

**CORPORATE CAPITAL STRUCTURE IN DEVELOPING COUNTRIES –
COLOMBIAN CASE**

By

Manuel Barrera S.

THESIS

Submitted to
KDI School of Public Policy and Management
in partial fulfillment of the requirements
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MASTER OF BUSINESS ADMINISTRATION

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ABSTRACT

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Research on corporate capital structure attempts to explain how corporations finance real investment, with particular emphasis on the proportions of debt vs. equity financing. There is no universal theory of the debt-equity choice, and no reason to expect one. However, this paper attempts to find different variables that affect “the financing decision-making process” in countries like Colombia, where economic conditions are vastly different to those in developed countries.

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I. INTRODUCTION

Research on capital structure attempts to explain how corporations finance real investment, with particular emphasis on the proportions of debt vs. equity financing. There is no universal theory of the debt-equity choice, and no reason to expect one. However, this paper attempts to find different characteristics in financing decision-making process in countries like Colombia, where economic conditions are vastly different to those in developed countries.

There is strong empiric evidence about the positive roll that Capital Markets play in the economic growth. Levine and Zervos (1998) and Beck et. al. (2000) found that financial development has a strong and positive impact about the economic growth in the long term. A better development in the Financial Sector improves the assignation of resources and increases the productivity, with positive result in the long-term growth.

One of the key determinants of corporate financing choices is the existence of “agency cost,” specially the ability of investors to ensure that management will act in their best interests (Jensen and Meckling, 1996; Myers, 1977). The more difficult this is, the greater will be the cost of raising finance particularly through equity offering.

According to recent literature on capital structure, sector- and firm specific factors, have clearly an important role. For instance, utilities and basic industries that have heavily capital-intensive technologies, slow (but stable) sales growth, and long maturity assets rely more on long-term debt, as opposed to short-term debt or equity financing (Morris, 1976; Myers, 1977; Barclay and Smith, 1995). In contrast, IT firms, which have high but less stable demand growth and low ratios of physical capital to assets, are probably better off financing themselves through retained earnings or equity.

The tradeoff theory says that firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress. The pecking order theory says that the firm will borrow, rather than issuing equity, when internal cash flow is not sufficient to fund capital expenditures. Thus, the amount of debt will reflect the firm's cumulative need for external funds. The free cash flow theory says that dangerously high debt levels will increase value, despite the threat of financial distress. Each of these theories "works" for some firms in some circumstances. Theories that are more general will require a deeper understanding of the financial objectives of corporate managers.

Colombia as a country far away from efficient and perfect market is though closer to some concepts about Pecking Order Theory. MIT professor Stewart Myers has suggested that corporate capital structures are simply the cumulative result of individual financing decisions in which managers follow a financial pecking order. According to Myers, corporate managers making financing decisions are not really thinking about an optimal capital structure. Instead, they simply take the “path of least resistance” and choose what then appears to be the low-cost financing vehicle – generally debt- with little thought about the future consequences of these choices.

Moreover, than to analyze corporate financial structure theories (most of them based on the strong assumptions on the efficient and perfect financial markets), this paper will try to explore different concepts about capital structure but applied in developing markets (specifically in Colombia), where the conditions are roughly different as they are in developed countries with more efficient markets.

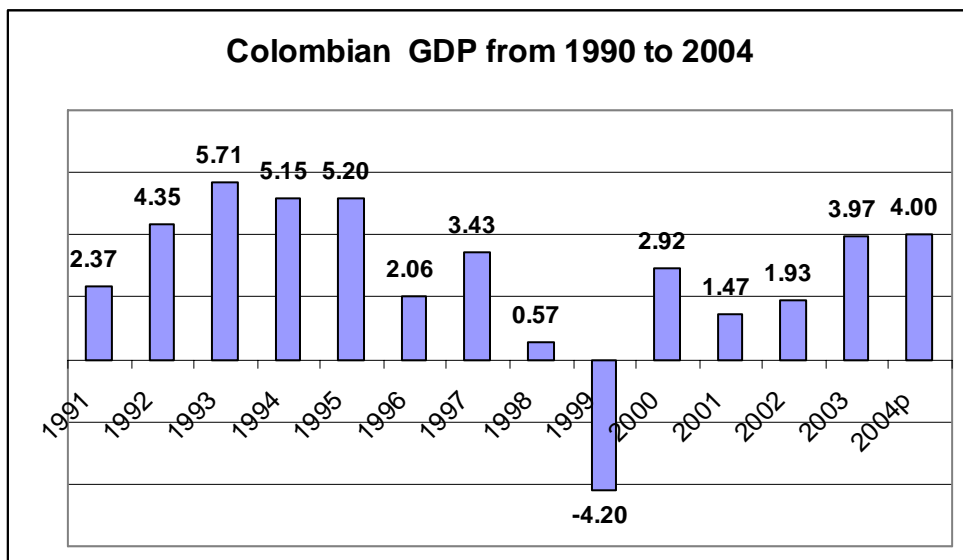
II. COUNTRY ANALYSIS

a. Social and Economic Aspects

COLOMBIA is a country badly affect for decades of conflict that has taken rural areas of the country as a hostage. However, its institutions have been developing, as well as well as the democratic political system, generating years of resilient and sustained economic growth.

Violence has taken an enormous human, social, and economic repercussion on the nation. Since 1980, has been estimated that the conflict has claimed about 100,000 lives. The economic impact of the conflict is staggering. Nevertheless, the country has managed to sustain GDP growth despite unfavorable international and regional trends.

Figure II-1 Colombian GDP



Source: Statistical Data from Colombian Central Bank.

The Colombian economy grew well above expectation in 2003, reaching 3.97% of GDP growth. Though this growth was initially concentrated in a few sectors (construction, manufacturing, mining), the expansion broadened to other sectors toward the end of the year.

The initial shock caused by the Venezuelan crisis and the foreign exchange controls that were imposed there and that negatively affected Colombian exports dissipated quickly as growth in the U.S. picked up and overall global economic performance improved. However, Colombia still faces many challenges both externally and internally, including debt management, sagging oil production, and unemployment.

Measures to spark economic growth and increase investor confidence included five reform bills passed by Congress in January 2003. These reforms, focusing on tax, pension, labor, public administration and banking, are to be implemented through 2006. In addition, the International Monetary Fund (IMF) has shown support reforms, and it is expected to renew a two-year \$2.1 billion stand-by agreement, when it expires in January 2005. Colombia has an export-oriented growth strategy, with the country taking part in recent bilateral Free Trade Agreement talks with delegates from the United States, Ecuador, and Peru.

b. Financial Variables and Overview.

Table II-1 COLOMBIA KEY DATA

COLOMBIA: Key Data				
ITEM	Latest Data Period	Units	Data	Data One Year Before
Total Foreign Investment				
Direct	Jan. 04 - Mar. 04	US\$ million	1,438.00	831.00
Portfolio	Jan. 04 - Mar. 04	US\$ million	86.00	-357.00
Demand and Unemployment				
GDP	Jul. 04 - Sep. 04	% variation year to year	2.43	4.17
Production Index (MMS) (*)	Sep. 04	% variation year to year	5.08	3.78
Retail Sales	Sep. 04	% variation year to year	6.03	0.17
Investment	Apr. 04 - Jun. 04	% variation year to year	8.98	49.07
National Unemployment Rate	Oct. 04	(%)	12.40	13.60
13 Main Cities Unemployment Rate	Oct. 04	(%)	14.10	15.40
Prices and Interest Rates				
Consumer Price Index	Oct. 04	variation year to year	5.89	6.58
Producer Price Index	Oct. 04	variation year to year	5.81	5.31
Savings Interest Rate (90 days)	Oct. 04	Monthly average (%)	7.68	7.82
Lending Interest Rate	Oct. 04	Monthly average (%)	15.21	15.47
Exchange Rate				
Nominal Exchange Rate	Oct. 04	Pesos/dollar US\$	2,580.70	2,876.20
Nominal Devaluation	Oct. 04	annual variation to	10.71	3.98
Real Exchange Rate (ITCR)	Oct. 04	1994=100	124.65	137.67
Real Devaluation	Oct. 04	annual variation to	9.45	5.52
Peso/Yen Monetary Units	Oct. 04	Peso/Yen	23.75	26.27
Peso/Euro Monetary Units	Oct. 04	Peso/Euro	3,230.40	3,368.50
Trade				
Exports	Jan. 04 - Sep. 04	US\$ million	11,864.30	9,705.20
Traditional Exports (FOB)	Jan. 04 - Sep. 04	US\$ million	5,448.49	4,499.21
Non-Traditional Exports (CIF)	Jan. 04 - Sep. 04	US\$ million	6,415.77	5,205.94
Imports	Jan. 04 - Sep. 04	US\$ million	11,941.80	10,241.20
Other				
M1	Oct. 04	variation year to year	12.62	13.62
M3	Oct. 04	variation year to year	15.75	10.61
Net International Reserves	Oct. 04	US\$ million	12,284.23	10,585.54
Colombia General Stock Exchange Index	Oct. 04	July 2001=1000	3,742.60	2,158.20
Fiscal Deficit (Central Government)	Jan. 04 - Jun. 04	% of GDP	2.50	2.90
Fiscal Deficit (Non - Financial Public Sector)	Jan. 04 - Jun. 04	% of GDP	0.03	1.60

Source: Central Bank, National Statistics Department (DANE) and Colombia Stock Exchange

Table II-2 Comparison against other Latin American Countries

	Main Latin American Economic Indicators								
	Colombia		Argentina	Brazil	Chile	Ecuador	Mexico	Peru	Venezuela
	2004(*)	2003	2003						
Real GDP Growth (%)*	4.0	3.9	8.7	0.2	3.2	3.0	1.2	4.0	-9.5
Population (millions)*	45.3	44.6	38.4	176.2	15.7	13.3	103.3	27.1	25.5
GDP (US\$ billions)	94.9	78.6	129.4	492.4	72.4	26.9	626.0	61.0	84.7
GDP per Capita (US\$)	-	1,764.0	3,650.0	2,710.0	4,390.0	1,790.0	6,230.0	2,150.0	3,490.0
GDP per Capita Growth (%)	-	9.4	6.0	1.2	2.0	0.2	0.3	2.4	11.2
Consumer Prices Variation	5.5	6.5	3.7	9.3	1.1	6.1	4.0	2.5	27.1
Fiscal Balance (% of GDP)*	-2.5	-2.7	1.6	1.0	-0.4	-0.4	0.6	-1.8	-7.0
Total External Debt/GDP (%)	41.4	49.2	112.1	47.8	57.2	61.8	22.4	49.5	37.4
Exchange Rate (LC/US\$ eop)	-	2,877.8	2.9	2.9	599.4	-	11.2	3.5	1,596.0
Nominal Interest Rate (savings)	-	7.8	10.5	23.3	3.2	5.3	5.1	3.1	17.2
Current Account (% of GDP)	-1.8	-1.8	6.1	0.4	-1.4	-3.3	1.8	-2.1	8.6
Foreign Direct Investment (US\$ million)	1,483.0	1,762.0	1,103.0	10,144.0	2,982.0	1,637.0	10,731.0	1,332.0	2,531.0
Foreign Direct Investment (% of GDP)	1.6	2.1	0.8	2.1	4.0	6.0	1.7	2.1	3.0

(*) Forecast

Source: ECLAC, World Bank and Central Bank

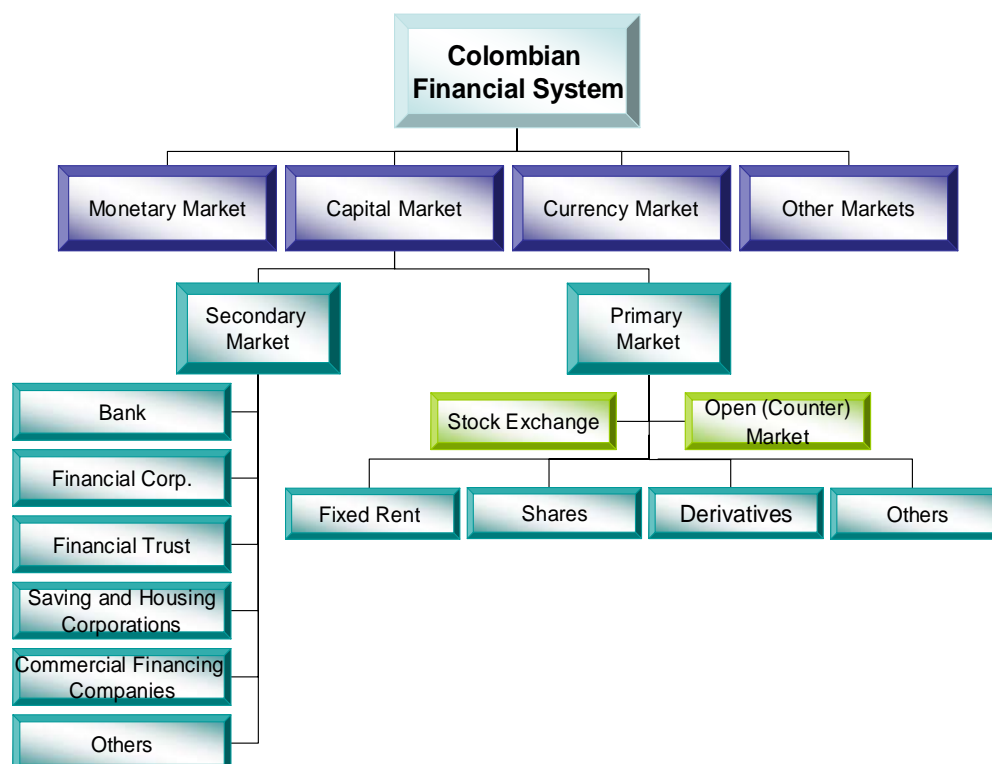
III. COLOMBIAN FINANCIAL SECTOR

A. Financial Sector in Colombia

Colombia's business climate is becoming more attractive; according to the World Bank's report "Doing Business in 2005: Removing Obstacles to Growth", Colombia was the world's second most successful investment climate reformer country between 2003 and 2004. Furthermore, the business and industrial community's confidence in the country's economic future is at its highest level since 1994, demonstrating attractive investment condition.

