COLOMBIA'S PUBLIC FINANCE IN THE 1990s: A DECADE OF REFORMS, FISCAL IMBALANCE, AND DEBT

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I. Introduction

At the beginning of the nineties, a diversity of economic reforms were designed and implemented to reduce the size of the country's public sector with the objective of making it more efficient. Despite the reforms, ten years later, the Colombian public sector is 80% larger, and the financial sustainability of the Government presents serious problems. In 1999, Colombia's chief indicator of economic growth (GDP) was –4,3% and the unemployment rate reached 20%. Such an evident dwindling of the economic activity has been accompanied with imbalances in the macroeconomic accounts, particularly in the public sector.

This paper provides a general description of Colombia's economic trends in the last few years, closely examining the factors which have undermined the country's public finances. Section II contains an overview of the fiscal imbalances registered as of the 1960s, and their relationship with both the real business cycle and the tax policy. Section III includes a synthesis of the main economic reforms introduced in the early nineties, and compares the size of the Colombian public sector with those of several neighboring countries. Section IV describes the key issues involved in the country's recent fiscal imbalance and, Section V, analyses the dynamics of the public debt and the question of its sustainability. The closing section outlines the policies for economic adjustment and reactivation currently debated in Colombia.

II. Historical overview

1. Fiscal imbalance trends

The Colombian public sector has registered two major fiscal imbalances since the 1960s. The first one occurred by the beginning of the 1980s, when both the central government and the decentralized agencies recorded large cash deficits. The Non Financial Public Sector (NFPS) deficit, which is the most common measure of the Colombian public sector imbalance, reached 7,6% of the GDP both in 1982 and in 1983. Of this deficit, 50% was explained by the financial operations of the central government. Three years later, the

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NFPS deficit was adjusted thanks to an effective economic program. Therefore, by 1986, the public deficit was only 1,2% of the GDP.

The second major fiscal imbalance began by the mid 1990s and attained its critical point in 1999. By this year, the consolidated fiscal accounts reached a cash deficit of 4,3% of the GDP, due entirely to the financial transactions of the central government[1]. Even though the size of the last deficit is smaller than the first one, its adjustment could be more complicated because it depends completely from the central government´s operations. In fact, the central government is currently facing serious obstacles to make successful fiscal adjustments, because of the narrow margins of its expenditure policy as well as the modest revenue increases gathered from several tax reforms.

Apart from these two fiscal crisis, fiscal data indicates that from the sixties, the macroeconomic management of the Colombian public finances had not posed problems. For instance, in the sixties, the government fiscal deficit was, in average, 0,6% of the GDP, while the consolidated public deficit was 1,8%. At such time, the government´s fiscal results stemmed from a simple fiscal framework: on the revenue side, income and imports were heavily taxed; on the expenditure side, investment was mostly geared towards building infrastructure. The budged destined to public payrolls was negligible.

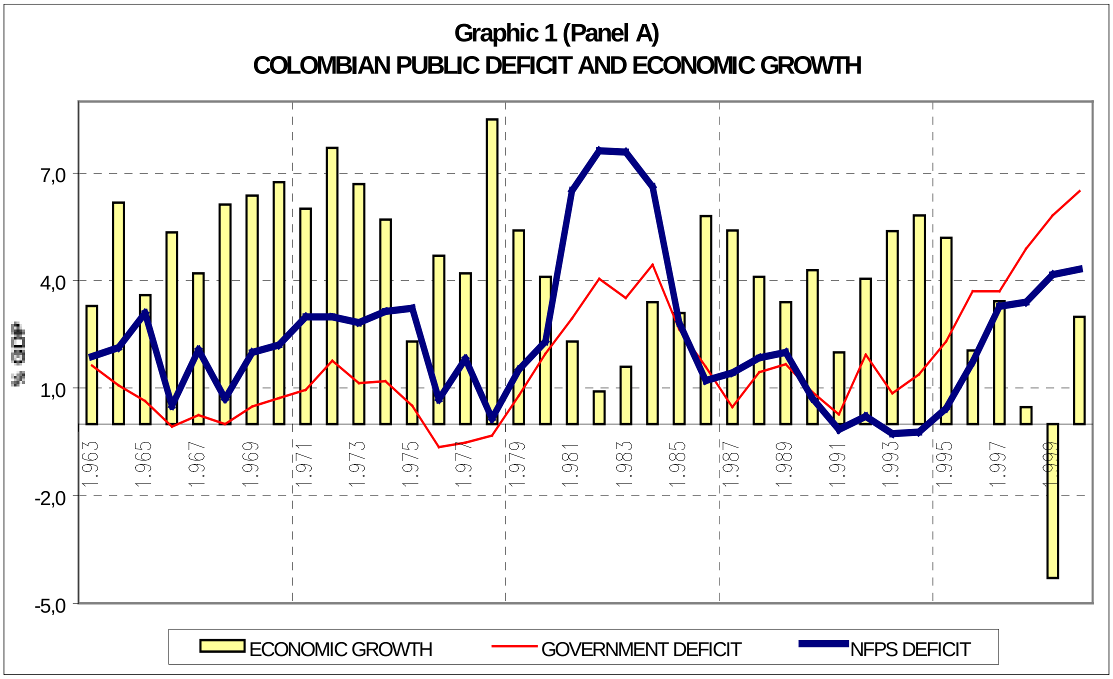
In the 1970s, the public deficit followed very similar trends. The government´s fiscal deficit was, in average, 0,7% of the GDP, and the overall public deficit was around 2,2%. Although, throughout the seventies, the government´s spending framework remained the same, by the mid 1970s, significant changes were introduced to the the taxation scheme: income tax rates were increased, and so was the tax imposed on the capital gains of corporations. These reforms as well as increases in the international coffee prices, registered as of 1976, rendered additional resources to the public treasury. Therefore, between 1976 and 1978, the government attained a cash surplus of 0,5% of the GDP.

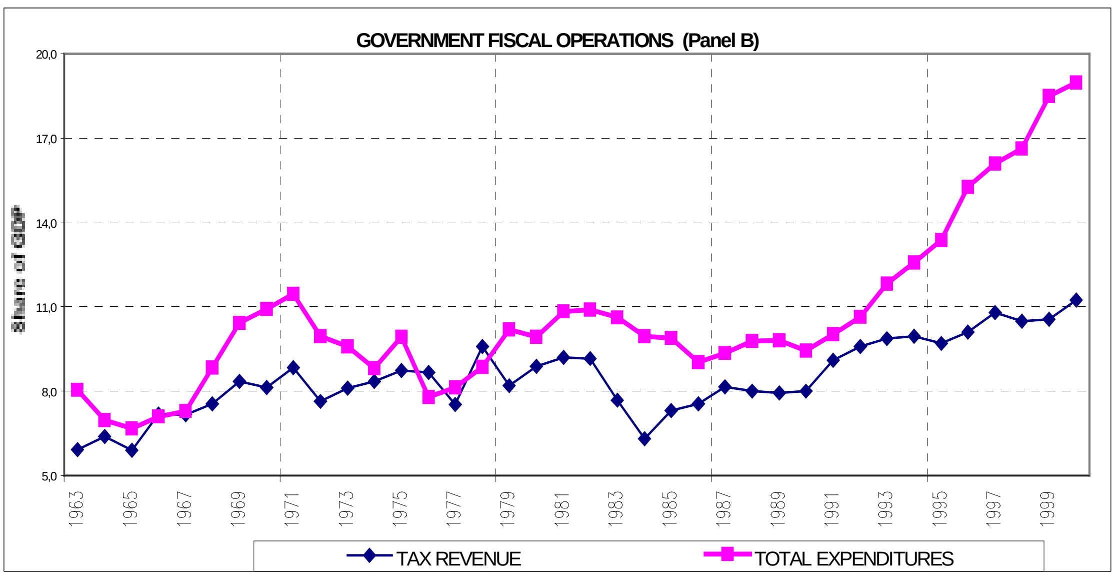
There is no question that the composition of the public deficit began to change in the 1990s. As it will be shown later on, both the introduction of major economic reforms and the new rules imposed by the 1991 Political Constitution had a strong impact in the shape of public finances. Until 1990, the central government´s deficit had been always below the consolidate one. For instance, in the sixties and seventies, the government´s deficit was, in average, one third of the consolidated fiscal result. By the 1980s, such participation had increased to two thirds. By 1990, the size of the government´s fiscal imbalance was larger than the total public deficit. This implies that throughout this period, the remaining public agencies, reached cash surpluses in their financial operations. This was particularly true in the oil and social security sectors.

2. Fiscal balance and the real business cycle

The panel A of Graphic 1 shows the aforementioned fiscal trends as well as the close relationship between the public fiscal imbalance and the real business cycle. Times of crisis for the public finances go hand in hand with periods of severe economic recession.

[1] Such a result is in cash basis. However, if we add another important accrue basis operations, which are important in Colombia in the last few years, the public fiscal deficit reaches 6,3% of the GDP in 1999.





	AVERAGE (Share of GDP)			
	1963 - 70	1971 - 80	1981 - 90	1991 - 00
GOVERNMENT DEFICIT	0,59	0,68	2,37	3,14
NFPS DEFICIT	1,83	2,17	3,84	1,69
ECONOMIC GROWTH	5,23	5,53	3,43	2,71
GOVERN. TAX REVENUE	7,08	8,45	7,93	10,14
GOVERN. EXPENDITURES	8,29	9,47	9,96	14,39

Source: Banco de la República

Between 1980 and 1982, the economic growth rate fell from 4,1% to 0,9%, while the public deficit grew from 2,3% to 7,6% of the GDP. By the end of the nineties, the situation was very similar. Between 1998 and 1999, the economic growth rate decreased from 0,5% to –4,3%, while the consolidate public deficit increased from 3,4% to 4,2% of the GDP (between 1997 and 1999, the government´s deficit grew from 3,7% to 6,5% of the GDP). Consequently, graphic 1 illustrates that economic recovery and adjustments to the public finances are concomitant. This was clearly the case between 1984 and 1986, when the economy´s annual growth rate raised above 5%, and the fiscal deficit decreased to moderate levels (1,2% of the GDP). Current fiscal policy aims at rendering similar results for the years 2000 and 2001.

