lessons

Cost of Bonds Financing (COB)

- The study uses as determinants of corporate bond spreads the following: the sovereign spread, and the idiosyncratic determinants (i. e., leverage, firm value volatility, risk-free interest rate volatility, time to maturity, liquidity).

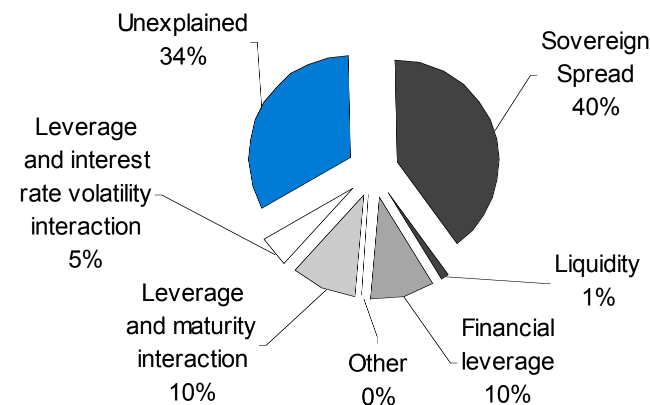


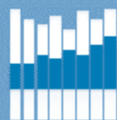
Main Conclusions and Policy Lessons

Cost of Bonds Financing (COB)

- Consistently with the results for COE, in bond markets the sovereign spread was found far more economically relevant than firm-specific or firm/bond idiosyncratic factors to explain corporate spreads (40% on average, see figure below).
- This result implies that firms in Latin America can achieve a lower cost of debt when sovereign risk decreases. This is the more critical the lower the country's creditworthiness (speculative grade sovereign ratings, higher and volatile sovereign spreads), as in Argentina, Brazil (but recent investment grade) and to a much lesser extent Mexico or Chile. Policies to improve the sovereign's creditworthiness –once again policies directed at mitigating systematic risk- might have a positive bearing upon the corporate cost of bond finance.

Economic significance of corporate spread structural determinants.
(% of variance explained by each determinant)





Main Conclusions and Policy Lessons

Cost of Bonds Financing (COB)

- Regarding the firm specific determinants of COB, it is worth mentioning that the most statistically and economically significant variable turned out to be financial leverage. Time to maturity and risk-free interest rate volatility are also relevant, but only indirectly through their interaction effect with leverage. Liquidity is highly significant but economically contributes less to explain spreads.

- From a policy perspective, these results imply that moderate to highly leveraged firms might bring down their cost of bond finance if they were able to lengthen the maturity of their bond liabilities.

- If firms are forced to short-term conditions, the results suggest that firms will reduce their cost of bond financing by minimizing their financial leverage.

Main Conclusions and Policy Lessons

Cost of Bonds Financing (COB)

- Finally, we find robust evidence against the sovereign ceiling rule (The application of the sovereign ceiling rule by market participants implying that a one percent increase in sovereign spreads will increase corporate spreads by at least one percent). The percentage of rejection ranges between 77% (Chile) to 90% (Argentina).

- For a third of the sample we checked that market views were consistent with the rating agencies policy of allowing these firms to pierce the sovereign ceiling for at least a sub-period within the sample. But in general, rating agencies appear to be more reluctant than market participants to allow corporations to pierce the sovereign ceiling.

- This result suggest that there are a number of characteristics that allow firms to reduce their sensitivity to sovereign risk and that new efforts in order to recognize them should follow on the research agenda.

Recommendations for the Forum discussion

Key question: How can Latin American Firms Achieve a Lower Cost of Capital

- Structural, Regional Policies
- Development Institutions Initiatives: MDBs, Bilateral Donors and Governments
- Enterprise actions
- Rating Agencies

Structural, Regional Policies

- Widely established that financial integration allows risk-sharing, consumption smoothing, allocation of investment flows where opportunities are profitable, and equalization of risk-adjusted interest rates (to world (hence lower) rate levels).

- Further deepening and global integration of local equity markets (less information asymmetries, transaction costs, larger diversification, broader investor pool)

- Support regionalization of equity and bond markets. Broader and deeper pools of capital available, higher risk tolerance and less expensive finance. E.g. Argentine or Uruguayan firms could tap the Novo Mercado in Sao Paulo.

- Foster development of domestic bond markets, if possible in local currencies. If local currency not possible at long tenors, provide foreign exchange risk cover, especially in non-tradable sector firms generating cash flows in domestic currency.

- To understand the cost of capital differences across countries it is essential to analyze regulatory, foreign exchange and tax frameworks in securities markets, as well as their enforcement differences. A later study suggests that the overall tax pressure may have also a positive impact on the cost of equity. These variables have not been taken into account in the present study and may explain the large portion of unexplained risk in these markets (68%).

Development Institutions Initiatives: MDBs, Bilateral Donors and Governments

- First and foremost, recognize that stable and less volatile macroeconomic frameworks/policies (fiscal, monetary, forex, financial) pay off in terms of capital access and returns > dampening macroeconomic volatility should always be high on the agenda (i.e. Chile, most recently Brazil).

- Critical to mitigate emerging market risk (political, regulatory, foreign exchange).

- Expand and enhance use of risk mitigation instruments (no need to reinvent the wheel, but to make the instruments work!). Especially applied to infrastructure projects, equipment acquisition, Greenfield investment > Leverage ODA flows (see more in the next panel).

  - Full, partial (best) guarantees and co funding
  - Developed country models: PPP in credit insurance schemes, securitization, venture cap
  - Scale up products targeted at currency and regulatory risks (also take into account link between the latter two and sovereign risk)
  - First loss guarantees to enable more risky countries access to capital markets (like IFC Municipal Fund; see WEF (2006).
  - Global Development Bonds: new fixed income securitized asset class. Have we seen any?

  Be prudent, however, with type of guarantees and GDB. Lessons from Sub-prime crisis may apply

- Liquidity risk: issuance of global bonds, or development of sovereign yield curve

Enterprise actions

Reduced cost of debt capital can be accomplished under certain conditions.

- If leverage is high, seek debt maturity extension or reduce exposure to interest rate volatility or interest rate risk.
- If firms are constrained from long-term borrowing, even at home, then reduce leverage.
- In general, LAC firms are not highly leveraged by emerging market standards.
- Issue larger, more liquid bonds (MDBs can support), primarily addressed to institutional investors (Chile's AFP successful story).

Rating agencies

- Need for more flexibility regarding the country ceiling policy. Moody's has taken steps in this direction since 2006. Many emerging market companies are creditworthy on a stand alone basis and may borrow cheaper than the sovereign and enjoy higher ratings.
- Procyclicality of ratings: longstanding issue (Asian crisis, Sub prime crisis).
- Supervision and regulation of rating agencies is imperative. Overreaction and ill pricing of risky assets affects the cost of capital and market access.

Recommendatıons for the Forum dıscussıon

- Summing up, our results imply that a crucial objective for Latin American policy makers is to reduce systematic volatility. This is especially the case in countries that exhibit the higher systematic volatility, namely Argentina and Venezuela; and to a lesser extent Brazil.

- Policies targeted at a stable and predictable macroeconomic environment should favor bring down the systematic volatility premium and the cost of firms financing in Latin America.