The health and reactivation of the financial sector support the overall good economy performance. After the crisis of previous years, the financial sector has reached important solvency and soundness levels, which suggest good growth prospects.

Figure III-1 Colombian Financial System



Source: Superintendencia de Valores (Colombian Governmental Institution).

B. Capital Market Description

There is an unresolved debate about whether markets or bank-based intermediaries are more effective at providing financial services hampers the formation of sound policy advice. According to Demirguc-Kunt and Levine¹ (1999), Colombia is classified as a country: financially underdeveloped with a financial structure of bank-based economy. Colombia is also a country with a French civil law tradition, characterized by poor accounting standards, heavily restricted banking systems, and highly inflation.

¹ “Bank-Based and Market- Based Financial Systems – Cross-Country Comparisons.” – Demirguc-Kunt and Ross Levine. The World Bank Development Research Group – Finance – July 1999.

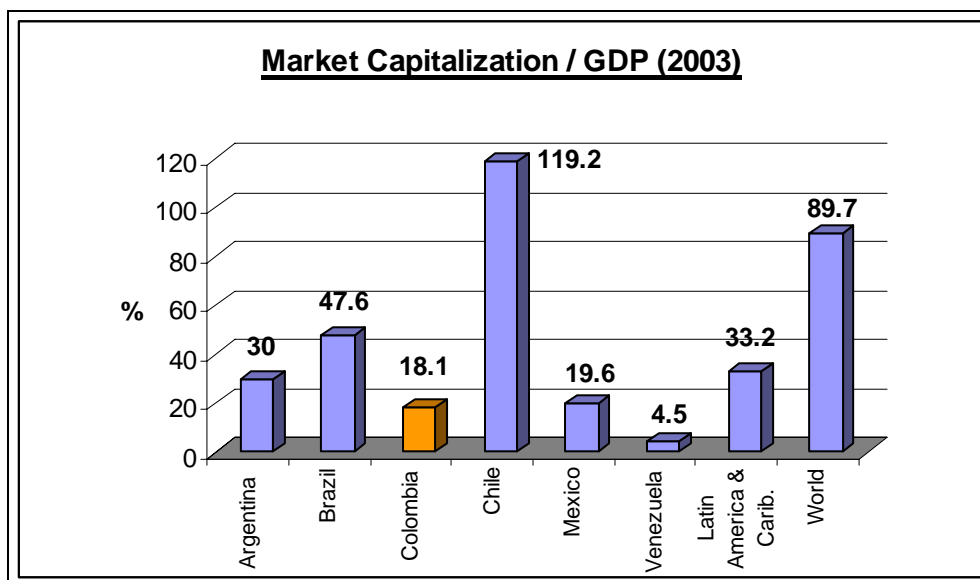
The following table shows the measurement lengthwise of the Colombian's Capital Market. It also compares market capitalization, liquidity and listed domestic companies with some peer countries in Latin America.

Figure III-2 The Measurement lengthwise of the Colombian Capital Market

	Market Capitalization				Market Liquidity		Listed Domestic Companies	
	USD \$ millions		% of GDP		1990	2003	1990	2004
	1990	2004	1990	2003				
Argentina	3,270	46,432	2.3	30	0.6	3.8	179	104
Brazil	16,400	330,347	3.6	47.6	1.2	12.3	581	357
Colombia	1,420	25,223	3.5	18.1	0.2	0.5	80	114
Chile	13,600	117,065	44.9	119.2	6.3	12.1	215	239
Mexico	32,700	171,940	12.4	19.6	4.6	3.8	199	152
Venezuela	8,360	6,117	17.2	4.5	4.6	0.2	76	59
Latin America & Carib.	78,451	550,731	7.7	33.2	2.1	6	1748	1468
World	9,403,525	32,436,350	48	89.7	28.5	83.4	25,424	50,038

Source: Standard & Poor's Global Stock Markets Factbook 2004.

Figure III-3 Market Capitalization / GDP - Cross Countries



Source: Standard & Poor's Global Stock Markets Factbook 2004.

Across countries with developed financial systems, economic performance is significantly larger in countries with market-based financial architecture than in those with bank-based architecture. Conversely, across countries with underdeveloped financial systems, economic performance is significantly larger in countries with bank-based systems than in those with market-based architecture².

Since the development of an economy's financial markets is closely related to its overall development, Colombia is facing an important challenge, as regards to its financial structure. Well functioning financial systems provide good and easily accessible information that lowers transaction cost, which in turn improves resources allocation and boost economic growth. Both banking systems and stock market enhance growth, which is the main factor in poverty reduction.

² Financial Architecture and Economic Performance: International Evidence. Solomon Tadesse. University of South Carolina. October 2002.

IV. CAPITAL STRUCTURE'S THEORIES

A. BRIEF DESCRIPTION OF INTERNATIONAL THEORIES

- **Miller Theory**

Modigliani and Miller (MM) have a strong argument that a firm cannot change the total value of its outstanding securities by changing the proportions of its capital structure. Therefore, the value of the firm is always the same under different capital structure for the firm's shareholders. This argument is the famous MM *Proposition I*, which in a world of no taxes, the value of the firm is unaffected by the debt-to-equity ratio. The authors obtain their results by showing that either a high or a low corporate ratio of debt to equity can be offset by homemade leverage, in this argument, there is the assumption that individuals can borrow at the same rate as corporations. *Proposition II* (in a world of no taxes) argues that the expected return on equity is positively related to leverage, due to the risk to equity-holders increase with leverage; meaning that firms are indifferent to capital structure.

On the other hand, MM Propositions with Corporate taxes argument the following:

Proposition I, since corporations can deduct interest payments but not dividend payment, corporate leverage lowers tax payments. *Proposition II*, the cost of equity rises with leverage, because the risk to equity rises with leverage. The second

propositions implies that in world with corporate taxes but not bankruptcy cost, firm value is an increasing function of the leverage; thus firms should have a capital structure almost entirely composed of debt.

- **Trade-off Model**

Trade-off theory appears after the integration of tax effects and distress cost. According to this model, exists an optimal amount of debt that also produces the lowest weight average cost of capital; this is the trade-off between tax benefit (generated by increase of debt) and the financial distress cost. *Tax benefit* happens because the basic corporate profits tax allows the deduction of interest payments but not dividends in the calculation of taxable income. *Cost of financial distress* (or Under-investment problem), although the direct expenses associated with the administration of the bankruptcy process appear to be quite small relative to the market values of companies, the indirect cost can be substantial. When a company files for bankruptcy, the bankruptcy judge assumes control of the investment policy, usually being very conservative and not effective maximizing firm value. But even in conditions less extreme than bankruptcy, highly leveraged companies are more likely than their low-debt counter-parties to pass up valuable investment opportunities, especially when faced with the prospect of default.

An additional issue in this theory emerges with the Agency Cost of Equity, this happens when the manager owns part of the equity of the firm thus the agency cost is reduced. The optimal debt-equity ratio would be higher in a world with agency cost of equity than in a world without these costs.

- **Pecking-order Theory**

The Pecking-order theory is generally attributed to S.C. Myers, “the Capital Structure Puzzle,” *Journal of Finance* 39 (July 1984). The pecking-order is based on the difficulties of obtaining financing at a reasonable cost, which corporate financial managers use internal financing first and then issue the safest securities. The Pecking order theory provides two rules for the real world. Rule # 1 – Use Internal financing; investors are likely to price a debt issue with the same doubt that they have when pricing an equity issue, thus the first rule in the pecking order is the use of retained earnings to finance projects out. Rule # 2 – Issue the safest securities first; although investors fear mispricing of both debt and equity, the fear is much greater for equity. Thus, the pecking order theory implies that, if outside financing is required, debt should be issued before equity, due to debt is less risky. Obviously, there are different sort of debts which one should choose first the less risky among them.

V. HOW COLOMBIAN FIRMS' ESTABLISH CAPITAL STRUCTURE?

The theories about capital structure are ones of the most sophisticated in the field of finance. However, the practical applications of these theories are less than common in the real world. There is not an exact formula available for evaluating the optimal debt-equity ratio. Nevertheless, there are strong evidence that besides own company characteristics, the development of financial systems together with legal systems and institutions of the country determine the Corporate Capital Structure and therefore affect their growth.

Table V-1 Recent International Financing Patterns³

Recent International Financing Patterns: Source of Funds as a Percentage of Total Sources						
	United States	Japan	United Kingdom	Germany	Canada	France
Internally generated funds	82.8%	49.2%	68.3%	65.5%	58.3%	54.0%
Externally generated Funds	17.2%	50.8%	31.7%	34.5%	41.7%	46.0%
Increase in long-term debt	17.4%	35.9%	7.4%	31.4%	37.5%	6.9%
Increase in short-term debt	-3.7%	9.7%	6.1%	-	3.8%	10.6%
Increase in stock	3.5%	5.1%	16.9%	-	10.4%	12.4%

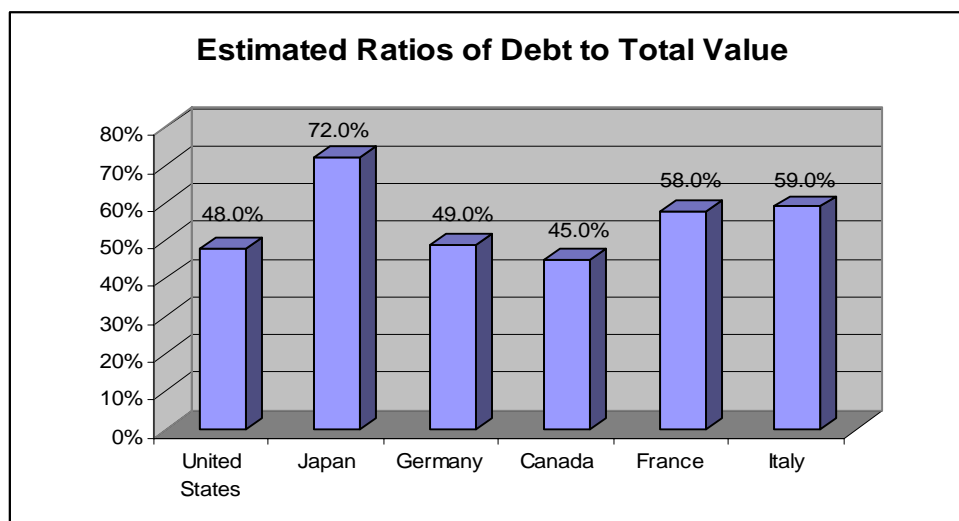
Source: OECD financial statistics

Above (Table V-1) shows that firms in the United States generate more financing from internally generated cash than firms in other countries. Firms in other countries rely largely than U.S. firms on external equity. Next graph (Figure V-1) shows estimated ratios of debt to total value (accounting value) of Non- financial firms, from

³ This information is provided by OECD financial statistics from average of recent years (early 2000).

various countries.

Figure V-1 Estimated Ratios of Debt to Total Value by Country⁴



Source: OECD Financial Statistics.

Japan has the greater ratio (bank-based country) against other developed countries.

(Definition: Debt is short-term debt plus long-term debt. Total value is debt plus equity – in book value terms.). Onward, this paper will revise some research about financial structure exclusively in Colombian firms.

South Korea is characterized as a country with high debt-equity ratio. Since the 1997-98 Asian Financial crisis, the country's largest conglomerates (chaebol) have reduced debt and cross shareholdings, and improved corporate governance. By September 2002, the debt-equity ratio of manufacturing firms had been reduced to 131% from

⁴ This information is provided by OECD financial statistics from average of recent years (early 2000).

398% in 1998. However, several chaebol continue to dominate the corporate environment, with the top 30 of them accounting for about 40% of manufacturing output and 50% of exports.

A. CORPORATE FINANCIAL STRUCTURE (SUPERINTENDENCE OF SOCIETIES – RESEARCH)

One of the main purposes of this paper is to find out: How Colombian firms establish Capital Structure. For this reason, this paper has a strong support in former researches carried out by the following institutions: Superintendence of Societies⁵, ANIF,⁶ and Fedesarrollo⁷.

Using a set of 1995-2002 data on the balance sheet of 9,027 Colombian firms, which have to report to the Superintendence of Societies⁸, they tried to describe the financial structure of the Colombian companies.

⁵ Superintendence of Societies: Governmental Institution in charge of the vigilance, control, and support of firms established in Colombia.

⁶ ANIF, National Association of Financial Institutions created in 1974.

⁷ Fedesarrollo is a foundation for the Education and the Development created in 1970.

⁸ In this exercise, companies belonging to sectors such as: Public Service, Health and Ports are excluded, as they do not have to report to the Superintendence of Societies. However, the sample provides precise information about a representative number of firms.