The inverse relationship between fiscal deficit and economic growth can be explained by the *fiscal automatic stabilizers* theory. Nonetheless, special attention must be exercised when interpreting fiscal variables. The theory defines fiscal automatic stabilizers as a group of public revenues and expenditures associated to the real business cycle. These stabilizers "smooth" the size of economic cycles by stimulating economic activity in periods of recession, or by decelarating it in times of high growth. Fiscal policy may foster or hinder the use of automatic stabilizers. However, the level of economic openness as well as the composition of the public revenues and expenditures determine the effectiveness of these self-regulatory tools.

The average size of automatic stabilizers in the European Community countries is 0,5. For developed, yet more closed, economies such as the United States and Japan, the average size is near 0,3. In Latin American countries, the size of automatic stabilizers ranges from 0,25 in Brazil to 0,10 in Ecuador, Venezuela, and Mexico. In Argentina, the automatic stabilizer is 0,17, while in Chile and Colombia, is 0,19 (Martner R, 2000). A contraction of 2% in the gap of the economic growth rate, with an automatic stabilizer of 0,19, will lead to the increase of the fiscal deficit in 0,38% of the GDP[2].

Panels A and B of Graphic 1 show the expected relationships between economic growth, the government´s tax revenues, and the fiscal deficit for Colombia. It is clear that as a consequence of the economic crises of the early eighties, the government´s revenues decreased from an average level of 9% of the GDP (between 1978 and 1981) to 7% (between 1982 and 1983). Not surprisingly, the government´s fiscal deficit registered an increase of 4% of the GDP between 1979 and 1982. During the second period of crisis, by the end of nineties, the relationship between the government´s tax revenues and the dynamics of economic growth is less clear, probably because major tax reforms were introduced to compensate for the loss of fiscal revenues.

3. Fiscal policy

For the past twenty years, the Colombian government has resorted to an increasingly aggressive set of fiscal reforms, as its discretional mechanism to foster social and economic

[2] In many countries, public expenditure and the real business cycle are not directly related. In such cases, the marginal sensibility of the deficit to changes in the economic activity (the automatic stabilizer), could be estimated by the product between the tax revenue income elasticity and the tax revenue rate.

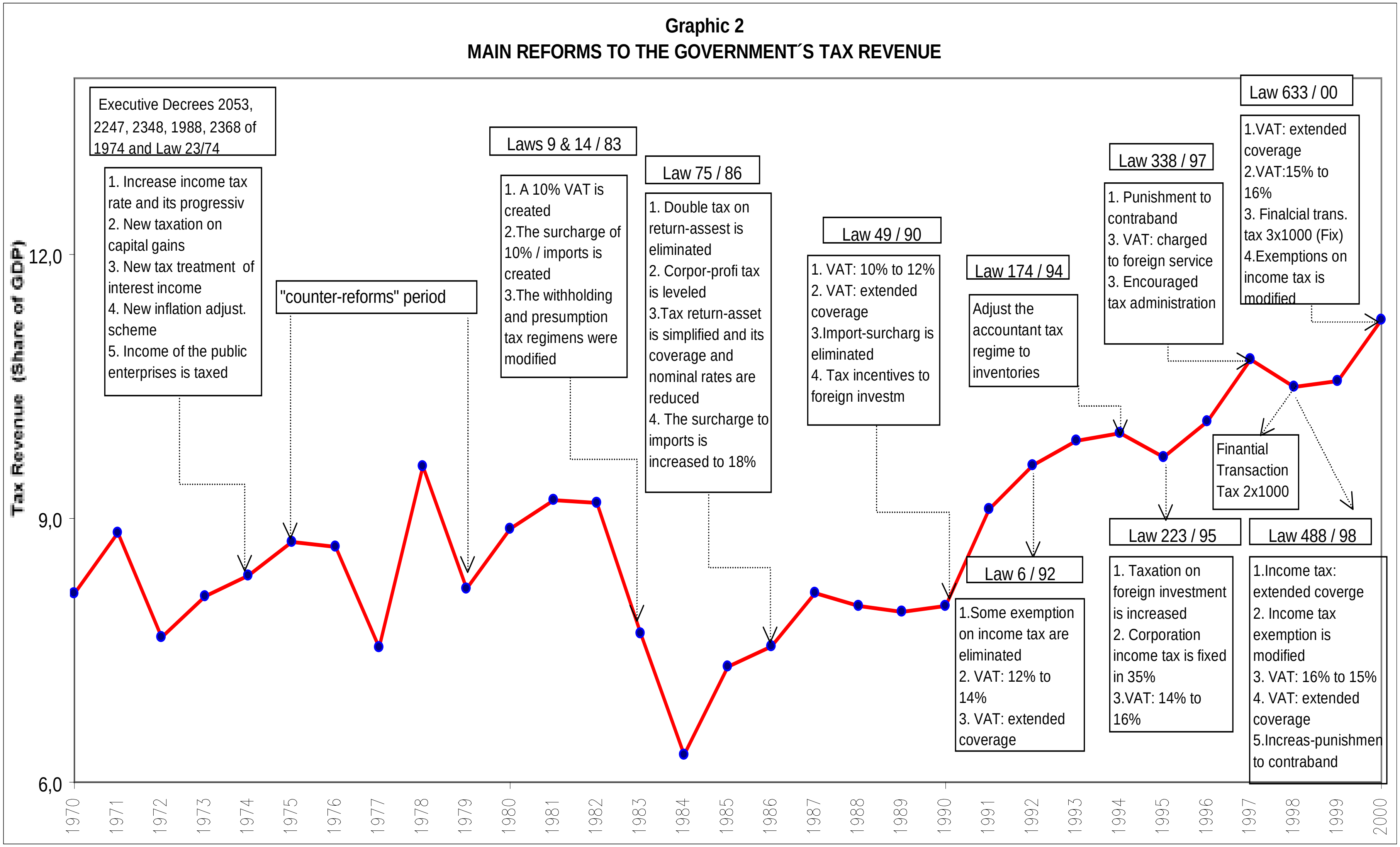
welfare. From a tax policy standpoint, the most important reforms are listed below (some of them are represented in Graphic 2).

- In the 1960s, the Colombian tax framework was simple. In agreement with influential advisers, policymakers emphasized the role of taxation as an automatic stabilizer[3]. In the seventies, less emphasis was made on the stabilizing effects of fiscal policy; and more, on the inequities and distortions that result from an unindexed income tax.
- The major reforms implemented by the mid seventies increased the income tax rate and its progressivity; incorporated into the tax base the income of public enterprises; extended taxation to capital gains (on assets held for more than two years); rationalized the tax treatment of interest incomes; and designed an income inflation adjustment scheme. However, some of these measures were reversed after 1975 in the so-called period of "counter-reforms."

- In the eighties, fiscal policies began to have an impact on many areas. First of all, by 1983, the general sales tax was transformed into a value added tax (VAT), which was applied to a diversity of retailed goods and services. Over the years, the VAT became a leading source of income for the Colombian government, therefore its rates and coverage were subject of frequent changes. Currently, VAT revenues amount to nearly 40% of the government´s total tax revenues. Next, by the mid eighties, policymakers began to favor fiscal decentralization as well as the strengthening of regional and local budgets through transfers made from the central government. Last, in 1986, a major income tax reform took place to stimulate savings and investment as well as to recover the original neutrality and simplicity of the country´s tax system. This reform ended double taxation on return assets, reduced personal income tax rates, leveled the rates on corporation profits, and simplified tax administration mechanisms in general.

- During the nineties, Colombia endured an unprecedented number of tax reforms which were not based on a single set of guiding principles. Some of these reforms were directly associated to structural reforms implemented in other economic fields.[4] Some other reforms were simply designed to help bridge the increasing gap between the government´s expenditures and revenues. Between 1990 and 2000, there were, at least, eight national tax reforms, including an Executive Decree which established a temporary tax on financial transactions. Graphic 2 illustrates how the common feature of all of these reforms was the constant changes to the VAT´s coverage and rates.

[3] Fiscal survey of Colombia 1965 (Taylor Report) and Musgrave and Gilles Report, 1971.
[4] such as the opening-up of the economy, the social security system, or the fiscal decentralization



Graphic 2
MAIN REFORMS TO THE GOVERNMENT´S TAX REVENUE
Tax Revenue (Share of GDP)
12,0
9,0
6,0
Executive Decrees 2053, 2247, 2348, 1988, 2368 of 1974 and Law 23/74
1. Increase income tax rate and its progressiv
2. New taxation on capital gains
3. New tax treatment of interest income
4. New inflation adjust. scheme
5. Income of the public enterprises is taxed
"counter-reforms" period
Laws 9 & 14 / 83
1. A 10% VAT is created
2.The surcharge of 10% / imports is created
3.The withholding and presumption tax regimens were modified
Law 75 / 86
1. Double tax on return-assest is eliminated
2. Corpor-profi tax is leveled
3.Tax return-asset is simplified and its coverage and nominal rates are reduced
4. The surcharge to imports is increased to 18%
Law 49 / 90
1. VAT: 10% to 12%
2. VAT: extended coverage
3.Import-surcharg is eliminated
4. Tax incentives to foreign investm
Law 174 / 94
Adjust the accountant tax regime to inventories
Law 338 / 97
1. Punishment to contraband
3. VAT: charged to foreign service
3. Encouraged tax administration
Law 633 / 00
1.VAT: extended coverage
2.VAT:15% to 16%
3. Finalcial trans. tax 3x1000 (Fix)
4.Exemptions on income tax is modified
Finantial Transaction Tax 2x1000
Law 6 / 92
1.Some exemption on income tax are eliminated
2. VAT: 12% to 14%
3. VAT: extended coverage
Law 223 / 95
1. Taxation on foreign investment is increased
2. Corporation income tax is fixed in 35%
3.VAT: 14% to 16%
Law 488 / 98
1.Income tax: extended coverge
2. Income tax exemption is modified
3. VAT: 16% to 15%
4. VAT: extended coverage
5.Increas-punishmen to contraband
1970
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III. Structural reforms and the size of the public sector in the 1990s

In 1991, the new Political Constitution prompted fiscal decentralization as well as a variety of financial, exchange, and social security reforms akin to the country's emerging free market policies (details in Hommes, Montenegro and Roda, 1994). A brief description of the main policies introduced in Colombia in the early nineties maps out the behavior of the country's public sector in the last ten years.