Table V-2 Superintendence of Societies - Total Firms Initial Classification

Initial Classification by Size (Year 2002)			
Firms	No.	Assets	Average Total Assets*
Small	3,591	< USD 1 mln	USD 0.44 mln
Medium	3,388	between USD 1 mln and USD 4.2 mln	USD 2.0 mln
Large	2,048	>USD 4.2 mln	USD 41.2 mln

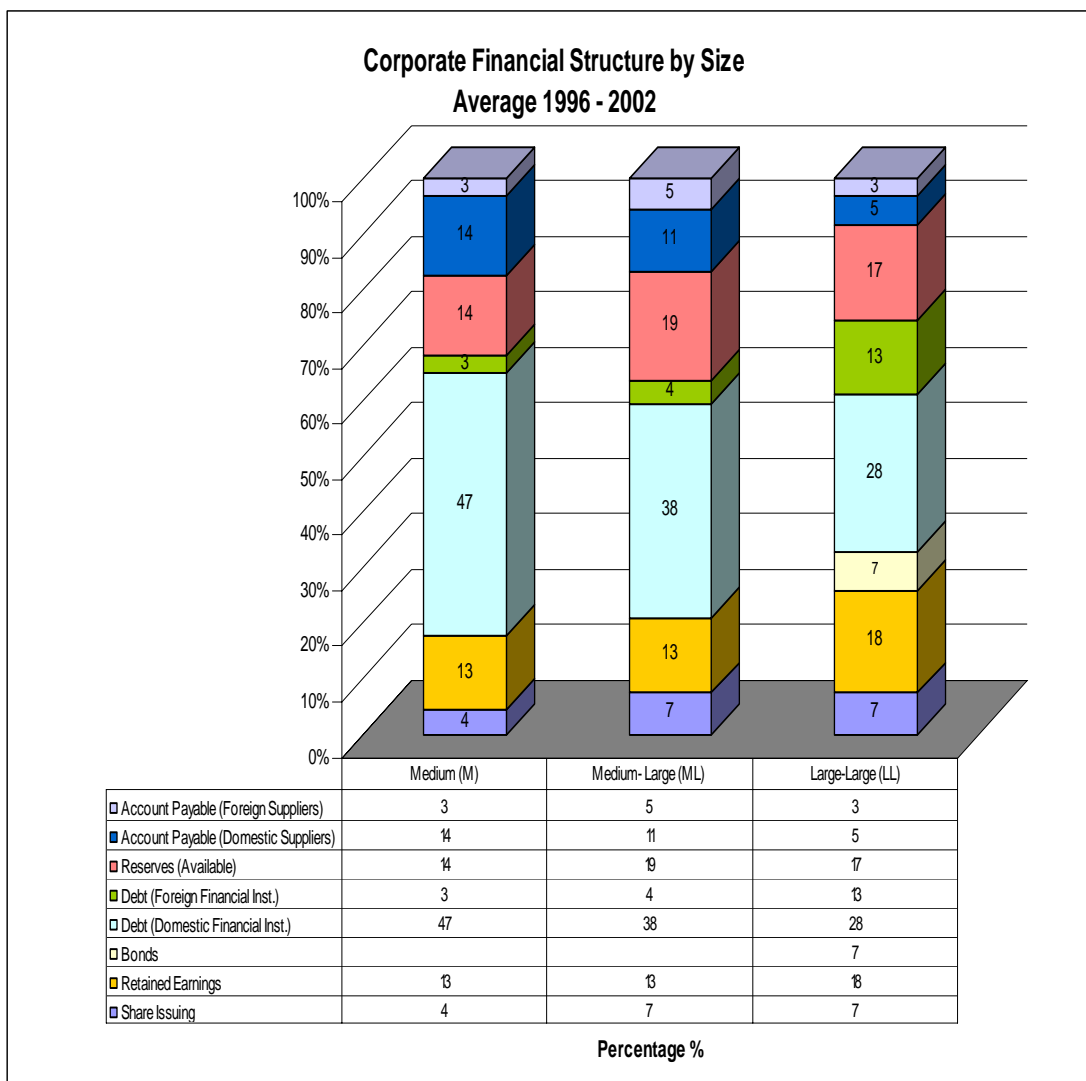
* average per firm.

a. Corporate Financial Structure by size:

Taking into account that the objective of the Superintendence's research was to find out "Potential users of the Capital Market" the small firms were eliminated from the research and a new classification was given. Medium Firms (M) were kept but Large firms were re-classified among Medium-Large (ML) firms (assets under the median) and Large-Large (LL) firms with asset over median of the same group⁹.

⁹ The new classification is as follows: Large-Large firms (LL) Total Assets > USD 10.8 million; Medium-Large firms (ML) Total Assets between USD 10.8 million and USD 2 million and Medium firms (M) Total Assets between USD 2 million and USD 1.1 million.

Figure V-2 Corporate Financial Structure



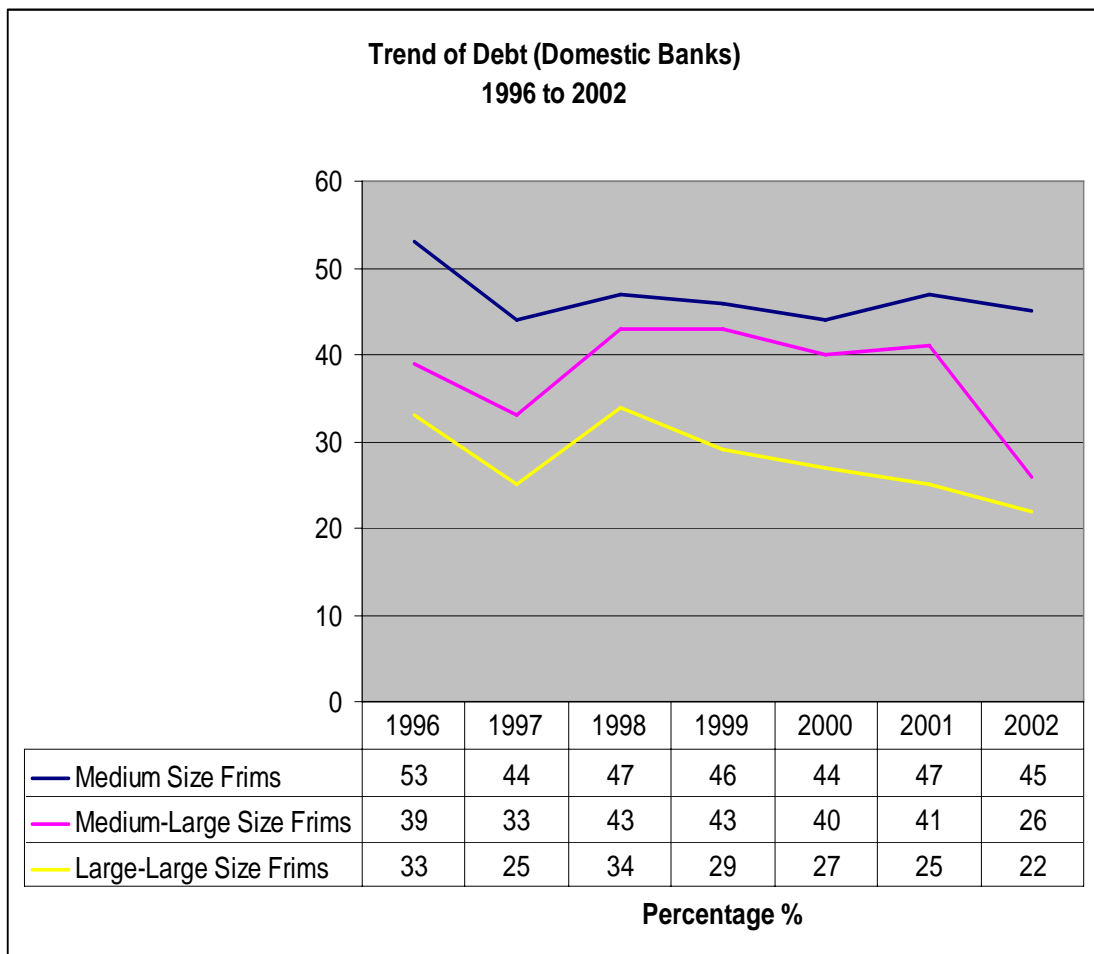
As a general characteristic, debt with local financial institutions is the main source of funds of the Colombian firms, however the importance of this source decrease as the size increase. The second source of funds for Medium firms (M) are the reserves¹⁰ and domestic suppliers, both with a average participation of 14%, in the case of Medium-Large firms (ML) reserves 19% and retained earning 13% are the next source of funds.

¹⁰ Reserves, refers to reserves of capital from the equity, which could be use as a financial source.

Large-Large firm's (LL) second and third source of fund have similar participation, retained earnings 18% and reserves 17%. Stand out the fact that Bond issuing is null as a source of funds for Medium and Medium-Large firms.

Firm's financial structure, according to their size, has not changed significantly all the way through of the research period (1996-2002). However, an important finding is the trend since mid 90's of replacing debt (particularly local bank debt) for other financing sources.

Figure V-3 Trend of Debt (Domestic Banks)



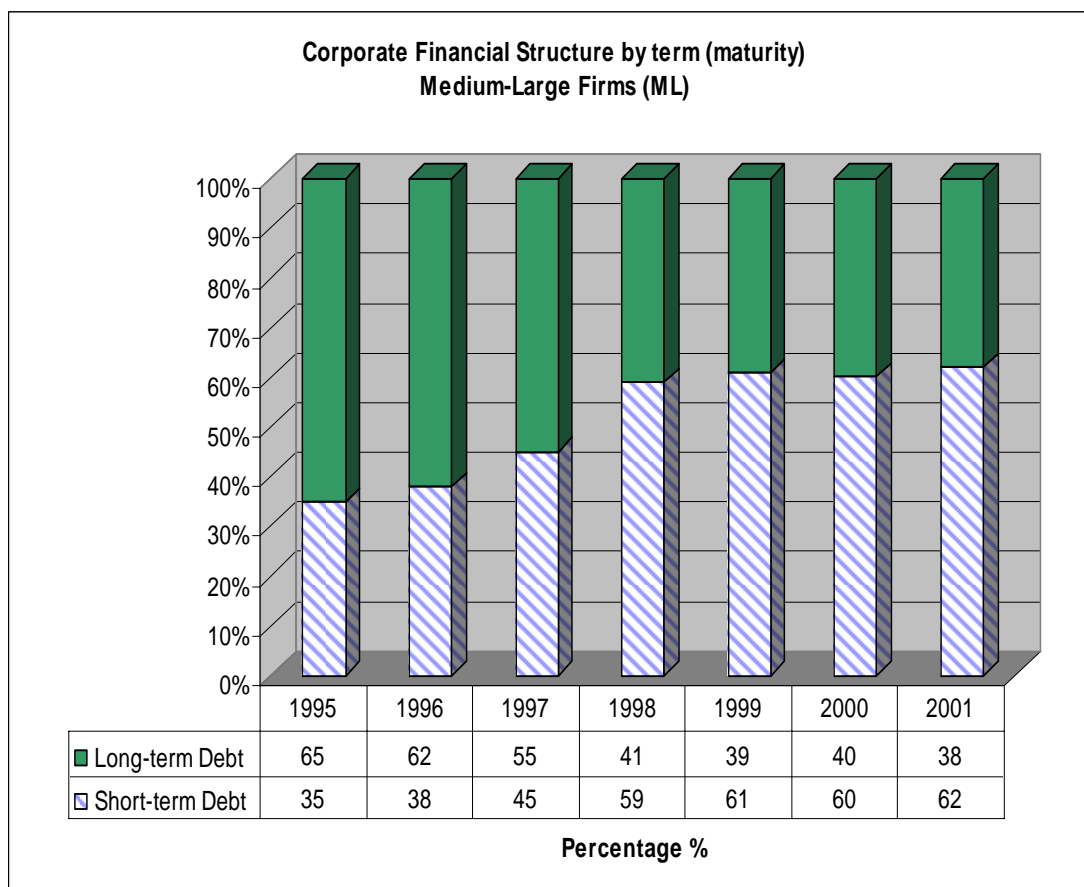
This trend obeyed to the crisis of both international capital market and local financial sector. The last one, characterized by a credit crunch (from 1998 to 2000), which started its gradual recovering in 2001. In those years, firms turned to financing their activities with suppliers and internal sources (retained earnings and reserves).

c. Corporate Financial Structure by term (maturity):

As a general characteristic, Colombian's firms finance their working capital operations mostly with short-term resources (Figure V-4). However, differences in maturity are strong between 1995 and 2001 because of the recession of end 90's against dynamic performance in mid 90's. Also smaller size firms show a higher concentration in short-term financing against higher size firms, which is expected given the greater accessibility of resources of the last ones.

In fact, in Medium-Large firms (ML) stands out the increase of short-term financing, while in 1995 short-term debt represented 35% over the total debt, this figure raised to 62% in 2001.

Figure V-4 Corporate Financial Structure by term (maturity)



d. Corporate Financial Structure by sector:

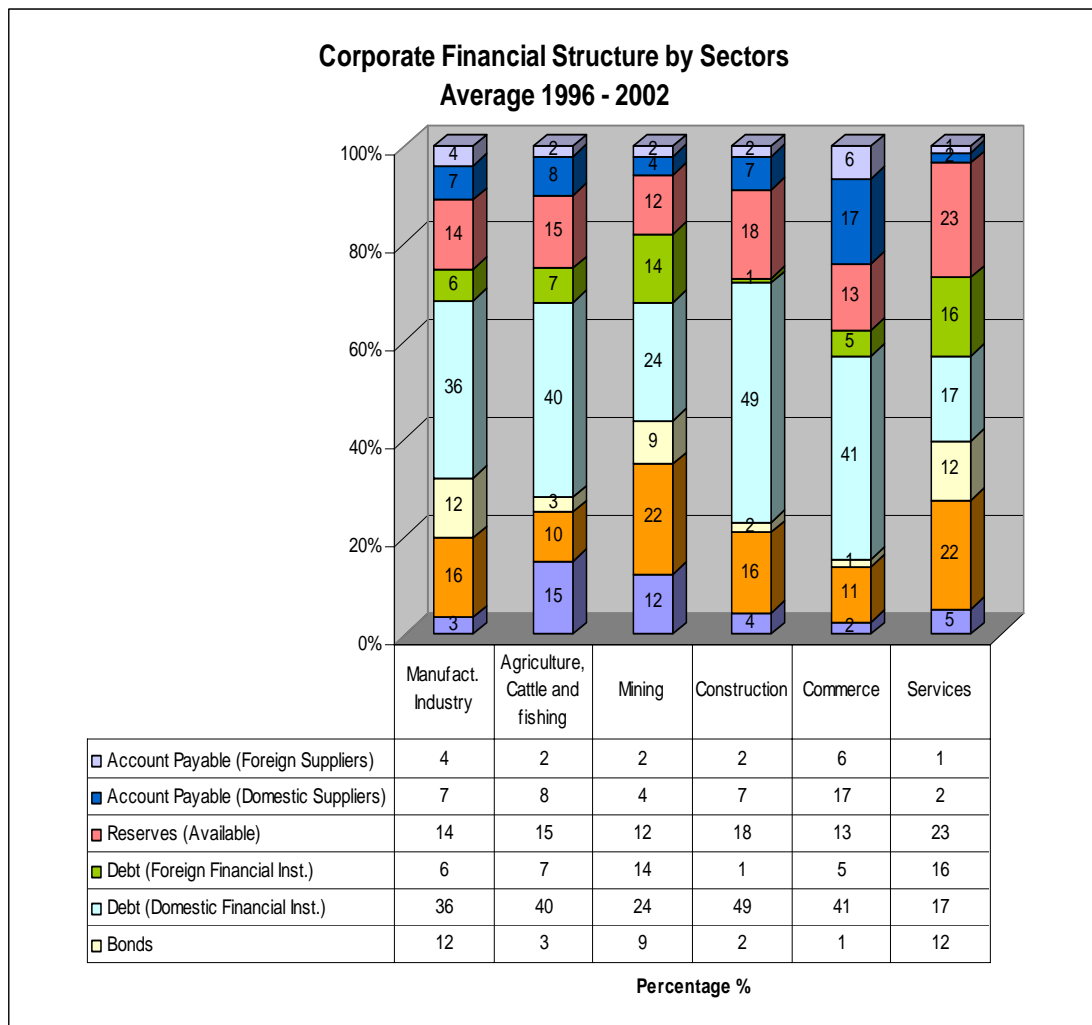
The Superintendence of Societies in its research also analyzed Corporate Financial Structure by sector, with the following classification: Manufacturer Industry, Agriculture, Cattle and Fishing, Mining, Construction, Commerce and Services.

In general terms, the most diversified sector regarding their financial sources during 1996 – 2002 were Manufacturer Industry, Mining, and Services (including Financial Sector). In these sectors, there is not a clear predominant source of financing, except for the Manufacturer Industry, which has a participation of 36% in Debt (Domestic Financial Inst.) over the total financial sources.

Both Manufacturer Industry and Mining have similar and diversified Financial Structure along the period 1996-2002, the main financial source for both sectors are Debt (Domestic Financial Inst.) follow by Internal sources (Retained Earning and Reserves). Another diversified sector was Services, but conversely the main financial source in average was internal sources (Reserves 23% and Retained Earnings 22%) and the third financial source was Debt (Domestic Financial Inst.) with a participation of 17%.

On the other hand, both Construction and Commerce make use of debt with domestic financial institutions as main financial source with a participation of 49% and 41% respectively. The sector of Agriculture, Cattle and Fishing shows as main financial instrument, debt with domestic financial institutions with a participation of 40%; Reserves and Account Payable (Foreign Suppliers) have similar participation in average with a 15%.

Figure V-5 Corporate Financial Structure by Sectors



As international literature suggest, debt ratios tend to be very low in high growth industries with plenty of future investment opportunities such as the medicine and electronic industries. Industries such as primary metal and paper, with relatively few investment opportunities (mature) and slow growth, tend to use the most debt. In addition, companies with lots of investment opportunities can be expected to issue debt with shorter maturities; not only to protect lenders against the greater uncertainty associated with growth firms, but also to preserve their own financing flexibility and future ability to invest.

Figure V-6 Debt to Equity Ratio by Sector

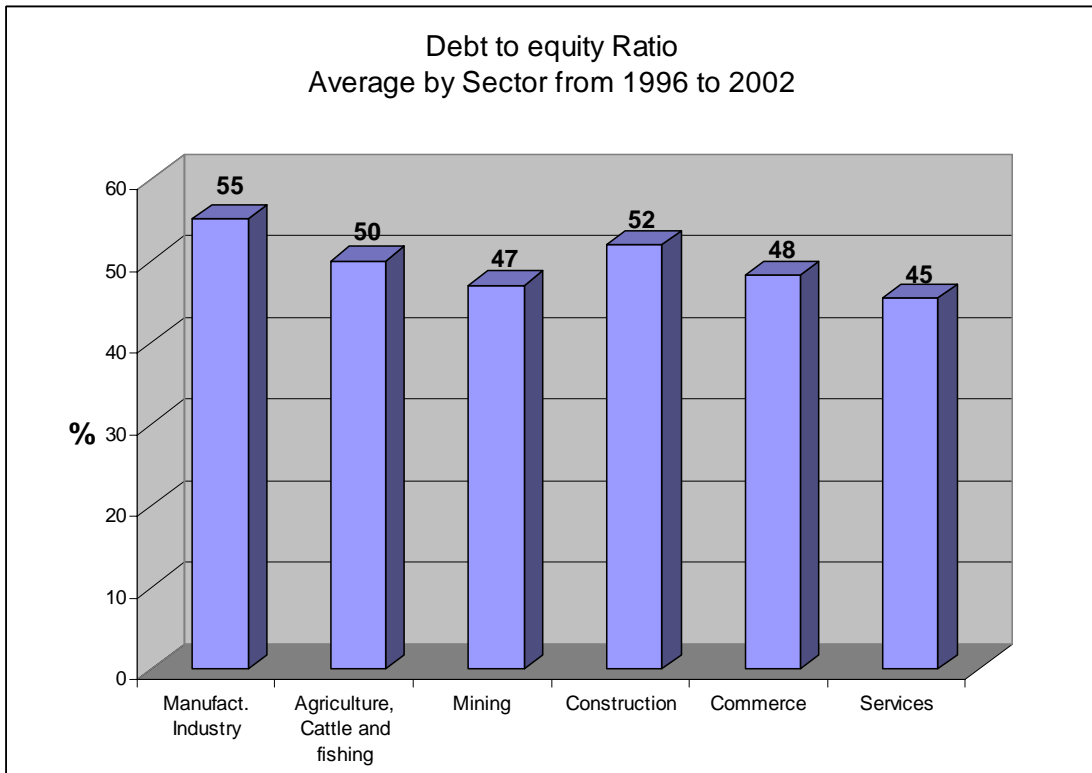
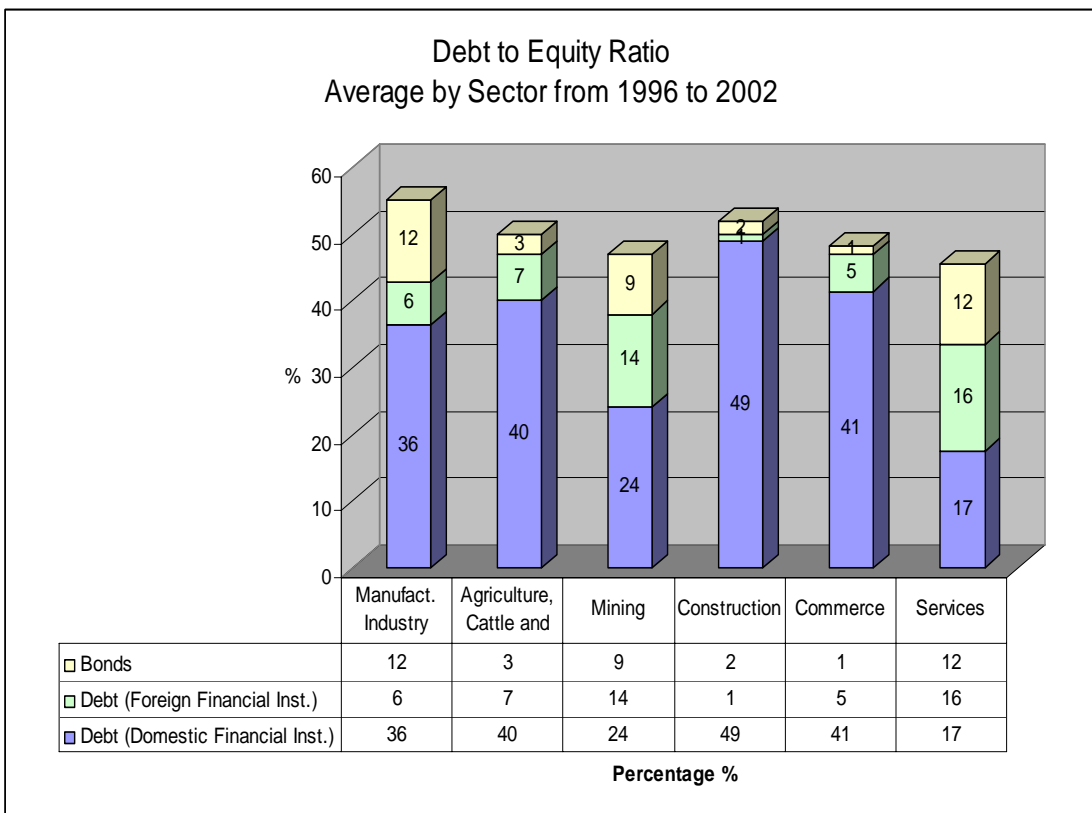


Figure V-7 Disclosure of Debt to Equity Ratio by Sector

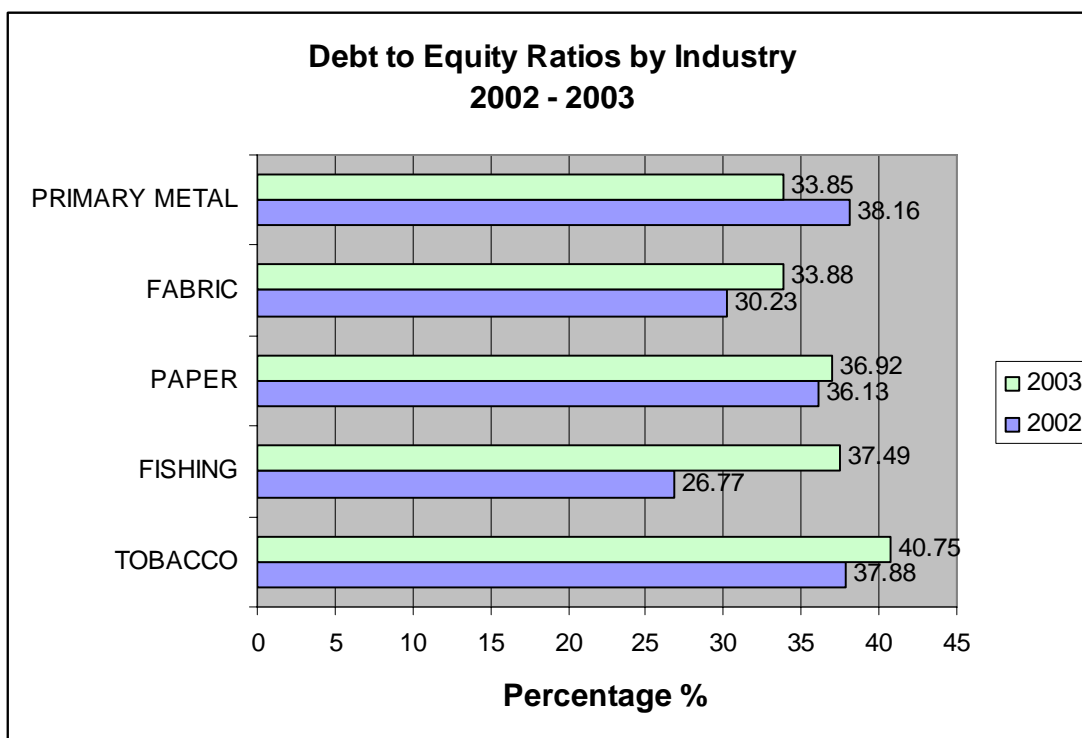


In Colombia this tendency is dissimilar in some aspects, new firms with high growth do not have chance to use Capital Market as a financial choice, because of their high risk and low acceptance for Institutional Investors (Pension Funds). However, there is a coincidence regarding short-term maturities, growth companies have to use short-term maturities with domestic banks and renegotiated it year to year based on the general financial conditions of the company and the market. About mature firms in Colombia, they also (as in the International trend) have more debt and longer maturities, because of their level of assets and trust from financial institutions, among others.

Figure V-6 shows debt to equity ratios by sector during the period from 1996 to 2002. In these graphs, there is a similar debt-equity ratio among several sectors in a range between 55% (Manufacturer Sector) and 45% (Services Sector). A common patron is the high concentration in Debt with Domestic Financial Institutions, especially in the Construction Sector (Figure V-7).

2003 average debt to equity ratio for all firms that report to the Superintendence of Societies was 42%.07, almost same percentage as 2002 (42.04%). Tobacco Industry shows the higher debt to equity ratio among the selected industries for the year 2003 (Figure V-8).

Figure V-8 Debt to Equity Ratios by Industry.



e. Corporate Financial Structure by belonging to Conglomerate or not:

The data from Superintendence of Societies also allowed having a firm's classification according to the criteria of belonging or not to Conglomerates. In fact, firms that belong to a conglomerate have more access and fewer restrictions to financial sources such as Bonds and Internship Loans (especially if the conglomerate owns financial firms).

There are strong differences about financial instruments between these kinds of firms.