1. The Reforms

A. Trade reform. In Colombia, the opening up process began in 1990 with a trade reform. Basically, prior-license requirements to imports were eliminated; the number of tariffs and their levels were reduced; trade operations steps were simplified; and new rules for the establishment of international trade agreements were formulated. These changes were backed up with several institutional adjustments such as the creation of : (a) a Foreign Trade Ministry; (b) a financial institution (*Bancoldex*); (c) an agency to control illegitimate trade practices and supply information about international prices (*Incomex*); (d) and an entity to promote exporting (*Proexport*).

The average nominal tariff on imports went down from 49,4% at the beginning of 1990, to 11,7% by the end of 1991. Nonetheless, despite the relative lower prices of imports, they increased only gradually because of the uncertainties caused by the new policies. Likewise, the fiscal effects of the lower tariffs were negligible.

B. Labor and social security reforms. In general, the new labor policies were designed to make the labor market more flexible. Until 1990, labor regulations in Colombia had restricted the flexibility of the labor market, imposing additional costs to employers, and generating uncertainly among them. The reforms sought to eliminate these obstacles. They made possible the hiring of workers with contracts of less than one year, and their annual salary-based benefits (locally known as *cesantías*) were no longer retroactive.

Likewise, there were fundamental changes in the social security system. Essentially, law 100 of 1993 replaced the Government's social security monopoly for a dual system. The objective was to extend coverage and to secure pension payments to all current and future retired workers. Nowadays, such a system operates either through individual capitalization into private funds, or through deposits made into public agencies – which continue to function as before the reform. The fees charged to both employers and workers were raised. Moreover, this reform led many public entities to straighten up their accounts –which had important fiscal effects. Section III provides some additional information on this matter.

C. Financial system reform. Colombia's Political Constitution of 1991 established an autonomous Central Bank responsible for maintaining the purchasing power of the currency (Law 31 of 1992). To meet this objective, the board of the Central Bank draws and implements the country's monetary, exchange rate and financial policies. The main fiscal effect of the new Central Bank is its inability to make direct loans to the Government (the Central Bank cannot purchase public debt instruments in the primary market). The Central Bank can offer direct credits to the Government only if all of the members of its board of directors approve unanimously such a decision. Nevertheless, this has never been the case ever since the reform took place in 1992. In addition, the law requires that as of January 1999, all of the Central Bank's open market operations must be carried out exclusively with government securities negotiated in the secondary market.

The financial reforms also ended the Central Bank's subsidized loans to specific sectors, and drew the legal and economic conditions under which commercial banks could become multibank institutions rather than specialized banks (Law 35 of 1993). Likewise, the new regulations eliminated obligatory investments for the banking system and decreased the banks' required reserves in the Central Bank. Last but not least, the financial system was opened to foreign investment.

D. Exchange reform. Under the new regulations, the central bank no longer kept the monopoly to trade with foreign currencies. The market forces were left to determine the exchange rate as well as the allocation of the foreign trade resources. The exchange control mechanisms were modified and the financial institutions became more involved. Anybody could hold foreign currencies or assets, yet in limited quantities (Law 9 of 1991). With the introduction of these set of reforms, the Law 444 of 1967 on exchange transactions, which had been enforced for the last twenty five years, was revoked.

Between 1991 and 1994, there was a transition period towards a system of exchange rate bands, which was finally established in February of 1994. Throughout these years, the exchange authorities continued to announce on a daily basis the "official exchange rates" according to the crawling peg system[5]. However, the bands system was dismantled in September of 1999, partly as a result of the speculative attacks associated to the high vulnerability of the LAC capital markets to the Asian crisis. Subsequently, a free floating exchange system was adopted.

2. The size of the public sector

In clear opposition to the goals established by Colombian police makers, and unlike many neighboring countries where important reforms were also implemented, the size of the Colombian public sector increased considerably throughout the 1990s. The non-financial levels of the Colombian public sector comprise the Central Government, the social security system, a variety of decentralized entities, a number of enterprises, and the provincial and local governments. As Table 1 illustrates, the total public expenditure between 1990 and 2000, went up from 20,4% to 37,7% of the GDP. This means that the size of the state almost doubled in those years. In fact, growth was registered for all levels of government, except the enterprises.

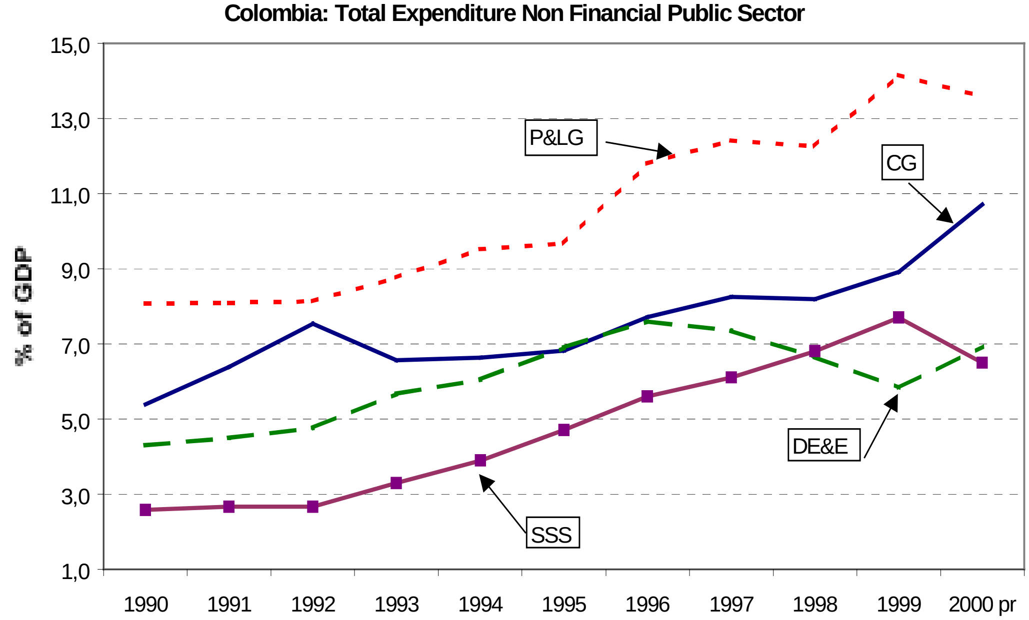
[5] See details on exchange rate policy throughout this transition period, in Villar and Rincon (2000)

Table 1
Colombia: Non Financial Public Sector
Total Expenditure
(Shares of GDP)

Year	Central Goverment (CG)	Social Security System (SSS)	Decentra. Entities and Enterprises (DE&E)	Provincial and Local Goverment (P&LG)	Total
1990	5,4	2,6	4,3	8,1	20,4
1991	6,4	2,7	4,5	8,1	21,6
1992	7,5	2,7	4,8	8,1	23,1
1993	6,6	3,3	5,7	8,8	24,3
1994	6,6	3,9	6,0	9,5	26,1
1995	6,8	4,7	6,9	9,7	28,1
1996	7,7	5,6	7,6	11,8	32,7
1997	8,2	6,1	7,3	12,4	34,1
1998	8,2	6,8	6,7	12,3	33,9
1999	8,9	7,7	5,8	14,2	36,6
2000 pr	10,7	6,5	6,9	13,6	37,7

Source: DNP, CONFIS and BR
Pr: preliminary

Graphic 3
Colombia: Total Expenditure Non Financial Public Sector



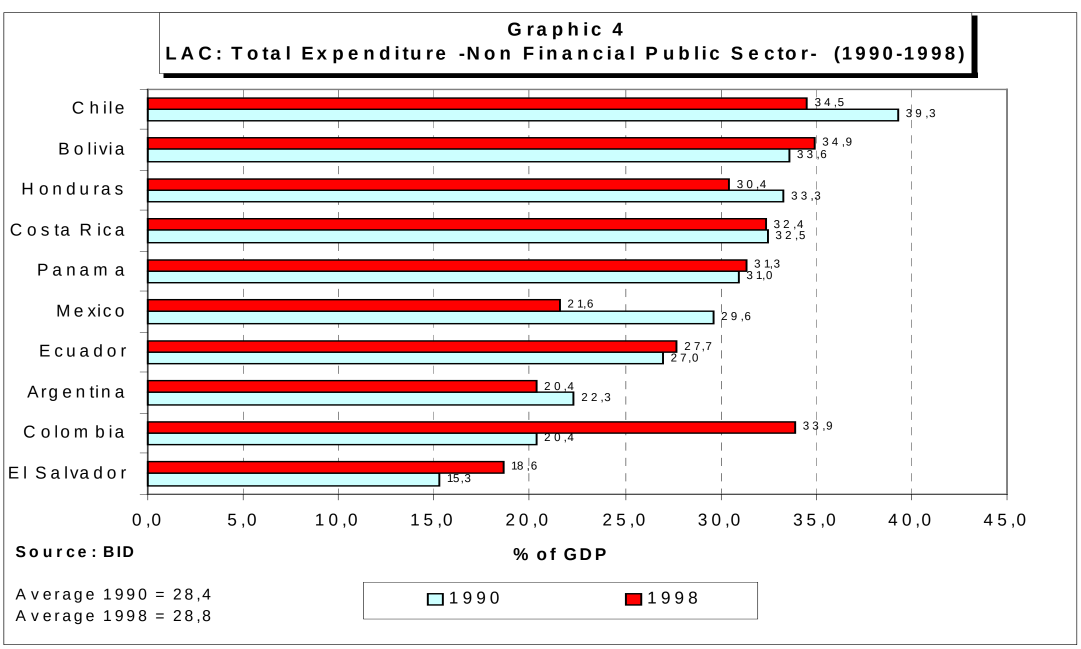
Source: DNP, CONFIS and BR

The fiscal decentralization process requires the transfer of an increasing share of the central government's current revenue to the provincial governments. Therefore, the provincial and local governments must carry out expenditures. Between 1990 and 2000, provincial and local expenditures in Colombia increased from 8,1% to 13,6% of the GDP (Graphic 3).

Likewise, the Central Government has transferred a significant amount of resources to the Social Security system. Through these resources, the social security institutions increased their reserves and raised their spending from 2,6% to 7,7% of the GDP (between 1990 and 1999). Interestingly enough, the expenditures of the Central Government, not related to transfers, increased from 5,4 % to 10,7%, which contradicts the expected results under a decentralization scheme. To sum up, nowadays, Colombia's public sector is much larger than the average for the Latin American region, mainly because of the country's expansive public spending.

Unfortunately, fiscal statistics for the year 2000 are not available for all of the Latin American countries (LAC). However, Graphic 4 illustrates the sharp increase in the size of the Colombian public sector between 1990 and 1998 --the same period when neighboring countries were decreasing their own public expenditure. In 1990, public expenditure in Colombia accounted for 20% of the GDP, a figure which was way below the regional average of 28%. Eight years later, Colombia's public expenditure was 8 points above the regional average.

Graphic 4 also shows the decreasing trend in the public expenditure of several LAC for the same period. In Argentina, public spending went down from 22,3% to 20,4% of the country's GDP; in Mexico, from 29,6% to 21,6%; and in Chile from 39,3% to 34,5%. Traditionally, Argentina and Mexico had had very large public sectors until the 1980s, nonetheless the situation in both countries changed notoriously during the following decade.



These figures indicate how the majority of the LAC made deep reforms in their public finances, not unlike the Colombian ones, and with very similar motivations. Mexico adjusted the administration of the tax system (to reduce tax evasion), and decreased the income tax on enterprises between 1986 and 1991 from 42% to 35% (to stimulate private investment). At the beginning of the 1990s, Argentina made strong cuts to its public spending by decreasing wages, privatizing various enterprises, and decentralizing education payments.

IV. The main public finances issues

Colombia's fiscal unbalance of the last few years can be explained through a set of nine issues closely related to public spending and revenue. The first six issues have to do with the finances of the Central Government, and the last three, with the consolidated results of the public sector at large.

- First, the decentralization process that begun by the mid 1980s and was subsequently endorsed by the Political Constitution of 1991. According to the Law 60 of 1993, the Central Government must transfer an increasing share of its current revenue to the provincial governments (from 38% in 1994, to 46,5% in 2001). Most of these resources (close to 80%) must be devoted to basic education and health services. Nonetheless, the Central Government has actually allocated more than the obligatory resources to these sectors, sometimes as a result of political pressures.

- Second, market reforms both in the social security and the financial systems. As was mentioned in section III, the Social Security reform (Law 100 of 1993) straightened up the Central Government's accounts and increased its contributions to the social security institutions. Consequently, between 1990 and 2000, the Government's transfers to the social security system increased by 2,2% of the GDP (Table 2). On the financial side, the reforms made impossible for the Central Bank to make direct loans to the Central Government. Thus, the Central Government could no longer count with the Central Bank's subsidies to the interest rates, and the cost of new public credits went up significantly.

- Third, inflexibility of the Central Government's obligatory spending, which is comprised by the transfers to the Social Security system and to the provincial governments, as well as the payment of interests of the public debt. As shown in Table 2, such spending amounted to 63,9% of the government's current revenues in 1990. In 2000, the Central Government's obligatory expenditures went beyond 100% of its current revenues. This means that at present, the central government has no discretionary margin to allocate its current revenues. In relation to the GDP, the Central Government's obligatory spending grew from 5,3% in 1990 to 14,2% in 2000.

- Fourth, the need to rationalize the country's public spending, both at the central and regional levels. The Central Government's operational expenditure grew up from

Table 2
Colombia: Expenditures of the Central Government

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Shares of GDP											
Interest	**1,1**	**1,2**	**1,0**	**1,1**	**1,2**	**1,2**	**1,9**	**2,0**	**2,9**	**3,3**	**4,5**
Internal	0,3	0,3	0,3	0,5	0,6	0,8	1,4	1,5	2,2	2,3	3,2
External	0,8	0,9	0,7	0,7	0,6	0,5	0,5	0,6	0,7	1,0	1,3
Transfers	**4,2**	**4,2**	**4,9**	**5,7**	**6,1**	**6,8**	**8,0**	**8,0**	**8,7**	**10,2**	**9,7**
Law 60/93	2,4	2,6	3,2	3,4	3,5	3,4	4,3	4,3	4,6	5,3	3,9
Social Security	0,8	0,8	0,9	1,0	1,2	1,3	1,6	1,7	1,8	2,0	3,0
Other	1,0	0,8	0,8	1,3	1,5	2,0	2,1	2,0	2,3	2,9	2,9
Obligatory Expenditures	**5,3**	**5,4**	**6,0**	**6,9**	**7,3**	**8,0**	**9,8**	**10,1**	**11,6**	**13,5**	**14,2**
Repayments on Debt	1,4	2,8	2,6	1,8	3,1	1,6	2,8	3,5	3,3	5,4	4,3
Obligatory Expenditures + Repayments on Debt	**6,8**	**8,2**	**8,5**	**8,6**	**10,4**	**9,6**	**12,6**	**13,5**	**14,9**	**18,8**	**18,4**
Shares of Goverment's Current Revenues											
Interest	**13,3**	**12,8**	**10,5**	**11,1**	**11,4**	**12,4**	**17,9**	**18,2**	**26,9**	**30,6**	**38,5**
Internal	3,3	3,4	3,3	4,6	5,9	7,8	13,4	13,2	20,0	21,1	27,3
External	10,0	9,3	7,2	6,4	5,5	4,6	4,4	4,9	6,8	9,5	11,2
Transfers	**50,6**	**45,1**	**49,5**	**55,5**	**60,4**	**68,0**	**76,3**	**71,3**	**80,6**	**94,2**	**83,7**
Law 60/93	28,7	27,8	32,1	32,7	34,1	34,6	39,8	35,9	38,0	46,5	33,4
Social Security	9,4	8,9	9,4	9,9	11,6	13,5	15,4	14,8	16,8	18,7	25,7
Other	12,4	8,4	8,0	12,9	14,7	19,9	21,0	20,5	25,8	29,0	24,7
Obligatory Expenditures	**63,9**	**57,9**	**60,1**	**66,6**	**71,8**	**80,4**	**94,2**	**89,4**	**107,5**	**124,8**	**122,2**
Repayments	16,8	29,4	26,1	17,2	30,2	16,5	26,9	30,7	31,0	49,6	36,9
Obligatory Expenditures + Repayments on Debt	**80,6**	**87,3**	**86,2**	**83,8**	**102,0**	**96,8**	**121,1**	**120,1**	**138,4**	**174,4**	**159,1**

Source: CONFIS and BR

Table 3
Colombia: Central Goverment Indicators

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
A. Billons of Colombian Pesos											
TOTAL REVENUE	**2.088**	**3.164**	**4.208**	**5.908**	**7.701**	**9.524**	**12.049**	**15.283**	**16.880**	**20.164**	**23.285**
Tax Revenue	1.886	2.768	3.747	5.051	6.731	8.185	10.172	13.148	14.825	16.067	19.464
Other	202	396	461	856	969	1.339	1.877	2.134	2.055	4.098	3.821
TOTAL EXPENDITURE	**2.269**	**3.232**	**4.858**	**6.284**	**8.628**	**11.462**	**15.776**	**19.787**	**23.821**	**29.033**	**35.231**
Interest	262	365	407	582	780	1.036	1.879	2.485	4.090	5.026	7.698
Personal sevices	385	566	789	1.166	1.628	2.072	2.295	2.848	3.548	4.106	5.278
Transfers	998	1.289	1.917	2.923	4.146	5.704	8.014	9.753	12.259	15.472	16.752
Capital expenditure	408	610	797	973	1.339	1.746	2.316	3.169	2.280	2.255	3.194
Other	215	402	948	639	734	904	1.273	1.532	1.644	2.174	2.308
SURPLUS / (DEFICIT)	**-180**	**-68**	**-650**	**-376**	**-927**	**-1.939**	**-3.728**	**-4.504**	**-6.941**	**-8.868**	**-11.946**
TOTAL DEBT	**3.971**	**4.622**	**6.498**	**7.477**	**8.320**	**11.666**	**14.489**	**21.720**	**31.200**	**44.909**	**63.404**
Domestic Debt	980	1.077	2.270	2.905	3.453	5.390	7.237	11.314	15.549	22.270	31.431
External Debt	2.991	3.545	4.227	4.572	4.867	6.276	7.253	10.406	15.651	22.639	31.972
CO-FINANCIAL FUNDS	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**520**	**738**	**979**	**809**	**537**	**n.a.**	**n.a**
B. Shares of GDP											
TOTAL REVENUE	**8,9**	**10,4**	**10,8**	**11,6**	**11,4**	**11,3**	**12,0**	**12,6**	**11,9**	**13,3**	**13,5**
Tax Revenue	8,0	9,1	9,6	9,9	10,0	9,7	10,1	10,8	10,5	10,6	11,3
Other	0,9	1,3	1,2	1,7	1,4	1,6	1,9	1,8	1,5	2,7	2,2
TOTAL EXPENDITURE	**9,6**	**10,6**	**12,4**	**12,3**	**12,8**	**13,6**	**15,7**	**16,3**	**16,9**	**19,1**	**20,4**
Interest	1,1	1,2	1,0	1,1	1,2	1,2	1,9	2,0	2,9	3,3	4,5
Personal sevices	1,6	1,9	2,0	2,3	2,4	2,5	2,3	2,3	2,5	2,7	3,1
Transfers	4,2	4,2	4,9	5,7	6,1	6,8	8,0	8,0	8,7	10,2	9,7
Capital expenditure	1,7	2,0	2,0	1,9	2,0	2,1	2,3	2,6	1,6	1,5	1,9
Other	0,9	1,3	2,4	1,3	1,1	1,1	1,3	1,3	1,2	1,4	1,3
SURPLUS / (DEFICIT)	**-0,8**	**-0,2**	**-1,7**	**-0,7**	**-1,4**	**-2,3**	**-3,7**	**-3,7**	**-4,9**	**-5,8**	**-6,9**
TOTAL DEBT	**16,9**	**15,2**	**16,6**	**14,6**	**12,3**	**13,8**	**14,4**	**17,8**	**22,1**	**29,5**	**36,7**
Domestic Debt	4,2	3,5	5,8	5,7	5,1	6,4	7,2	9,3	11,0	14,6	18,2
External Debt	12,7	11,7	10,8	8,9	7,2	7,4	7,2	8,5	11,1	14,9	18,5
CO-FINANCIAL FUNDS	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**0,8**	**0,9**	**1,0**	**0,7**	**0,4**	**n.a.**	**n.a.**

n.a. not available
Source: CONFIS and BR

2,5% to 3,6% of the GDP between 1990 and 1993. Salary payments rose from 1,6% to 2,5% of the GDP between 1990 and 1995. Moreover, the accounts of the Central Government were affected by the creation of new kind of regional transfers, different to the ones created by the Law 60 of 1993. These new transfers took place through the so called *co-financial funds*. Unfortunately, the administration of these resources was heavily influenced by domestic politics until 1998, when they ceased to exist. Table 3 illustrates that the *co-financial funds* represented 1% of the GDP in 1996.