However, there is a common patron in the main financial source, which is Debt with

Domestic Financial Institutions with a similar participation around 30% in both groups of firms.

On the other hand, firms that do not belong to conglomerate support their financial structure in a strong way with Reserves (16%) and Retained Earnings (15%). In addition, these firms that do not belong to conglomerate make use of Suppliers as a financial choice in a 15%. Internal Sources (Reserves and Retained Earnings) have a greater participation in firms owned by a conglomerate with a participation of 13% and 24% respectively (Figure V-9).

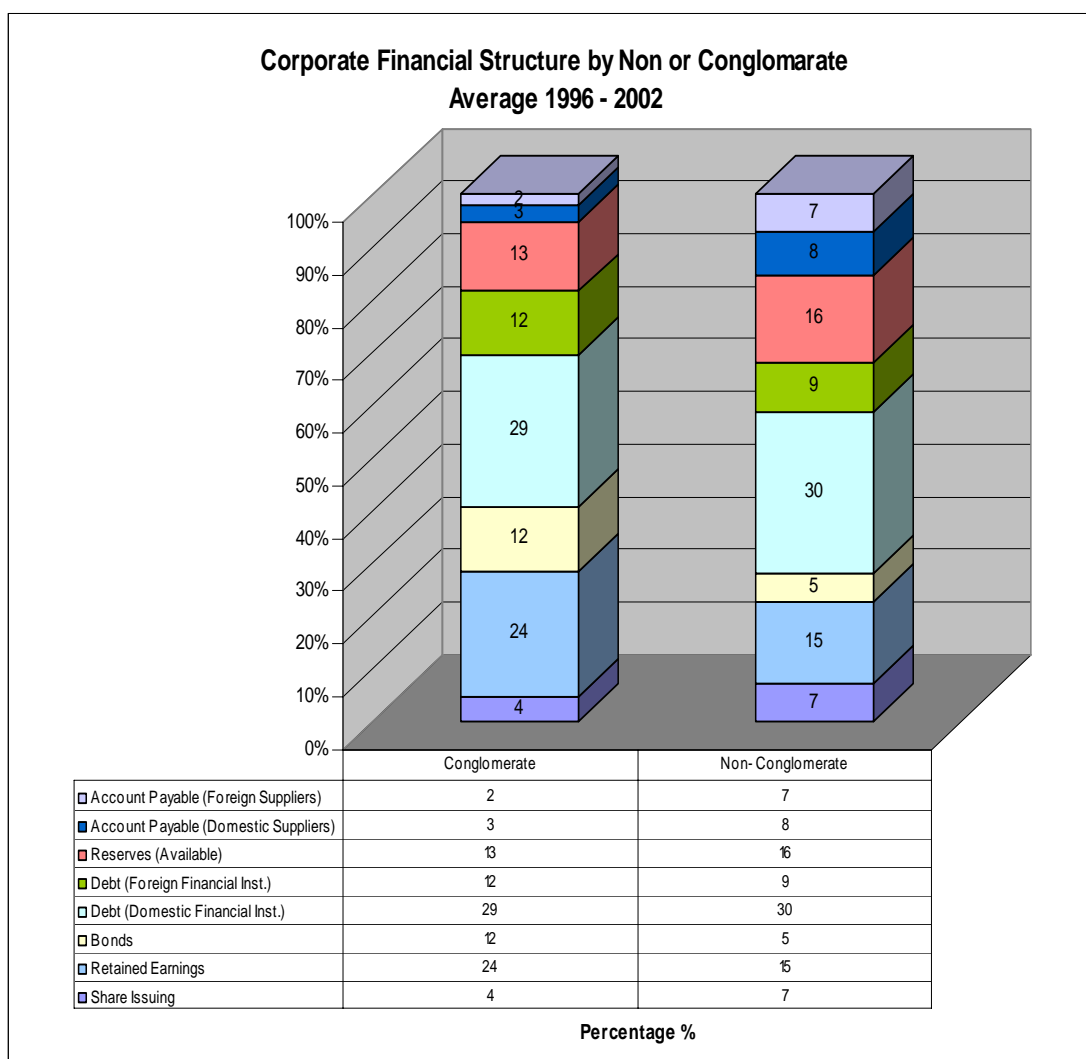
As international literature evidence, because some diversification occurs when firms merge, the cost of financial distress is likely to be less for the combined firm than is the sum of these present values for the two separate firms. Thus, the acquiring firm might be able to increase its debt-equity ratio after a merger¹¹.

Nevertheless, diversification through conglomerate merger may not benefit

¹¹ Unused debt capacity is cited as a benefit in many mergers. An example was the proposed merger of Hospital Corporation of America and America Hospital Supply Corporation in 1985. Insiders were quoted as saying that the combined companies could borrow as much as an additional \$1 billion, 10 times the usual borrowing capacity of Hospital Corporation alone (The Wall Street Journal April 1, 1985). (The merger never took place).

shareholders¹²; just when diversification reduces risk and thereby increases debt capacity, acquiring firms can produce gains. In addition, the reduction of risk from a merger may actually help bondholders and hurt stockholders.

Figure V-9 Corporate Financial Structure by Non or Conglomerate



¹² Evidence suggests that diversification can actually hurt shareholders. Randall Mork, Andrei Shlifer, and Robert W. Vishney (Journal of Finance 45 – 1990) show that shareholders did poorly in firms that diversified by acquisitions in the 1980's.

B. FEDESARROLLO - “CORPORATE OPINION SURVEY”

Since 1995, Fedesarrollo has been developing several surveys about managerial choices regarding Financial Structure. In 2003, the “Corporate Opinion Survey – COS” was developed, which included specific and detail questions about restrictions of the firms accessing to the Capital Market.

The COS was sent to 800 firms, from which just 214 answered and were distributed as follows: 53% Large firms, 31% medium-large firms and 16% medium-small firms.

A 95% of the sample belongs to Industrial Sector, which included Chemical, and Food sectors with a participation of 17% and 19% respectively.

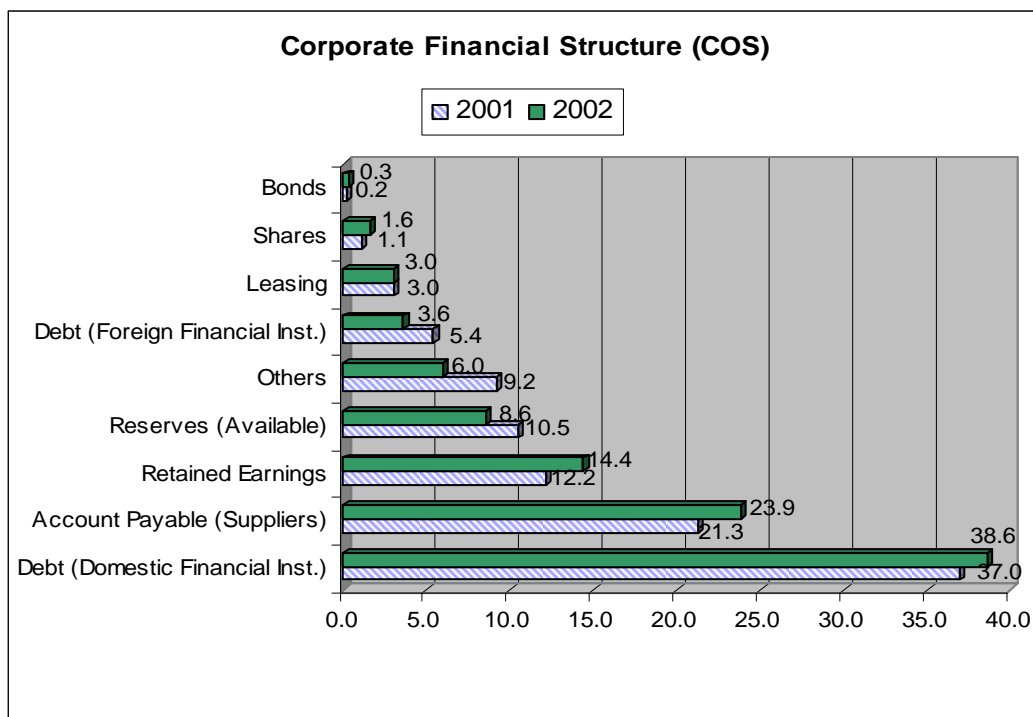
a. Corporate Financial Structure (COS)

The surveys (COS) inquired about Financial Structure and some of the findings are consistent with the research of Superintendence of Societies. In 2002, debt with domestic financial institutions followed by Account Payable (Suppliers) and Retained Earnings are the main financial sources according to COS with a participation of 38.6%, 23.9%, and 14.4% respectively. Leasing and Debt with Foreign Financial Institutions represent a small portion of the financing issue with 3.0% and 5.4% correspondingly.

Finally, the Capital Market (Shares and Bonds) is a financial instrument almost

inexistent, with a participation of 1.6% and 0.3%, even though the better performance of this market in the most recent years.

Figure V-10 Corporate Financial Structure (COS)



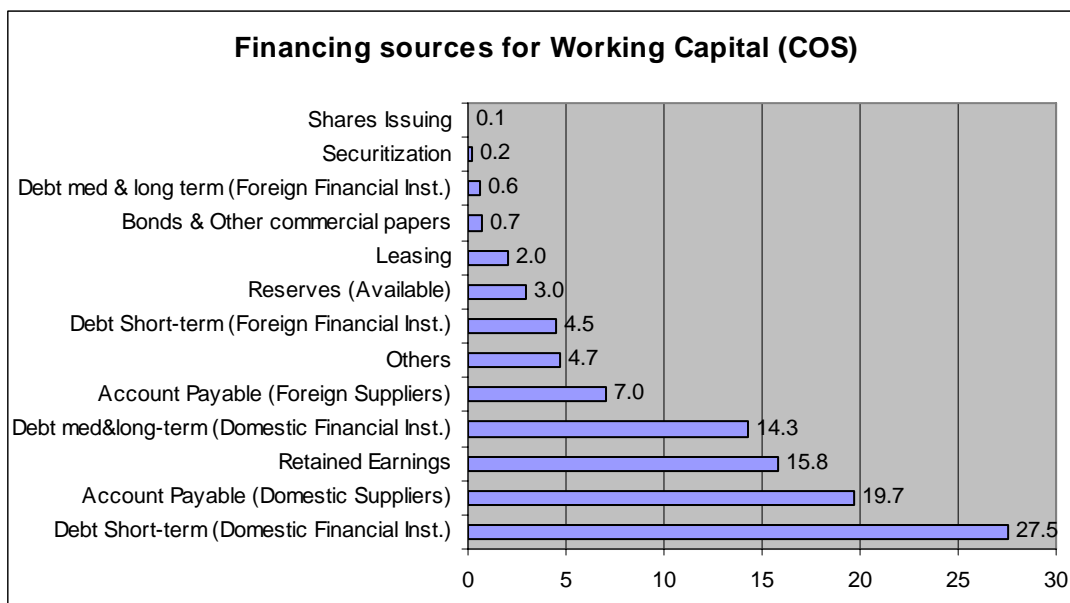
b. Financing Sources for Working Capital

The Corporate Opinion Survey also shows the financing sources that managers prefer for financing working capital. Once more, short-term debt with Domestic Financial Institutions is the main source of financing for working capital, participating with 27% over the total sources of financing. Secondly, domestic suppliers (19.5%) followed by retained earnings (17%).

About firm's size and their financing for working capital, is important to highlight, that domestic debt (short & long-term) decrease with the size of the firms, taking

more significance other financial sources such as domestic suppliers and retained earnings.

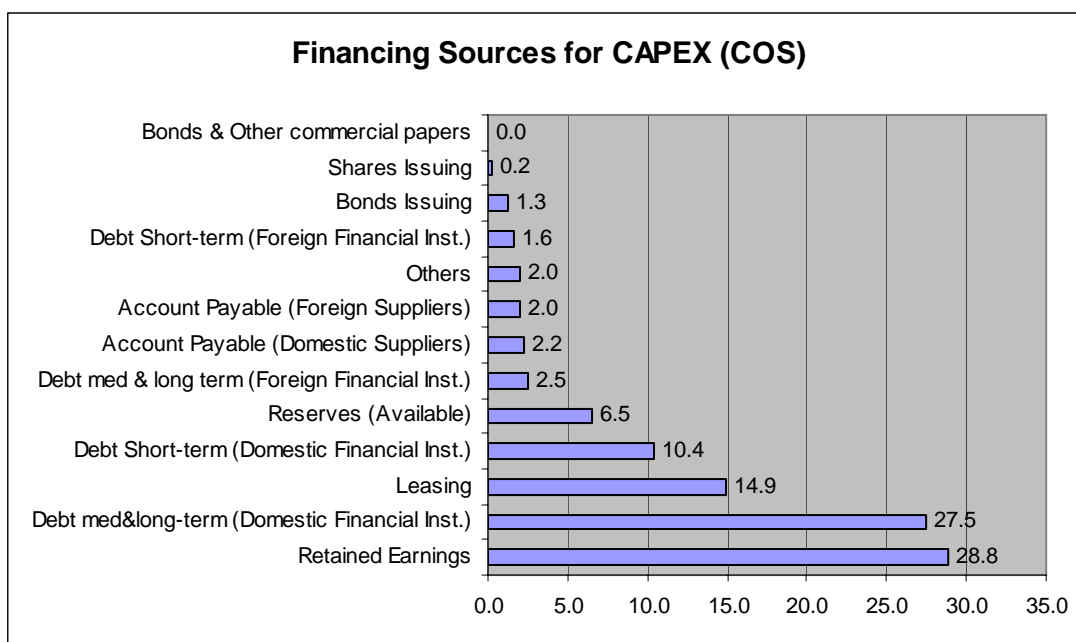
Figure V-11 Financing Sources for Working Capital (COS)



c. Financing Sources for Capital Expenditures:

Conversely, retaining earnings (28.8%) is the main financial source for CAPEX according to the COS. Short & Long-term debt and leasing are the secondary financial source for CAPEX representing 27.5% and 14.9% respectively.