- Fifth, the Central Government's revenue. There were eight tax reforms in Colombia throughout the 1990s (Graphic 2). The most notorious changes were: (a) an increase in the value added tax (VAT); (b) adjustments to the income tax; (c) improvements in the tax system administration; and (d) controls to non legitimate imports, tax evasion and elusion. Despite these reforms, Table 3 shows that the Central Government's tax revenues increased only 2,6% of the GDP between 1990 and 1999. It is clear, then, that these policies had only a short term impact. However, the Central Government gathered additional resources from profits coming from the Central Bank and public enterprises such as Ecopetrol (the public Oil Company). Additional sources of income for the Central Government were privatizations (mainly in the banking and electricity sectors), and concessions (mainly in the telecommunications sector). In 1994, the Central Government obtained 2,1% of the GDP from concessions, while in 1996 and 1997, 0,7% and 0,4% of the GDP came from privatizations.

- Sixth, the Central Government's increasing credit requirements. The large gap between the Central Government's expenditures and revenues led to the swift development of a deep fiscal deficit, which rose, from 0,8% of the GDP in 1990, to 6,9% in 2000. The financing of this deficit as well as the repayments of the public debt, lead to the Central Government's increasing demand for new credits. These new credits went up from 2,2% to 11,2% of the GDP between 1990 and 2000 (Tables 2 and 3). The sustainability of such an accelerated increase in the level of the public debt became a serious problem for the country's Government --as will be analyzed in more detail in section V .

- Seventh, the provincial and local finances. From the early nineties, Colombia's Central Government largely increased its transfer of resources to the provincial and local administrations. Consequently, the regional public spending expanded notoriously. Table 4 shows how the total regional spending increased by 6,1% of the GDP in the last ten years, while the regional tax revenue increased only by 0,8%. Between 1991 and 1999, the regional expenditure in salaries went up from 3,3% to 5,1% of the GDP. Moreover, by the mid 1990s, transfer funds began to be used as a kind of collateral for banking credits. By December of 1999, the debt of the regional governments with the domestic financial system had grown to 2,1% of the GDP. For the same year, the fiscal deficits of the provincial and local governments together amounted to 1,3% of the GDP.

- Eighth, the Social Security surplus. After the reform of the Social Security system,

Table 4
Colombia: Indicators of Provincial and Local Governments

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999 pr
A. Billons of Colombian Pesos										
TOTAL REVENUE	**1.796**	**2.363**	**3.152**	**4.266**	**5.938**	**8.100**	**10.719**	**14.160**	**16.030**	**19.556**
Tax Revenue	495	641	834	1.126	1.583	2.002	2.566	3.192	3.647	4.340
Other	1.300	1.723	2.318	3.140	4.355	6.098	8.153	10.969	12.383	15.216
TOTAL EXPENDITURE	**1.904**	**2.460**	**3.175**	**4.478**	**6.432**	**8.172**	**11.880**	**15.107**	**17.377**	**21.555**
Interest	125	184	296	251	389	609	816	957	1.322	1.422
Personal sevices	770	990	1.328	1.743	2.359	3.047	3.963	4.771	6.459	7.715
Transfers	111	134	129	185	245	317	458	662	752	755
Capital expenditure	465	618	789	1.128	1.782	1.960	3.041	4.317	3.871	4.869
Other	434	534	633	1.172	1.656	2.239	3.601	4.400	4.974	6.793
SURPLUS / (DEFICIT)	**-108**	**-96**	**-23**	**-212**	**-494**	**-71**	**-1.161**	**-947**	**-1.347**	**-1.998**
B. Shares of GDP										
TOTAL REVENUE	**7,6**	**7,8**	**8,1**	**8,3**	**8,8**	**9,6**	**10,6**	**11,6**	**11,3**	**12,9**
Tax Revenue	2,1	2,1	2,1	2,2	2,3	2,4	2,5	2,6	2,6	2,9
Other	5,5	5,7	5,9	6,1	6,4	7,2	8,1	9,0	8,7	10,0
TOTAL EXPENDITURE	**8,1**	**8,1**	**8,1**	**8,8**	**9,5**	**9,7**	**11,8**	**12,4**	**12,3**	**14,2**
Interest	0,5	0,6	0,8	0,5	0,6	0,7	0,8	0,8	0,9	0,9
Personal sevices	3,3	3,3	3,4	3,4	3,5	3,6	3,9	3,9	4,6	5,1
Transfers	0,5	0,4	0,3	0,4	0,4	0,4	0,5	0,5	0,5	0,5
Capital expenditure	2,0	2,0	2,0	2,2	2,6	2,3	3,0	3,5	2,7	3,2
Other	1,8	1,8	1,6	2,3	2,5	2,7	3,6	3,6	3,5	4,5
SURPLUS / (DEFICIT)	**-0,5**	**-0,3**	**-0,1**	**-0,4**	**-0,7**	**-0,1**	**-1,2**	**-0,8**	**-1,0**	**-1,3**

pr: preliminary
Source: BANCO DE LA REPUBLICA.

Table 5
Colombia: Non Financial Public Sector Indicators *
(Shares of GDP)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total Expenditure	20,4	21,6	23,1	24,3	26,1	28,1	32,7	34,1	33,9	36,6	37,7
Central Government	5,4	6,4	7,5	6,6	6,6	6,8	7,7	8,2	8,2	8,9	10,7
Social Security System	2,6	2,7	2,7	3,3	3,9	4,7	5,6	6,1	6,8	7,7	6,5
Decentralized Entities and Enterprises	4,3	4,5	4,8	5,7	6,0	6,9	7,6	7,3	6,7	5,8	6,9
Provinces and Municipalities **	8,1	8,1	8,1	8,8	9,5	9,7	11,8	12,4	12,3	14,2	13,6
NFPS Surplus (+) or Deficit (-)	-0,5	0,0	-0,2	0,2	0,1	-0,3	-1,7	-2,8	-3,6	-4,3	-4,3
Central Government	-0,8	-0,2	-1,7	-0,7	-1,4	-2,3	-3,7	-3,7	-4,9	-5,5	-6,9
Social Security System	-0,1	-0,1	0,1	0,5	1,1	1,9	2,0	1,1	1,2	0,9	1,8
Decentralized Entities and Enterprises	0,3	0,3	1,4	-0,1	0,8	-0,2	0,2	-0,1	0,3	0,7	1,2
Provinces and Municipalities **	0,1	0,0	0,0	0,5	-0,3	0,3	-0,2	-0,1	-0,3	-0,4	-0,4
Privatizations	0,0	0,0	0,0	0,0	2,2	0,2	0,8	3,3	0,5	0,3	0,4
NFPS Surplus (+) or Deficit (-) -Net of privatiz.-	-0,5	0,0	-0,2	0,2	2,3	-0,1	-0,9	0,4	-3,1	-4,0	-3,9
Revenue of ISS	1,5	1,5	1,6	1,8	2,3	2,8	2,9	2,6	2,9	2,5	2,7

Source: DNP, Confis and BR
* Net of Transfer
** Including: Local Government and local enterprises

Colombia's leading public social security institution (the ISS --*Instituto de los Seguros Sociales*), which covers nearly 62% of the country's insured workers, increased its resources from 1,8% of the GDP in 1993, to 2,9% of the GDP in 1998 (Table 5). This surplus was invested in the Central Government's securities. By the end of 1999, the ISS held $6,2 billions (4,1% of the GDP) in TES B, which are the most important securities of the Central Government (this amount represented approximately 30% of the total TES B issued). From a fiscal point of view, the social security sector reached a cash surplus of 1,6% of the GDP between 1994 and 1997, which compensated the deficit of the Central Government.

- Ninth, fiscal revenues coming from specific public enterprises. In the seventies and eighties, Colombian public finances were heavily influenced by the international prices of coffee. Coffee prices under the international agreement of producers had been steadily high. When such an agreement ended, in the late 1980s, coffee prices plummeted and so did coffee's contribution to the country's public finances. In the nineties, Colombia turned to its oil reserves and embarked on several exploration projects, led by the public oil enterprise (*Ecopetrol*), as well as by various transnational companies. The high international prices of petroleum in the last couple of years have rendered *Ecopetrol* large revenues, which have contributed to neutralize the Central Government's unbalanced accounts. In 1999, *Ecopetrol's* cash surplus was 0,73% of the GDP.

Overall, the nine issues described above indicate that the fiscal unbalance of the non financial public sector in Colombia has sharply increased, particularly after 1995. Table 5 shows a relative financial equilibrium in the first half of the nineties as well as an increasing deficit in the second half of the decade (from 0,3% of the GDP in 1995 to 4,28% of the GDP in 2000). As a result of this fiscal trend, the public sector at large has widely increased the size of its domestic and foreign debt. The following section outlines Colombia's public debt evolution.