Figure V-12 Financing Sources for CAPEX (COS)



About firm's size and their financing for CAPEX, once again domestic debt (short & long-term) decrease with the size decreasing of the firms, taking more significance other financial sources such as retained earnings and leasing.

d. Reasons choosing financial structure:

FEDESARROLLO's survey also tried to find some reasons which managers in Colombian's companies choose any financial structure.

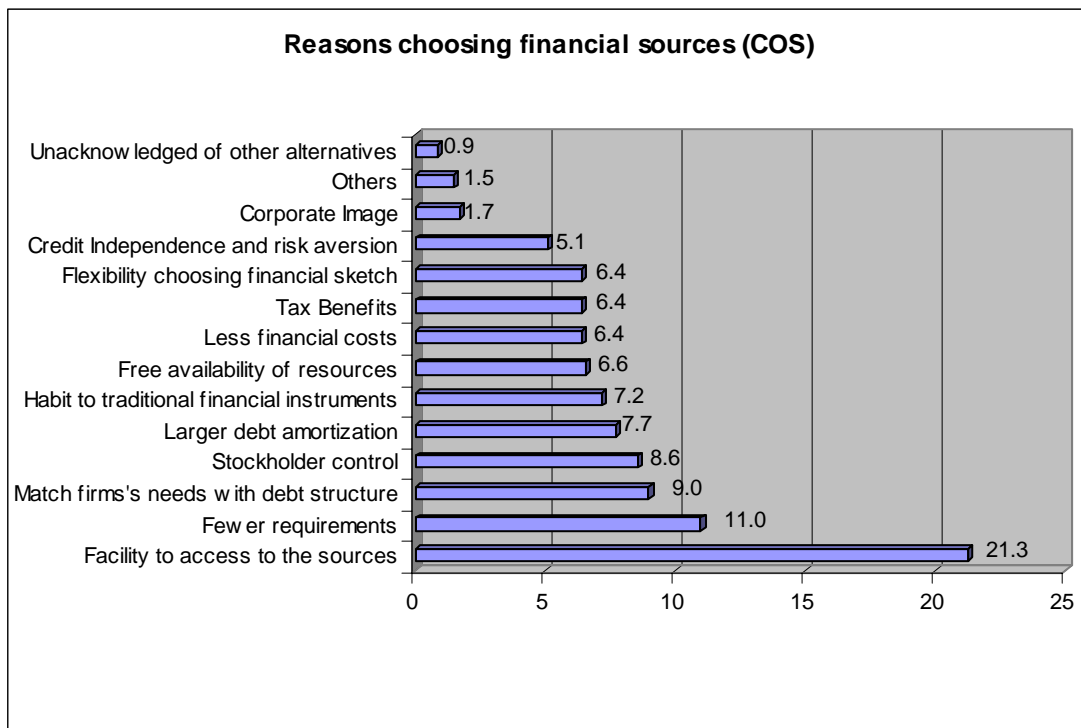
In General terms, Colombian's firms of any size choose the following reasons as the recurrent ones to decide its financial structure:

- Facility to access to the sources (21.3%)
- Fewer requirements (11.0%),

- Match firms' needs with debt structure¹³ (9.0%)
- Stockholder control (8.6%)

Nevertheless, Large-Large firms (L.L) did not show Stockholder control as a strong concern in financial decision-making, but Large-Large firms (L.L) coincide as others that the facility to access to the source is the main issue choosing financial structure.

Figure V-13 Reasons choosing Financial Sources (COS)



e. How Taxes Affect Financing Choices?

According to the survey (COS), some of the circumstances which managers would take part in the Colombian Capital Market are:

¹³ Managers from Colombian companies take into consideration the management of assets and liabilities (especially working capital) when they analyze their financial choices. Usually managers would prefer short-term assets to be financed by short-term liabilities as well as long term assets with long term liabilities.

- Drop of introduction costs.
- Guarantee of demand of its bonds and/or shares.
- Fewer requirements.
- Some changes in tax regulations.

Colombia is a country with a high level of tax evasion; corporate balance sheets do not always reflect accurately the accounting principles. Since this information is a requirement to be listed in the Capital Market, some firms would find this issue as a strong obstacle to issue shares or bonds.

Even though corporate income tax in Colombia is quite high (35%) managers do not have the tax benefit as an essential patron in choosing their financial structure.

International evidence¹⁴ is in contrast to the prediction of tax hypothesis¹⁵, these studies suggest that firms with more non-debt tax shields such as depreciation, net operating loss carryforwards, and investment tax credits have, if anything, more not less debt in their capital structures.

On the other hand, tax evasion in corporations affect the admission of firms in the capital market (because lack of transparency) which reduce the financial alternatives for these firms.

¹⁴ Bradley, Jarrel and Kim (1984), Titman and Wessels (1988) and Watts (1995).

¹⁵ Theoretical models of optimal capital structure predict that firms with more taxable income and fewer non-debt tax shields should have higher leverage ratios.

In order to get tax benefit, firms would add debt to the company's capital structure, lowering their expected tax liability and increasing their after-tax cash flow. Nevertheless, as it was mentioned before, Colombian managers do not take this issue as an essential patron in choosing their financial structure.

On balance, international evidence appears to suggest that taxes play at least a modest role in corporate financing and capital structure decisions. In Colombia, this international evidence is also corroborated.

C. PENSION FUNDS' ROLL IN THE COLOMBIAN CAPITAL MARKET

The importance of pension savings has increased dramatically in recent years, particularly as populations mature. Pension funds have a very significant role to play in the Colombian capital market, particularly as providers of retirement income and as investors of long-term savings.

One of the main concerns of the managers about Colombian capital market is the low demand of shares and bonds. **Therefore, institutional investors as Pension Funds play an important roll, generating a high potential of demand of assets (fixed rent or variable rent) from productive sector.**

According to Pension Fund's opinion, its main objective is not to encourage the Capital Market but to guarantee the pension of the affiliates. However, they recognize

that the regulation is inefficient about the combination risk and return, arguing that there are some important biases that impede taking risks.

- **Low Offer:**

Between 1992 and 2002, Pension Funds grew 70% while new issues of shares and bonds grew just 30%. Another factor affecting the offer is the lack of homogeneity in the issue, which increase valorization and accounting costs, as well as obstruct the liquidity and the development of the market. Low offer of shares and bonds from firms in the Capital Market reduce confidence of institutional investor of take part in this market, thereby generating a vicious circle of low offer and/or low demand.

- **Tax policy issues:**

There is a strong risk aversion propitiated by “the minimum profitability¹⁶” required by the regulation of the market. Asymmetric incentives such as if the profitability of the period exceeds the minimum required the profit corresponds to the affiliates, but if it is the opposite situation, the Pension Funds have to cover the difference with its own equity.

- **Corporate Governance’s implementation:**

Pension funds manifest some kind of distrust with new firms in the Capital Market. They argue that the implementation of Corporate Governance in those firms is

¹⁶ “The minimum profitability” is a requirement of the Superintendence of Banks, which is compulsory for all Pension Funds. This “minimum profitability” is calculated on a very conservative basis.

necessary in order to reach a high quality in the standardization and revelation of the information of new firms. Corporate Governance implies a better quality respect to supervision, control, and information; therefore, Corporate Governance's implementation would improve the trust of Pension Funds to invest in the Capital Market, which will expand the financial choices for Colombian firms (Issuing shares or Bonds).

- **Risk Qualification:**

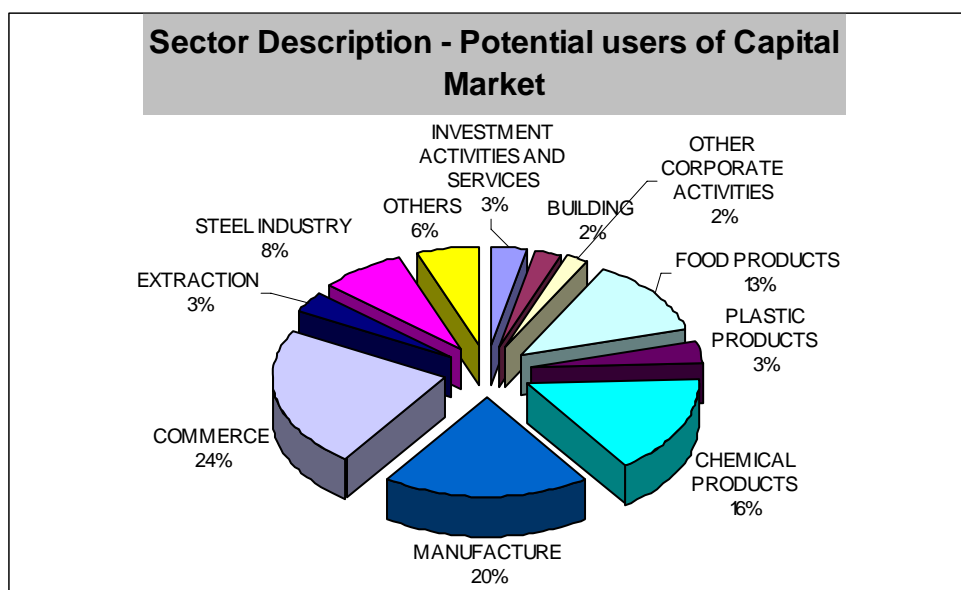
There are some limitations about the risk qualification in Colombia. The minimum grade of investment without any provision is A-. Therefore, the Pension Fund's portfolios are concentrating in assets qualified as AAA or AA+, which increase the aversion of Potential Issuers in the Colombian capital market. Because of the limitations about risk qualification, Colombian firms are afraid to get into the Capital Market (as a financial choice – issuing shares or bonds) because of the perception to get lower risk qualification, losing the initial expenses for the issue.

VI. CAPITAL MARKET AS FINANCIAL ALTERNATIVE

Given the low use of the Capital Market in Colombia as a financial source, FEDESARROLLO developed an important research, in which they made use of a sample of Potential firm users of the Capital Market. These Potential users would increase the activity of the Capital Market as a financial choice, issuing shares, or debt (Bonds). In addition, these firms would encourage the participation of other companies that would make the Colombian Capital Market more efficient. About 82 firms (See Appendix I) resulted from that research, firms on different economic sectors of the economy, distributed as follow:

A. SECTOR DESCRIPTION / POTENTIAL USERS OF A CAPITAL MARKET IN COLOMBIA

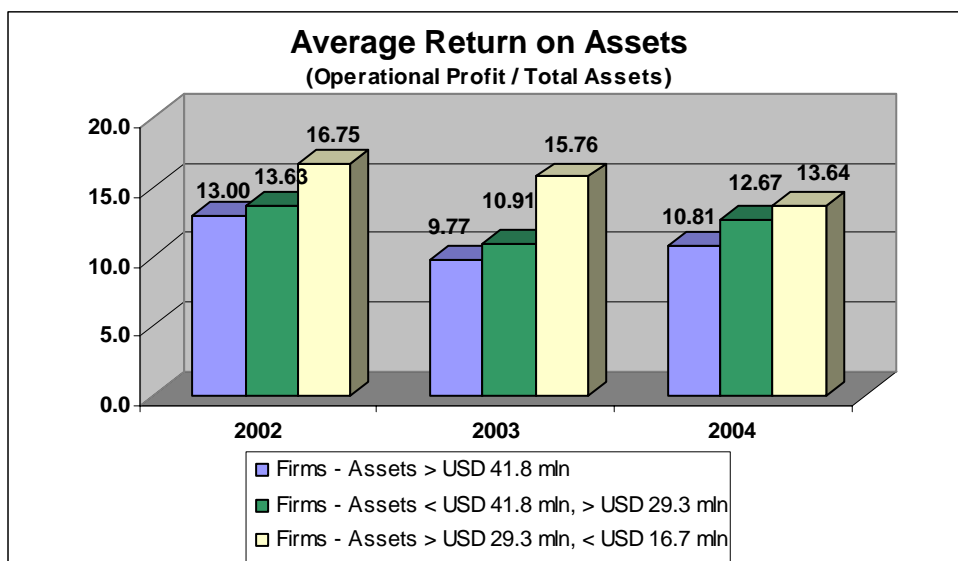
Figure VI-1 Sector Description - Potential users of Capital Market in Colombia



The criterion for selecting these 82 firms was regarding two issues: level of assets and operational performance. These two characteristics let us count with a group of firms that accomplish the basic conditions to get into the Capital Market. Based on 2002 financial reports, the minimum level of assets was COP 40.000 million (USD 16.7 million) and operational profitability greater than 10%.

B. AVERAGE RETURN ON ASSETS OF POTENTIAL USERS OF A CAPITAL MARKET IN COLOMBIA

Figure VI-2 Average Return on Assets by Size (Selected Firms)

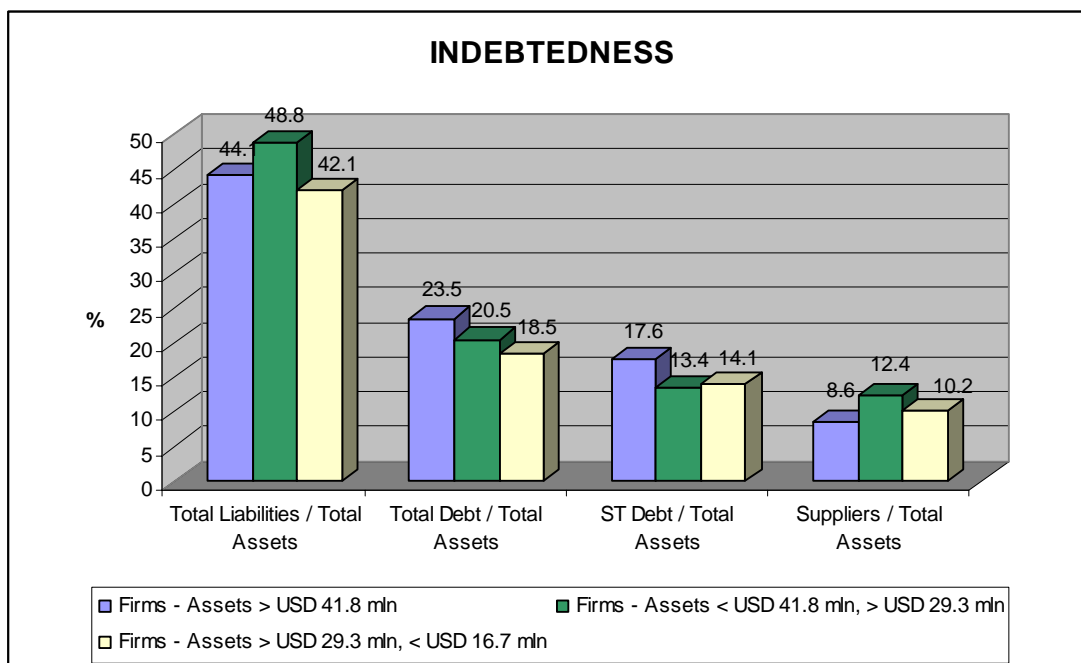


The general characteristic in these three years (2002-2004), is that smaller firms show a better operational performance, which is kind of logic but not a model, given that is more difficult to generate high operational return with a high level of assets. Also is important to mention the average decreasing in the operational performance of firms of any size along these years, with the only exception of firms with assets greater than USD 41.8 million in the year 2004.

C. INDEBTEDNESS OF POTENTIAL USERS OF A CAPITAL MARKET IN COLOMBIA

The sample of Potential users of Colombian Capital Market confirms the general financial structure situation described formerly, where the main source of funds is the Debt with Domestic Financial Institutions especially in short-term Debt. Suppliers' account as financial source is also a very important choice for small and median size firms.

Figure VI-3 INDEBTEDNESS OF POTENCIAL USERS OF THE CAPITAL MARKET



Conversely, in the Superintendence’s research Medium (MM) and Medium-Large (ML) firms show a similar and stable level of indebtedness. The relation between total liabilities over total assets was softly decreasing: 49% in 1995 and 45% in 2002. Greater firms showed a smaller level of indebtedness passing from 44% in 1995 to 37% in 2002. This decreasing trend obeyed to recession years at the end of the 90’s.

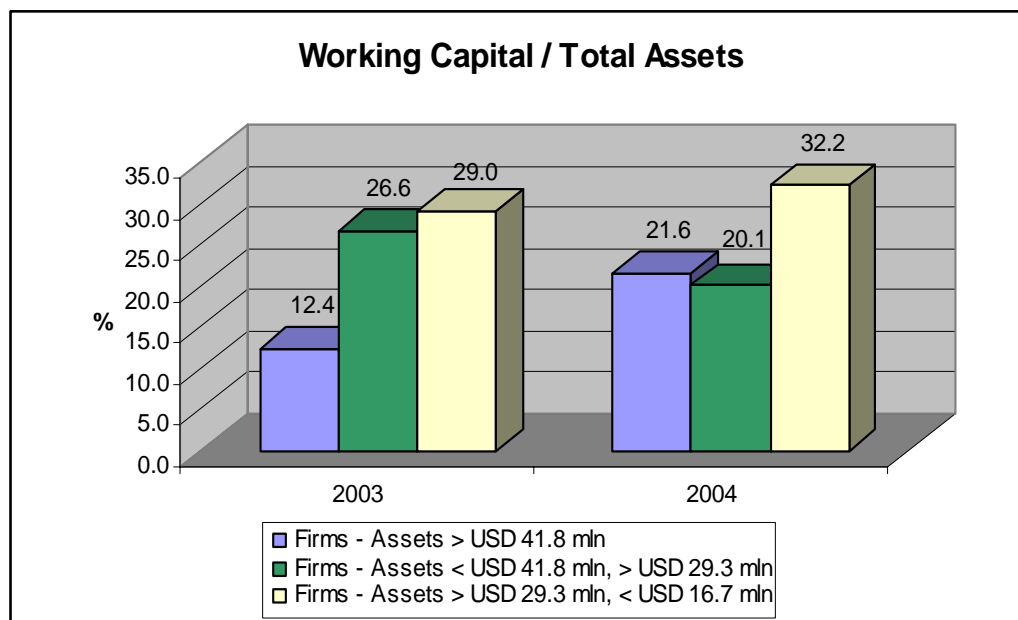
D. AVERAGE WORKING CAPITAL OF POTENTIAL USERS OF A CAPITAL MARKET IN COLOMBIA

International literature¹⁷ shows, with is strong empiric evidence that liquidity of firms is important for investment activities when firms have restrictions about availability of external resources, in these conditions cash flow is a positive feature regarding investment activities. Empiric researches find that this restriction is bigger as the firm size is smaller, given the less access of those to other financial sources.

In the sample of potential users of the capital market, the international empiric evidence is confirmed, showing in average that working capital increased as the firm size decreased in both 2003 and 2004 years.

¹⁷ Fazzari, et al. (1998) Gallego & Loaiza (2000), by Harris, et al. (1994), Jaramillo, et al (1996), Demirguc-Kunt & Levine (1996), Gelos & Werner (1999).

Figure VI-4 WORKING CAPITAL OF POTENCIAL USERS OF THE CAPITAL MARKET



However, in 2004 in average the relation working capital over total assets is a little bit bigger in firms with assets greater to USD 41.8 million. Other size firms show a similar trend in both 2003 and 2004, but bigger size firm show a strong increase in the working capital for 2004 due to the greater operational performance of those in that year.

VII. CONCLUSIONS

Since the original papers from Modigliani–Miller in 1963 in relation to the effect of several source of financing about the firm value, came into view different theories explaining why firms choose a specific Capital Structure Composition. In general terms, there is not a single theory or model, which explains satisfactorily about all issues in this managerial decision-making. Theoretically, Myers developed one of the most well made researches (Myers 1984, Myers and Majluf 1984). Empirically authors like Rajan and Zingales (1995), Bradley Jarrel and Kim (1984) and recently Demircuc–Kunt, Ross Levine (1999) are the most renowned about findings in the Capital Structure of diverse countries.

Colombia as a developing country has several different factors of those from developed countries, which determine the Capital Structure of its firms. According to Demircuc-Kunt and Levine (1999), Colombia is classified as a country financially underdeveloped with a financial structure of bank-based economy. Colombia is also a country with a French civil law tradition, characterized by poor accounting standards, heavily restricted banking systems, and high inflation. The lack of transparency affects the admission of new firms in the Capital Market, reducing their choices of financing.

In order to get empirical evidence of How Colombian firms choose a specific Capital Structure, this paper took into consideration several issues such as: the macroeconomic variables, social aspects, financial and legal systems and local and international researches among others.

An important long-standing issue in corporate finance has been the relative merits of banks and financial markets as providers of capital. A macro-economic version of this question is whether the financial architecture of an economy – i.e. the degree to which its financial system is bank-oriented or market-based – has any impact on economic performance in the real sector. Financial markets and banks perform vital functions in an economy that may include capital formation, facilitation of risk sharing, information production and monitoring.

International evidence¹⁸ suggests that financial architecture (in and of itself) could be a source of value. A lack of fit between the legal and institutional preconditions, and the financial architecture retards economic performance.

¹⁸ Financial Architecture and Economic Performance: International Evidence. Solomon Tadesse. The University of South Carolina, October 2002.

From this paper is possible to conclude that exist a high level of concentration of financing in the short-term: Debt with Domestic Financial Institutions, retained earnings and suppliers. The concentration in short-term debt generates a misusing of growth opportunities and consequently a stagnation or slow development of the whole economy. Investment opportunities with high return usually are long-term projects, but the restriction of use long-term financing from the Capital Market block the investment in those projects. In addition, restrictions accessing to external sources, generate the necessity of use of internal sources (with greater costs) for investment opportunities¹⁹.

Current moment of the economy with high liquidity in the financial sector and low interest rate allows the financing in the short-term; however, to underestimate the risk of change in these specific conditions would generate a high level of financial costs.

As a result, the use of the Capital Market as financial source of long term is still little, showing just a slight improvement from 90's. Surveys about financial structure' issues confirm the following aspects: Large firms are the recurrent ones of the Capital

¹⁹ Fazzari, et al. (1998) Gallego & Loaiza (2000), by Harris, et al. (1994), Jaramillo, et al (1996), Demirguc-Kunt & Levine (1996), Gelos & Werner (1999).

Market and the participation of medium or small firms in this market is almost void.

As regards of reasons not to choose the Capital Market as a financial choice, managers from more that 200 firms answered that the main reasons are:

- About issuing Shares: Prevention to loss control of the company, Lack of demand, unawareness of this instrument (especially small size firms).
- About issuing bonds: Fear to disclose confidential information to the public²⁰ and the perception of not accomplishment the requirements.

Managers from diverse sectors of the economy manifested that some worries about getting into the Capital Market are related with high costs, necessity of disclosure information to the public, unawareness of this alternative of financing and some limitations about demand of their shares or bonds.

Pension Funds, conscious of its main objective is not to encourage the Capital Market but to guarantee the pension of the affiliates; also recognize that the regulation is inefficient about the combination risk and return, arguing that there are some important biases that impede taking risks. In this sense, regulatory entities should make more flexible the calculation of the “minimum profitability” which could

²⁰ Regarding the disclosure of information to the public, reasons like personal security, taxes and security about the competitors are the most mentioned among the managers.

decrease the risk aversion and increase the diversification of portfolios.

Strengthening of the financial systems no matter Bank based or Market based structure, together with legal systems and institutions of the country determine the Corporate Capital Structure and therefore affect their growth. For this reason, it is evident that the steady improvement of these factors would generate better financial alternatives for companies in Colombia, which will influence their growth in the domestic and foreign markets.

VIII. BIBLIOGRAPHY

Ross, Westerfield and Jaffe. *Corporate Finance. Seventh Edition.*

Mark Grinblatt and Sheridan Titman. *Financial Markets and Corporate Strategy. Second Edition. McGraw-Hill – Higher Education.*

Arthur Levitt. *Take on the Street.*

Steward C. Myers. *Journal of Economic Perspectives. Volume 15. Capital Structure. (Spring 2001).*

International Monetary Fund. *Capital Structure and Corporate Performance Across Emerging Markets.*

Michael J. Barclay and Clifford W. Smith, Jr., *The Capital Structure Puzzle: Another Look at the Evidence.* University of Rochester.

Thorsten Beck, Demirguc –Kunt, Ross Levine, *A New Database on Financial Development and Structure.* The World Bank – Development Research Group – Finance, July 1999.

Solomon Tadesse, *Financial Architecture and Economic Performance: International Evidence.* University of South Carolina. October 2002.

International Monetary Fund. *Global Financial Stability Report – Market Developments and Issues.* World Economic and Financial Survey. September 2004.

Standard & Poor's. *Global Stock Market Factbook 2004.* World Development Indicators.

Fedesarrollo – ANIF, Colombia – *Diagnostico de la Estructura de Financiamiento del Sector Real e Identificacion de Obstaculos que han impedido que estas empresas acudan al Mercado de Valores,* March 2004.

Banco de la Republica – Colombia

Superintendencia de Sociedades – Colombia

Superintendencia de Valores – Colombia

APPENDIX I POTENTIAL USERS OF CAPITAL MARKET (2004)