V. The dynamics of public indebtedness and the question of its sustainability

This section provides, firstly a brief description of Colombia's accelerated process of public indebtedness in the last five years (which is most evident in the case of the Central Government); and secondly, an analysis of the debt's sustainability as well as of the country's vulnerability to external shocks.

1. Public indebtedness

A. Indebtedness of the Non-financial Public Sector. Starting in 1995, Colombia's public debt skyrocketed. Between 1995 and 2000, the consolidate public debt of the NFPS climbed from 24,9% to 46,2% of the GDP -not counting the Central

Government's social security liabilities (Table 6). The total of such an increase was explained by the Central Government's indebtedness.

In the first half of the nineties, the ratio public debt/GDP went down as a result of (a) economic growth and (b) the public sector's decreasing need of new credits. As it was already mentioned, the public sector gathered substantial resources from the sale of assets and the concession of licenses, which were used to make pre-payments of the external debt. Between 1992 and 1994, the Central Government along with other national entities, made pre-payments for a total of US$3,193 millions. By that time, the value of the foreign debt was US$10,089 millions. Not surprisingly, the ratio external public debt/GDP dropped from 26% to 16% between those two years.

Between 1997 and 2000, public indebtedness levels reached a critical point. The foreign public debt rose from 14,1% to 23,8% of the GDP, while the domestic public debt went from 14,9% to 22,4% of the GDP. The Central Government's indebtedness accounted for 80 % of the increase of the total debt. Likewise, the rest of the NFPS foreign indebtedness was on the rise. Between 1996 and 1999, it climbed from 5,6% to 6,2% of the GDP. We will now examine the Central Government's indebtedness, because of its predominance, and because of the limited information available on the structure of the provincial and local debt.

B. Indebtedness of the central government. Between 1995 and 2000, the Central Government's indebtedness rose from 13,6 % to 36,7% of the GDP (Table 6). By the end of the nineties, the foreign and domestic debts were almost similar in size (50,4% vs. 49,6%, respectively). At the end of 2000, foreign liabilities reached US$14,325 billions and were represented as follows: 54% in bonds; 30% in from the multilateral credit system; 14% in from the commercial banks; and the remaining balance, in credits with foreign governments and other agencies. Foreign indebtedness was usually negotiated in the medium and long terms. Regarding the currencies used, 82% was negotiated in American dollars; 8,2% in euros; 1,2% in yens; and the rest, in other currencies.

The indebtedness strategy followed by the Central Government after 1992 consisted of substituting the external debt by domestic indebtedness. The main instrument employed were the so called TES B bonds. The Treasury issued them for the first time in 1992, when the domestic debt accounted for 33% of the total indebtedness. By the end of 2000, these leading governmental securities represented 88% of the total internal debt. Currently, the Central Government counts with other securities, yet the TES B continue to be paramount. Some decentralized government agencies, such as the Agricultural Development Bank (*Finagro*) and the Deposit Insurance Fund (*Fogafin*) have placed their own bonds. By the end of 2000, these entities' share in the public debt bond market was of 20%.

Although financial reforms aimed at allocating resources through market mechanisms, large portions of the Central Government's securities were placed by other means. As some studies point out, perhaps the strongest restriction to the placement of the Government's securities is the segmentation and thinness of the Colombian public bonds market (Correa P, 2000). These market characteristics led the Central Government to attract

Table 6
Colombia: Stock of Public Debt
Shares of GDP

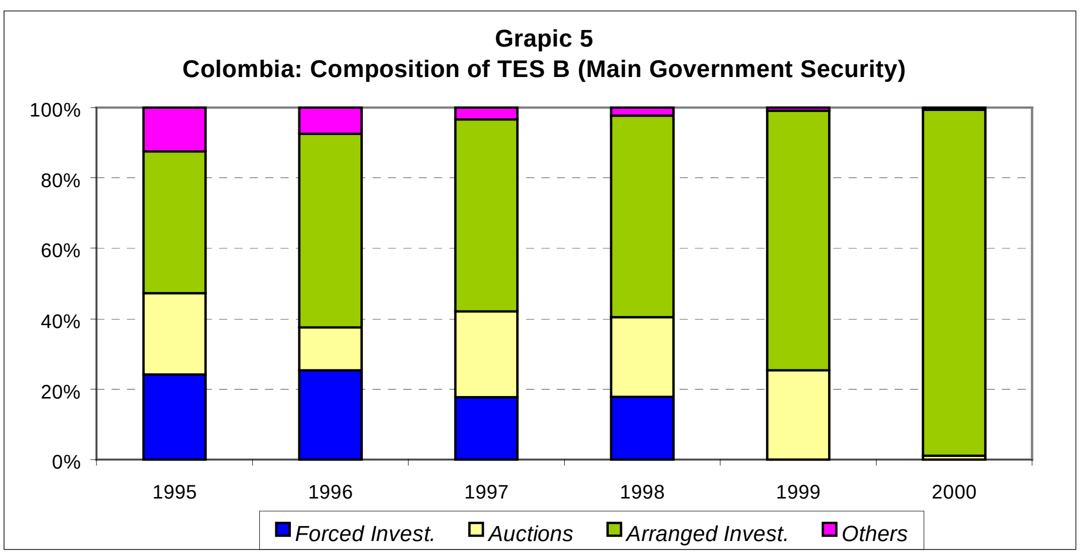
AÑO	External			Domestic			Total		
	Central Goverment	Rest of the NFPS	Non Financial Public Sector	Central Goverment	Rest of the NFPS	Non Financial Public Sector	Central Goverment	Rest of the NFPS	Non Financial Public Sector
1995	7,4	6,8	14,2	6,2	4,5	10,7	13,6	11,3	24,9
1996	7,2	5,6	12,8	7,1	4,7	11,8	14,3	10,3	24,7
1997	8,6	5,6	14,1	9,4	5,5	14,9	18,0	11,1	29,0
1998	11,1	5,8	16,9	11,1	5,4	16,5	22,1	11,3	33,4
1999	14,9	6,2	21,1	15,0	5,0	20,0	29,9	11,2	41,1
2000 *	18,5	5,3	23,8	18,2	4,2	22,4	36,7	9,5	46,2

* Preliminary
Source: Banco de la República

Table 7
Colombia: TES B and TRD by Holders

	December 2000 Billions of Colombian pesos	%	
Public Sector	12.529,7	43,2	
Social Security 1/	6.915,8		55,2
Enterprises 2/	1.342,3		10,7
Others 3/	4.271,7		34,1
Central Bank	1.799,2	6,2	
Financial Sector	5.809,9	20,0	
Private Sector	8.891,0	30,6	
Total	29.029,9	100,0	

1/ including: ISS, Cajanal, Caprecom and others.
2/ Including: Ecopetrol, Telecom, Isagen, Sena and others.
3/ Including: TGR, ICBF, Bogotá, FNC and others.
Source: Banco de la República



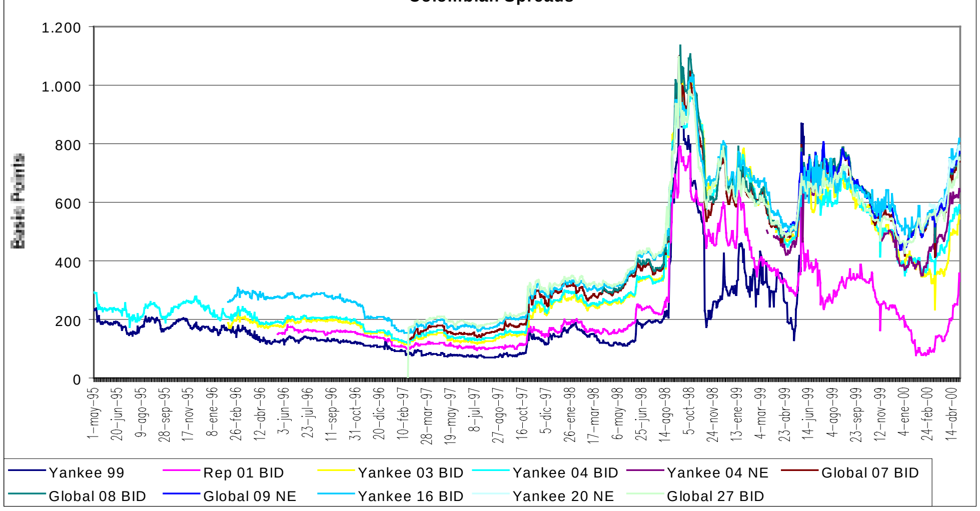
Source: Banco de la República

Table 8
Colombia: Interest Rates

YEAR	DOMESTIC DEBT Effective		EXTERNAL DEBT			MARKET End period	
	Nominal	Real	Effective	Devaluation	New debt	Nominal	Real
1993	29,0	5,2	7,5	9,0		26,7	3,3
1994	25,0	2,0	8,0	3,4	7,3	38,7	13,1
1995	25,4	5,0	6,4	18,8	4,7	33,1	11,4
1996	27,1	7,9	7,3	1,8	7,8	28,0	5,2
1997	25,3	8,4	7,2	28,7	7,9	24,4	5,7
1998	26,6	11,2	8,4	19,2	8,2	34,3	15,1
1999	22,1	13,2	8,2	21,5	10,0	15,8	6,0
2000	23,9	13,9	8,4	19,0	n.a.	13,4	4,2

Source: Banco de la República

Graphic 6
Colombian Spreads



Source: MHCP

Table 9
Colombia: Interest Payment Determinants - On Central Government Debt-
Percentages

Year	Domestic Interest Payments: Primary Deficit (t-1) A	Primary Deficit Accumulation (before t-1) B	Initial Stock of Debt (Capitliz.) C	Subtotal	External Interest Payments: Primary Deficit (t-1) D	Primary Deficit Accumulation (before t-1) E	Initial Stock of Debt (Capitliz.) F	Subtotal
1994	-	-	51,90	51,9	-	-	48,1	48,1
1995	13,3	-	49,7	63,0	-0,3	-	37,3	37,0
1996	21,6	11,3	42,2	75,1	-0,2	-0,2	25,3	24,9
1997	7,1	28,8	37,0	72,9	1,5	-0,5	26,0	27,1
1998	13,4	30,1	31,0	74,5	1,0	1,0	23,6	25,5
1999	6,4	36,6	26,0	69,0	4,4	2,0	24,7	31,0

Source: Hernandez-Lozano-Misas (2000)

liquidity from some public agencies (particularly, national enterprises and social security institutions), and from the banking system.