Company Name Assets > COP 100.000 million (USD 43.8 million) - 43 firms -	Total Assets (USD Thous)	Operational Income / Total Assets	Net Operational Income / Total Assets	Net Profit / Total Assets	ST Debt / Total Assets	Suppliers / Total Assets	Reserves/ Total Assets	Total Debt / Total Assets	Total Liabilities / Total Assets	% Total Debt / Total Liabilities	Working Capital / Total Assets	Interest Coverage * times (Total Debt / Operational Profit)
1 CARULLA VIVERO S A	436.919	160.73	3.79	2.10	19.00	26.41	0.87	25.68	65.41	39.26	20.20	6.77
2 TRANSGAS DE OCCIDENTE S.A.	316.090	23.27	16.70	6.76	8.93	0.00	7.11	52.01	62.89	82.69	33.23	3.11
3 COMPADIA COLOMBIANA DE CERAMICAS S A	228.181	102.93	12.95	5.08	7.79	5.88	4.86	26.90	48.87	55.05	4.28	2.08
4 ORGANIZACION CORONA S.A	202.115	12.28	8.69	9.08	0.00	0.00	7.88	0.00	1.18	0.31	2.89	0.00
5 CASA EDITORIAL EL TIEMPO S.A.	189.038	63.70	9.62	-11.48	4.05	3.54	8.38	18.27	37.00	49.38	42.46	1.90
6 TECNOQUIMICAS S. A.	186.389	107.15	5.57	1.70	6.51	17.76	15.76	23.59	45.56	51.77	60.98	4.24
7 GENERAL DE EQUIPOS DE COLOMBIA S A	169.161	109.26	13.30	5.50	6.43	48.02	5.31	14.71	75.25	19.55	18.10	1.11
8 ALPINA PRODUCTOS ALIMENTICIOS S A	168.705	132.85	5.56	1.68	25.37	12.13	4.28	33.94	52.51	64.64	58.58	6.10
9 BELSTAR S.A.	167.284	80.31	7.30	1.96	34.20	24.39	1.09	34.20	71.32	47.96	25.71	4.69
10 CARVAJAL INTERNACIONAL S. A.	163.665	24.37	23.11	9.85	0.81	0.00	20.92	0.81	25.74	3.17	33.05	0.04
11 REMBRANDT S.A.	158.035	12.72	-4.65	0.01	98.74	0.01	0.00	98.74	98.77	99.97	-1.34	-21.24
12 PRODUCTORA TABACALERA DE COLOMBIA S A	155.374	83.07	7.99	2.53	43.16	11.16	3.45	47.81	67.82	70.49	67.14	5.98
13 ACERIAS DE COLOMBIA S A ACESCO	128.618	99.31	4.13	4.93	38.18	2.59	3.00	49.15	55.99	87.78	44.82	11.90
14 COMPADIA PINTUCO S A	114.068	121.04	20.28	12.67	2.49	8.16	7.64	2.50	27.69	9.02	40.74	0.12
15 CALES Y CEMENTOS DE TOLUVEJO S. A.	111.185	38.55	9.00	5.13	2.69	0.75	6.25	6.86	20.11	34.12	21.81	0.76
16 OMIMEX DE COLOMBIA LTD	108.803	83.76	50.40	29.23	0.00	2.62	8.17	0.23	50.21	0.45	13.43	0.00
17 CARCAFE LTDA C.I.	100.781	166.99	-9.45	-4.51	68.89	0.53	2.58	68.89	91.73	75.10	-4.70	-7.29
18 CINE COLOMBIA S A	86.763	38.67	9.81	8.90	13.10	0.91	12.52	13.10	24.93	52.57	73.79	1.34
19 SUCROMILES S.A.	86.487	80.93	8.60	4.35	6.57	4.60	19.20	6.57	15.61	42.06	56.36	0.76
20 MOLINOS ROA S A	82.930	201.01	3.94	2.16	20.92	6.88	17.45	20.94	33.11	63.24	-37.67	5.32
21 FAMILIA DEL PACIFICO LIMITADA	80.371	66.78	9.42	8.40	1.62	9.08	25.36	1.62	13.27	12.21	1.22	0.17
22 LAFAYETTE S.A.	78.246	65.01	9.58	3.99	0.21	12.76	0.40	0.21	18.06	1.14	41.92	0.02
23 LABORATORIOS GENERICOS FARMACEUTICOS S A	74.266	72.47	10.25	7.12	18.42	2.33	21.12	23.24	44.03	52.78	2.88	2.27
24 QUALA S.A.	66.035	198.23	22.34	5.57	0.86	18.58	4.26	11.12	44.82	24.82	19.43	0.50
25 ANHIDRIDOS Y DERIVADOS DE COLOMBIA S A	65.722	133.13	13.61	9.67	6.84	25.24	11.77	6.88	45.02	15.27	27.17	0.51
26 DETERGENTES S A	65.080	142.63	16.70	9.97	24.55	8.46	0.00	24.55	43.59	56.31	31.29	1.47
27 SIDERURGICA DEL NORTE-MARCO Y ELIECER SREDNI SIDUNOF	61.176	137.79	10.40	3.37	60.07	1.91	8.11	63.87	70.44	90.67	-21.45	6.14
28 OXIGENOS DE COLOMBIA LTDA.	57.759	61.50	13.69	13.19	0.00	1.26	5.05	0.00	19.95	0.00	22.64	0.00
29 LAMITECH S A	57.532	59.08	2.52	1.27	10.75	10.33	3.56	36.12	50.80	71.10	6.77	14.33
30 CORPORACION DE ACERO CORPACERO MARCO Y ELIECER SR	56.047	122.22	4.31	2.60	43.86	1.84	0.00	43.86	59.65	73.53	13.16	10.18
31 DIDA COLOMBIANA S.A. DIDACOL S.A.	51.659	136.29	6.81	5.06	33.13	8.87	4.64	33.13	63.48	52.19	5.86	4.86
32 TERPEL SUR S A	50.262	144.08	7.16	21.00	1.35	0.00	17.17	1.35	3.98	33.94	9.90	0.19
33 PRODUCTOS ALIMENTICIOS DORIA S A	50.143	102.77	21.13	10.61	6.84	0.92	21.10	6.84	17.46	39.17	20.72	0.32
34 INDUSTRIAS METALURGICAS UNIDAS S A	50.029	102.74	7.77	3.17	16.14	4.46	11.13	30.61	44.10	69.42	22.76	3.94
35 CONSTRUCTORA BOLIVAR BOGOTA S A	49.870	57.06	0.20	4.04	15.54	7.75	1.25	38.01	59.48	63.91	53.63	188.32
36 GENFAR S.A.	49.603	63.04	17.84	16.54	5.86	8.35	21.52	10.86	23.10	47.02	12.42	0.61
37 CACHARRERIA MUNDIAL S A	49.220	158.82	-0.26	5.45	1.18	14.68	5.52	1.23	22.54	5.44	9.33	-4.72
38 MINEROS DE ANTIOQUIA S A	48.440	58.32	21.22	21.66	7.16	0.96	15.67	7.16	18.98	37.71	13.14	0.34
39 PROQUINAL S A	47.309	131.22	19.75	11.33	12.43	12.54	10.39	12.43	45.54	27.29	-12.12	0.63
40 PRO NOVA LTDA	46.170	183.61	8.71	5.31	0.27	10.28	21.30	0.27	49.43	0.55	8.89	0.03
41 C I YUMBO S A	44.926	242.37	6.85	0.00	24.15	22.02	0.00	53.50	82.67	64.72	11.94	7.81
42 AVENTIS PHARMA S A	43.795	110.72	23.54	11.93	0.00	5.09	5.06	0.00	18.31	0.01	31.74	0.00
43 SOCIEDAD EXPORTADORA DE CAFE DE LAS COOPERATIVAS D	42.368	212.83	3.01	-3.71	58.15	5.55	2.42	58.15	65.25	89.12	20.17	19.34

Company Name Assets < COP 100.000 million > 70.000 million (Assets < USD 41.8 mln, > USD 29.3 mln) - 22 firms -	Total Assets (USD Thous)	Operational Income / Total Assets	Net Operational Income / Total Assets	Net Profit / Total Assets	ST Debt / Total Assets	Suppliers / Total Assets	Reserves/ Total Assets	Total Debt / Total Assets	Total Liabilities / Total Assets	% Total Debt / Total Liabilities	Working Capital / Total Assets	Interest Coverage * times (Total Debt / Operational Profit)
1 INDUSTRIA COLOMBIANA DE MOTOCICLETAS YAMAHA S A	41,665	192.38	27.23	15.02	17.85	8.46	13.78	18.04	41.87	43.10	17.79	0.66
2 URBANIZADORA MARIN VALENCIA S.A.	39,022	72.69	22.68	21.01	2.14	2.21	2.73	15.59	52.48	29.72	20.45	0.69
3 LABORATORIOS LA SANTE S.A.	38,045	78.27	19.97	5.24	18.13	9.08	2.59	32.36	52.34	61.83	7.72	1.62
4 EMPAQUES INDUSTRIALES COLOMBIANOS S.A.	37,900	73.51	6.73	0.89	28.65	5.81	4.22	34.84	46.45	75.01	26.93	5.18
5 FLEXO SPRING S. A.	37,824	161.45	11.95	8.79	6.47	15.79	0.63	8.06	46.44	17.34	24.85	0.67
6 EURO CERAMICA S.A.	37,336	57.11	4.39	1.09	18.11	5.24	13.01	25.75	41.89	61.46	10.92	5.86
7 MOLINO FLORHUILA S A	36,794	281.41	7.97	1.18	16.08	7.05	14.79	16.08	47.14	34.10	25.94	2.02
8 REPRESENTACIONES CONTINENTAL S.A.	36,021	135.67	16.57	8.93	0.86	44.41	5.41	0.86	61.75	1.38	39.73	0.05
9 SUMINISTROS DE COLOMBIA S.A.	35,586	106.01	12.74	5.92	13.36	7.36	2.68	33.98	52.80	64.35	12.16	2.67
10 CASA TORO S A	35,535	96.70	6.23	3.80	17.23	1.76	12.88	20.94	31.94	65.58	13.35	3.36
11 COMERCIAL INTERNACIONAL DE EQUIPOS Y MAQUINARIA S A	34,757	138.09	9.96	5.85	21.94	21.28	8.95	22.19	56.94	38.97	5.81	2.23
12 EMPACOR S.A.	34,429	92.95	8.07	3.22	1.23	6.94	1.41	43.17	74.38	58.05	15.91	5.35
13 LABORATORIO FRANCO COLOMBIANO LAFRANCOL S.A	33,889	110.08	12.02	1.90	24.28	13.68	5.20	37.85	62.68	60.39	55.15	3.15
14 EDUARDO LONDONO E HIJOS SUCESORES S A	33,410	124.41	16.34	11.57	5.08	5.85	1.25	27.95	42.57	65.65	21.14	1.71
15 TORRECAFE AGUILA ROJA & CIA. S.A.	33,113	99.93	18.47	8.23	0.00	6.41	22.99	0.00	12.41	0.00	25.27	0.00
16 PRODUCTOS RAMO S A	33,106	128.27	12.46	5.72	0.72	5.28	12.80	0.72	26.94	2.69	-16.11	0.06
17 YARA COLOMBIA LIMITADA.	33,003	218.27	15.22	4.35	28.42	26.65	2.08	28.42	62.71	45.31	2.19	1.87
18 FOTO DEL ORIENTE LTDA.	32,081	89.98	5.38	7.11	19.30	14.52	0.27	19.30	40.81	47.30	11.83	3.59
19 EDITORIAL NORMA S.A	31,138	84.96	11.12	7.78	7.37	25.52	0.68	7.37	68.58	10.75	37.49	0.66
20 INDUSTRIA DE EJES Y TRANSMISIONES S.A.	31,092	142.71	10.92	13.32	4.47	23.91	0.00	5.37	43.97	12.22	58.36	0.49
21 CABOT COLOMBIANA S.A.	31,032	112.75	20.81	9.90	3.21	6.15	3.65	3.21	38.73	8.29	-12.61	0.15
22 PROCESADORA DE ARROZ LIMITADA	30,641	215.19	9.40	0.76	40.60	8.70	1.16	48.73	67.29	72.41	36.97	5.19

Company Name Assets < COP 40.000 million > 70.000 million (Assets > USD 29.3 mln, < USD 16.7 mln) - 22 firms -	Total Assets (USD Thous)	Operational Income / Total Assets	Net Operational Income / Total Assets	Net Profit / Total Assets	ST Debt / Total Assets	Suppliers / Total Assets	Reserves/ Total Assets	Total Debt / Total Assets	Total Liabilities / Total Assets	% Total Debt / Total Liabilities	Working Capital / Total Assets	Interest Coverage * times (Total Debt / Operational Profit)
1 PRODUCTORA DE CABLES LTDA C I	27,904	145.29	12.58	2.14	47.19	10.18	0.22	47.19	67.29	70.12	12.95	3.75
2 INDUSTRIAS ESTRA S A	27,760	97.00	6.92	4.47	15.66	6.13	8.87	17.01	27.37	62.15	0.13	2.46
3 H A BICICLETAS S.A.	27,585	108.95	18.70	10.78	7.26	0.00	37.75	7.26	21.40	33.93	31.66	0.39
4 PRIMATELA S.A.	27,414	87.41	11.96	18.27	29.30	5.58	19.23	43.83	55.05	79.62	28.37	3.66
5 RAYOVAC - VARTA S.A.	27,055	127.57	4.47	-5.34	0.04	8.25	23.54	0.04	21.68	0.20	25.20	0.01
6 CERAMICA ITALIA S.A	26,892	111.94	20.61	15.49	0.01	7.71	2.24	16.53	32.62	50.67	22.30	0.80
7 GRASAS VEGETALES S A	26,774	147.98	11.87	7.40	0.00	0.01	13.02	0.00	1.70	0.00	77.54	0.00
8 UNION DE CABLEOPERADORES DEL CENTRO CABLECENTRO S	24,027	157.44	4.90	1.33	6.74	32.38	0.09	15.67	71.27	21.99	19.98	3.20
9 COMPANIA INDUSTRIAL DE PRODUCTOS AGROPECUARIOS CIP,	22,811	163.83	4.47	1.35	20.06	23.67	3.60	30.79	61.04	50.45	83.46	6.88
10 FARMASANITAS LTDA	22,779	218.66	7.97	5.78	16.77	36.59	0.00	30.68	87.89	34.91	57.20	3.85
11 COATS CADENA S A	22,520	135.24	21.37	13.20	0.00	8.36	8.56	0.00	29.89	0.00	15.29	0.00
12 NUBIOLA COLOMBIA PIGMENTOS S.A.	22,132	116.48	13.23	5.83	2.52	8.07	36.25	2.52	18.66	13.49	36.08	0.19
13 ITALCOL DE OCCIDENTE LIMITADA	20,141	363.50	8.08	4.84	14.78	12.18	16.42	14.78	59.98	24.65	37.99	1.83
14 ELECTROMANUFACTURAS S A	19,772	93.47	18.37	9.08	6.00	1.67	11.48	6.00	18.84	31.85	29.87	0.33
15 ESTUDIO DE MODA S.A.	19,327	129.12	12.16	1.44	53.08	7.26	15.70	56.03	75.59	74.13	48.88	4.61
16 GRASYPLAST S.A.	19,232	66.15	19.45	17.12	0.00	4.16	10.52	0.00	15.96	0.01	21.83	0.00
17 METROKIA S.A	18,544	308.30	41.83	14.76	20.60	0.79	12.97	25.35	49.18	51.54	-1.32	0.61