Policy makers designed three mechanisms to attract resources through the TES B: (i) direct transaction with the Treasury (*inversiones forzosas*), in which the bonds (as collateral) cannot be traded in the secondary market; (ii) transactions with the *IS*S (main social security agency), in which the *ISS* is capable of buying TES B directly from the Treasury, or in the second market (*inversiones convenidas*); and (iii) auctions, which are explicit market mechanisms. Its clear that the first two strategies are institutional agreements rather than market mechanisms.

Graphic 5 illustrates the composition of TES B investments, as related to these three mechanisms, during the second half of the nineties. Forced investments (*inversiones forzosas*) went down from 24% in 1995, to 18% in 1998; arranged investments (*inversiones convenidas*) went up from 40% in 1995 to 98% in 2000; the auction mechanism kept its participation around 24% until 1999, and then its share decreases to 1,1%. Consequently, the arranged investments were the most dynamic channel.

From a bondholder standpoint, Table 7 displays the main TES B holders up to December of 2000. The public sector (including the Central Bank) holds 49,4% of these securities; the financial sector holds 20%; and the private sector, 30,6%. As far as the public agencies are concerned, the social security system holds 55% of the TES B; and the enterprises, 11%. Therefore, public entities have kept the majority of these securities

The interest payments made by the Central Government on new domestic and foreign credits have increased since 1995. This is another trait of the indebtedness process of the Central Government. For new external credits, the average weighted interest rate grew from 4,7% in 1995, to 10% in 1999 (Table 8). Furthermore, the Colombian spreads in the foreign capital market begun to rise in November of 1997, as a consequence of the international financial crisis (Graphic 6).

Up to October of 1997, Colombian spreads, in average, were about 200 basic points; eight months later, they had climbed to 600 basic points. In addition, the Colombian peso has depreciated in the last three years. The real exchange rate index rose approximately 30 points between June of 1997 and December 1999. Hence, the cost of foreign debt went up from 0,5% in 1995, to 1,3% of the GDP in 2000 (Table 2).

The interest rate that the Central Government was paying for its internal debt also begun to increase after 1996. Table 8 illustrates that the effective real interest rate grew from 5% in 1995, to 13,9% in 2000 (9,7% above the real market interest rate). The cost of government securities depends upon the interest rates negotiated. By the end of 1999, 74% of the domestic debt in TES B was negotiated at fix rate, while the rest, was settled with a floating interest rate. Thus, the domestic interest payments of the Central Government's debt went up from 0,6% to 3,2% of the GDP between 1994 and 2000.

To sum up, high interest rates as well as the government's accelerated process of indebtedness increased the government's interest payments from 1,2% of the GDP in 1995, to 4,5% by 2000. However, the main cause of such an increase was the indebtedness policy itself (which reflects the fiscal unbalance). Table 9 shows that, by the end of 1999, the accumulation of the primary deficit explained 50% of the total interest payments --out of which, 43% was related to the domestic debt. The rest is explained by the capitalization of the initial stock of debt (details of the exercise are available in Hernádez, Lozano and Misas, 2000).

2. Debt and fiscal sustainability

Our analysis of Colombia's fiscal sustainability starts by understanding that "debt sustainability is an integral element of macroeconomic stability. Interactions between different policy variables (such as debt, fiscal and interest rate policies), and outcome variables (such as GDP and exports growth), as well as international economics conditions (international interest rates) jointly define if the country is on a sustainable debt path" (Ghani and Hyoungsoo, 1995). An accurate forecast of the debt's path must then, be based on reliable information on all of these variables. However, most empirical studies on fiscal sustainability are accomplished through two simple yet useful approaches.

A. The standard debt sustainability approach. The debt sustainability analysis is, in essence, a fiscal sustainability analysis. Consequently, "what matters is whether the fiscal stance (present and projected) will permit repayment of the current stock of debt. If it does not, policy prescription will focus on fiscal adjustment measures to increase future primary surpluses" (Perry, 1997).

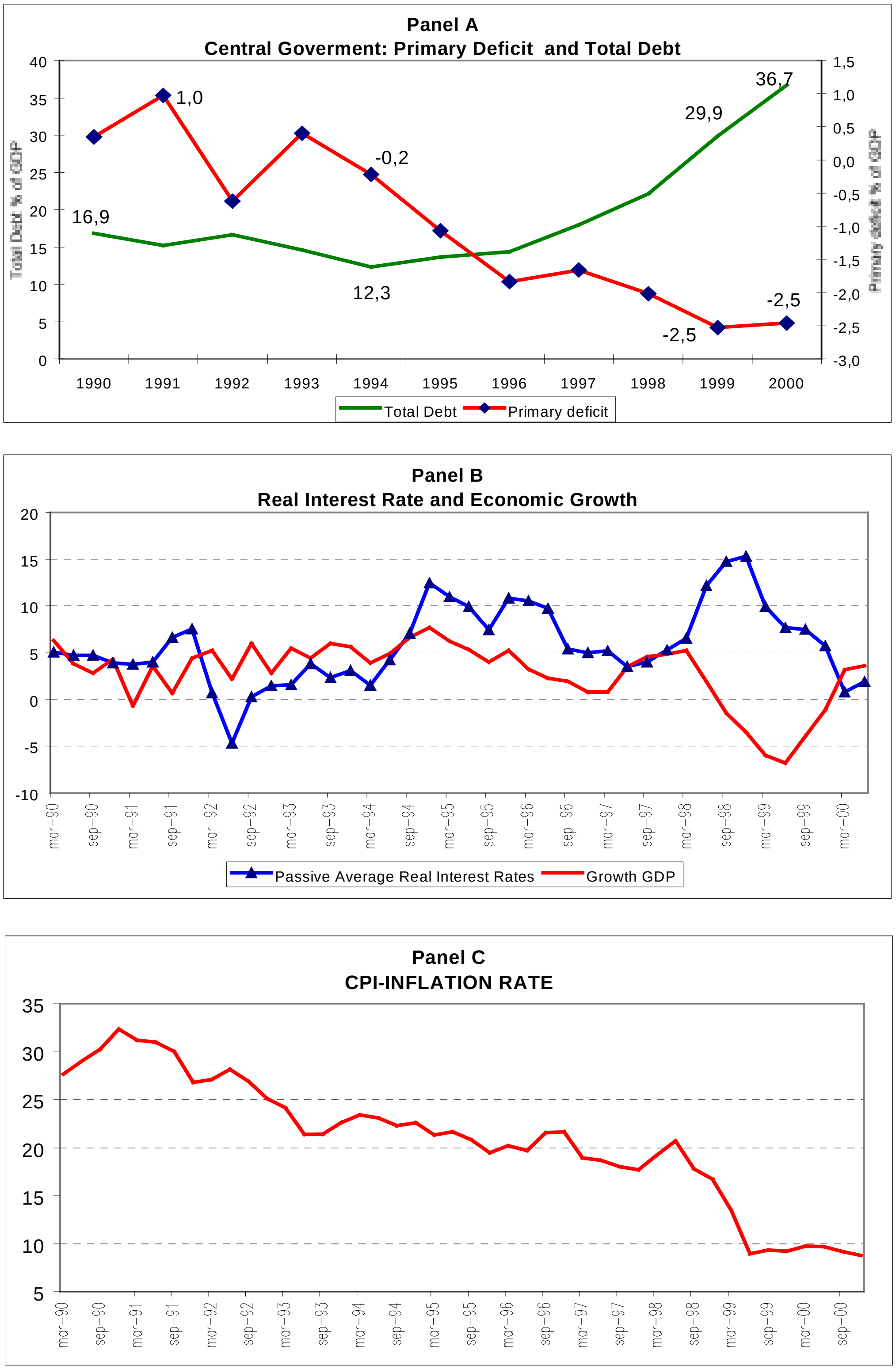
The implications of this quotation are better understood by examining the determinants of the debt's changes, as defined in the Fisher and Easterly tradition.[6] According to these authors, the ratio debt/GDP changes positively as a function of the difference between the real interest rate and the growth rate of GDP. Moreover, the ratio debt/GDP increases with the primary deficit, and decreases with the seignorage. These assertions are useful tools to describe the Colombian situation for the last few years. In simple terms, they indicate that the debt of the Central Government has been negatively influenced by: (i) low economic growth; (ii) high real interest rates; (iii) an increasing primary deficit; and (iv) a decreasing seignorage (caused by a decreasing inflation trend).

Graphic 7 illustrates some of these developments. Panel A, compares the dynamics of the government's debt with primary deficit trends since 1990. At the beginning of the decade, the government's finances had a primary surplus of 1% of the GDP. This primary fiscal unbalance increased to 2,5% of the GDP by 2000. The fiscal issues outlined in the fourth section of this paper further explain that the primary unbalance is the leading cause of the accumulation of the government's debt.

Panel B illustrates the dynamics of both, the real interest rate and the rate of economic growth. The large gap between these two variables during the second half of the nineties, led to the further expansion of the governmental debt. The most critical period was reached between the fourth quarter of 1997 and the fourth quarter of 1999, when such a gap hit a maximum of 18,8 points. Moreover, a decreasing inflation trend in the last few years

[6] The Fisher and Easterly paper was published in The World Bank Research Observer, in July of 1990. Their finding is given by: $\Delta d = (r-g)d + pd - s$, where *d* = debt/GDP; *pd* = primary deficit/GDP; *s* = seignorage; *r* = real interest rate and *g* = real growth rate.

Graphic 7



Source: BR and Confis

has led to a shrinking of the seinorage (Panel C). By 1992, seignorage amounted to 2,9% of the GDP (on M1); by 1999, it amounted to 0,4% (Posada, 1999).

If Fisher and Easterly's equation is used to calculate the level of the government's primary surplus, two aspects must be considered in an exercise to keep constant the government's debt level for the year 2000. First, the new liabilities of the government; and second, the variables included in the exercise. Between1999 and 2000, the Central Government faced a deep crisis in the financial system, which was particularly related to the financing of housing. To solve this crisis, the Government issued a new type of bonds (locally known as Law 546 and *TRDs*). Moreover, the Government was forced to close some public entities. By the end of 2000, the new liabilities of the Colombian Government amounted to 6,7% of the GDP; thus, the government's new level of indebtedness is close to 37% of the GDP.[7]

The second aspect is the set of variables included in the sustainability exercise. From a long term perspective (1980-2000), the real interest rate was 7,5%, and the real economic growth was 4,5%. Furthermore, the inflation forecast is below 10%, which is compatible with a seignorage of 0,4%. Within this context, in the upcoming years, the Central Government will generate a primary surplus of about 1,1% of the GDP -- depending, of course, on adjustments to the fiscal policy.

B. Financial institutions approach. The International Monetary Fund (IMF) and The World Bank (WB) have suggested a set of guidelines for public debt management.[8] These guidelines, which comprise a great variety of indebtedness issues, provide policy makers with sound advice on how to improve the quality of their public debt management, and how to reduce their countries vulnerability to international financial shocks. From a macroeconomic perspective, it is also important to monitor a variety of internal and external indicators, to be able to assess the debt sustainability and the vulnerability of a small country such as Colombia. As the IMF and the WB point out, "...Vulnerability is often greater for smaller and emerging market countries because their economies may be less diversified, have a smaller base of domestic financial savings and less developed financial systems, and be more susceptible to financial contagion through the relative magnitudes of capital flows..." (IMF and WB, 2000).

Several ratios, commonly used to predict solvency, are helpful to examine debt sustainability as well. Among them, we have revised: (i) *External Indicators:* reserves/short term external debt; reserves/imports; external debt/imports; and external debt/exports. (ii) *Central Government Indicators:* tax revenue/debt service; and interest payments/total revenue. (iii) *Non Financial Public Sector:* debt/GDP. Table 10 displays the behavior of these ratios along the nineties and, for some of them, projections for the period 2001 and 2002. These projections are based on several assumptions on the country's economic performance, which is in turn contingent upon the implementation of fiscal reforms aimed at reducing the primary deficit.

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[7] The 6,7% of the new government liabilities is given by: 2% from bonds law 546; 3,7% from the public banking capitalization (bonds -*Fogafin*); and 1% from the cost of closing public entities.
[8] Draft Guidelines for Public Debt Management, IMF and WB, 2000

Table 10
Colombia: Selected Economics Indicators

	Average 1990-1994	1995	1996	1997	1998	1999	2000 pr	Projectios 2001	2002
General Indicators									
GDP (MM$)	42332,8	84439,1	100711,4	121707,5	141740,5	152165,0	172638,0	197692,2	221415,3
GDP (Millons US$)	59899,2	92539,1	97148,0	106718,8	99045,5	86550,8	82675,8	n.a	n.a
GDP (Growth Rate)	4,3	5,2	2,1	3,2	0,4	-4,3	3,0	3,8	4,8
Exports (Millons US$)	7565,0	10095,33	10523,91	11529,35	10944,3	11573,34	13043,0	13662,0	14376,0
Imports (Millons US$)	7168,6	12922,67	12783,6	14371,37	13691,93	9955,864	10780,0	12323,0	12803,0
Reserves (Millons US$)	6934,9	8446,4	9933,034	9905,16	8739,791	8102	8809,7	9784,0	10107,0
Fiscal Indicators									
NFPS Fiscal Deficit (% GDP)	-0,08	-0,3	-1,7	-2,8	-3,6	-4,3	-4,3	-2,5	-1,5
NFPS Expenditures (Billons $) 1/	10.091	23.723	32.899	40.887	47.396	57.665	65.256	n.a	n.a
NFPS Revenue (Billons $) 1/	10.135	23.461	31.190	36.897	42.562	51.324	57859	n.a	n.a
NFPS Debt (Billons $)	n.a.	21.066	24.829	35.352	47.369	62.490	79.801	n.a	n.a
S. Term Public Debt (Billons $) 2/	682	1569	1173	1209	1505	1255	439	n.a	n.a
NFPS Interest payments (Billons $)	1.424	2.777	3.908	4.113	6.521	5.712	4.568	n.a	n.a
Sustainab. / Vulnerabil. Indicators									
Reserves / S.T. External Debt	249%	156%	200%	208%	187%	193%	175%	151%	171%
External Debt / Imports	285%	193%	231%	223%	248%	347%	309%	n.a	n.a
External Debt / Exports	247%	247%	280%	278%	310%	298%	255%	n.a	n.a
Reserves / Imports	104%	65%	78%	69%	64%	81%	82%	79%	79%
External Debt / GDP	32%	27%	30%	30%	34%	40%	40%	n.a	n.a
CG: Tax Revenue / Debt-Service	277%	339%	216%	196%	168%	122%	129%	117%	n.a
CG: Interest Payments / Revenue	11%	11%	16%	16%	24%	25%	33%	29%	n.a
NFPS: Interest Payments / Revenue	14%	10%	11%	11%	14%	15%	20%	n.a	n.a
NFPS Debt / GDP	n.a.	25%	25%	29%	33%	41%	46%	n.a	n.a

1/ Net of transfers.
2/ Including: Central Bank, Decentralization Entities, Central Government,Banks and other Financial Corporations.
* Preliminary
Source: Banco de la República

Table 11
Colombia: Prospects on Fiscal Deficit Adjustment
Shares of GDP

	2000	2001	2002
Central Government	**1,9**	**1,0**	**0,6**
Budget Adjustment	0,5		
Growth in Economic Activity	0,2		
Management of the Tax Administration	0,2		
Reduction in Floting Debt	0,5		
Financial Transaction Tax	0,5		
Transfers (to Provincial and Local Gov.)		0,4	0,4
Tax Reform		0,6	0,2
Provincial and Local Governments	**0,5**	**0,6**	**0,0**
Social Security Fund -Pensions-	0,3	0,4	
Addittional Adjustment	0,2	0,2	0,0
Other adjustments	**0,3**	**-0,5**	**0,4**
Total Adjustment	**2,7**	**1,1**	**1,0**
New Fiscal Unbalance	**3,6**	**2,5**	**1,5**

Source: Hernandez and Lozano (2000)

The erosion of Colombia's main economic variables since the mid nineties is evident from the data. Regarding the vulnerability indicators, the ratio reserves/short term debt, which is a measure of *reserve adequacy* in countries with significant but uncertain access to capital markets, went down from an average of 249% between 1990-1994, to 175% in 2000. If official predictions are right, by the end of 2002, such a ratio will decrease to 171%. Interestingly enough, Argentina registered similar reserve adequacy levels in 1999, and official estimates predict their fall to 150%. The other external indicator, useful to assess vulnerability, is the ratio reserves/imports (a measure of reserve needs). Between 1990-1994, this ratio was in average 104%. Subsequently, it went as low as 64% in 1998. By 2000, it registered an increase to 82%, which is near to the average level predicted by the Colombian authorities for the next few years.

As it was mentioned, debt sustainability analysis involves external and internal indicators. The ratio external debt/exports is a measure of the trend in debt, which is closely related to the repayment capacity of the country. Between 1990-1994, this ratio was 247% (in average). Thereafter, it increased to 310% by 1998. In 2000, it fell to 255%. Likewise, the ratio external debt/GDP, which is a useful indicator for relating debt to resource base (reflecting the potential of shifting production to exports as to enhance repayment capacity), went up between the first and the second half of the nineties (in average 32% in the first half on 1990s, and then went up to 40% in 2000). The projection of these external ratios is contingent upon economic recovery.

Regarding public sector indicators, their reversal trend between the first and the second half of the nineties is clear. Between 1990-1994, the ratio tax revenue/debt service (for the Central Government) was in average 277%. Thereafter, this index decreased, and by the end of 2000, it went down to 126%. Official expectations about changes in this index are modest, because of the current high level of indebtedness, and because of the short term maturity. Between 2000 and 2002, the maturity of the TES B placed until 1999 is 60%.

The ratio interest payments/revenue (also for the Central Government) was in average 11% between 1990-1994. Thereafter, it went up to 32% by 2000. In the last few years, the high cost of the Central Government's debt, along with its dwindling tax revenues have become increasingly evident. The reversal of these trends depends upon an upswing in economic activity as well as the approval of a sheer tax reform, currently debated in Congress. At last, as it was mentioned in the previous section, the ratio public debt/GDP has increased since 1995. In 1995, this ratio was 24,9% and by 2000, it had increased to 46,2%.

VI. Final remarks

From the mid 1990s, the Colombian economy has endured a pattern of slow growth and expanding economic unbalance, particularly of its fiscal accounts. As discussed in this paper, these trends are related to unsustainable fiscal policies, external shocks, as well as the country's internal political turmoil (which was not mentioned explicitly). In December of 1999, the Colombian economic authorities subscribed a three-year agreement with the

IMF, to restore long term economic growth, reduce inflation even further, and achieve an external sustainable position. This agreement requires strong fiscal adjustments, a restructuring of the financial sector, and a flexible exchange rate policy, among other structural reforms.

From a fiscal standpoint, the main reforms comprise: a tight wage policy; a tax reform; a redesign of the transfers policy; reforms in the pension system; and a downsizing of the public sector through privatizations. Through these set of reforms, the Colombian authorities expect the NFPS fiscal unbalance to go down to 1,5% of the GDP by the year 2002. Table 11 depicts the path to such a result. Fiscal adjustments are geared to reforms on the Central Government's accounts. Such reforms are expected to yield 3,5% of the total fiscal deficit reduction (throughout a three-year program). The adjustment of the provincial and local finances will render 1,1%. The remaining percentage of the fiscal adjustment will result from other actions. Some adjustment policies, such as cuts to the national budget, setting a longer period for the financial transactions tax, and the creation of the social security provincial pension fund were implemented by the end of 1999. By the time this paper was written, the Colombian congress was debating a set of additional reforms.

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