FINANCIAL REFORM, CRISIS AND CONSOLIDATION IN COLOMBIA

by

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I. Introduction

Colombia's financial system has experienced important transformations during the last two decades. In order to illustrate the most significant modifications, Tables 1 and 2 present a summary of the financial system's structure during four different points in time: 1986-1989, 1990, 1995, and 2001. Table 1 shows the assets of different types of banks (private domestic banks, foreign banks and state-owned banks), Savings and Loans corporations, and the rest of the financial system, all of them as a proportion of GDP. Table 2 complements the information by presenting the participation of each financial intermediary in the total assets of the financial system. The following facts are of interest:

- In the second half of the 1980s, Colombia's financial system had 91 financial institutions with assets equivalent to 46% of GDP. State-owned banks held approximately 43% of the financial system's assets (20% of GDP), banks with foreign participation only 3% (1%), private domestic banks 20% (9%), Savings and Loans corporations 15% (7%), and the rest of the financial system 20% (9 of GDP).
- During the first half of the 1990s, the number of financial institutions increased considerably. It peaked in 1995 with 148 institutions, and total assets equivalent to 68% of GDP The participation of state-owned banks in the total assets of the financial system fell in a significant manner, reaching 13% in 1995. The loss in participation of state-owned banks was initially gained by other non-banking financial institutions, whose share in the financial system's assets increased from 20% during 1986-1989, to 37% in 1990. This participation, however, decreased to 28% in 1995. The 1990s fall of state-owned banks and other non-banking financial institutions participation in the total assets of the system was replaced in equal proportion by foreign banks, Savings and Loans corporations and private domestic banks.
- In the second half of the 1990s the financial system's assets fell by 6.4% of GDP. The biggest decrease was recorded by the state-owned banks (2.9%), followed by

the Savings and Loans corporations and other non-banking financial institutions (3.3%). However, at the same time, the size of private domestic banks increased by 1.7% of GDP together with the size of foreign banks by 0.5%. The number of financial institutions dropped to 105, slightly higher than before the structural reform process began during the period of 1989-1992. The configuration of financial conglomerates in the intermediation process also increased its importance. At the beginning of the decade, the financial intermediation was done in its majority by individual financial institutions, while towards 1999, the financial conglomerates owned close to 70% of the assets of the intermediation system. This characteristic moved the Colombian financial system in the direction of a universal banking scheme through a process of mergers and liquidations.

This paper studies the main driving forces behind this transformation. It is argued that the rapid structural change undergone by the Colombian financial system in the last ten years can be explained by the liberalization of the early 1990s, the inflow of FDI to the financial sector, the privatization of state-owned institutions, and the effects of the credit boom and the subsequent financial crisis that occurred during the decade. Furthermore, specific lessons are drawn from the experience of the hardest hit sub-sectors of the financial system.

II. Financial Liberalization

At the beginning of the 1990s Colombia's financial sector was characterized by its reduced size, segmented and oligopolistic structure, and a dominant presence of the State, which held 50% of the banking system assets. The sector was severely repressed and was highly inefficient. The reserve requirements surpassed 40% of the total deposits and the interest rate spreads exceeded those of the developed countries by more than 500 basis points¹. In a context of high inflation and directed subsidized credit, the banking sector concentrated most part of its voluntary credits in maturities of one year or less, limiting the long term financing to the indexed system of Savings and Loans.

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¹ Barajas et al. "The impact of Liberalization and Foreign Direct Investment in Colombia's Financial Sector". Journal of Development Economics, vol. 23 pp. 157-196.

During the period of 1990-1992 Colombia begun an ambitious program of economic modernization oriented to improve the efficiency of resource allocation and increase competitiveness. Such program included a group of structural reforms and macroeconomic policies designed to achieve a 5% annual real GDP growth and a significant reduction in the rate of inflation. The main components of the program consisted of establishing an open economy (Law 9 of 1991) and a financial liberalization. With respect to the Central Bank, its monopoly over the purchase and sale of foreign currency was eliminated, and its functioning was designed as an independent central bank (Law 32 of 1992)².

Regarding the financial sector, Laws 45 of 1990 and 35 of 1993 redefined the role and structure of the financial system. Among other things, these laws simplified the entry and exit rules, established a scheme close to universal banking aimed at reducing specialization, and introduced more strict prudential regulation. The main idea of the reforms was to introduce more competition among the financial intermediaries in search for higher efficiency, and lower spreads and lending rates.

As a result of the reforms, the process of re-privatization of the institutions that were nationalized following the financial crisis of the early 1980s gained momentum. In addition, there was an increasing access of Colombia's businesses to external credit and the foreign direct investment in the financial sector was encouraged.

III. FDI in the financial system

1. Background

The seventies and eighties in Colombia were a period of severe restrictions to foreign investment in general, and most particularly to that directed to the financial sector. The Decree Law 444 of 1967 gave the Government a set of tools to channel FDI towards the sectors considered "a priority for the economic development". This meant that during years

² Complementary policies were undertaken to rationalize the public sector, improve transport infrastructure,

no foreign investment was approved in the financial sector. Later, the Law 75 of 1975 applied to the financial sector the Decision 24 of the Andean Pact. By this rule, the foreign banks were compelled to become joint ventures in a period no longer than three years. It was established that at least 51% of the property had to be in hands of Colombians and limits were established on the reinvestment and external transfers of profits.

In practice, the conversion to joint ventures was obtained without the foreign investors relinquishing the control of their institutions, the financial joint ventures didn't increase their capital and their relative size increased. All of this was contrary to the initial intention of the government to avoid a further portion of the domestic savings to be under the control of foreign hands³. Furthermore, the direct foreign investment inflows in the financial system completely stagnated. According to the figures presented recently by Barajas et al., on average, the inflows of foreign investment in the financial system as a portion of the total foreign investment in the country decreased from 23% between 1975-1979, to 7.4%, 4.5% and -3.9% in the following five-year periods, respectively. As a portion of the GDP the magnitude of these flows was negligible. During the crisis of the 1980s, the banks with shared property between nationals and foreigners had on average a slightly better performance than local banks⁴.

2. Liberalization in the 1990s and results

As stated before, at the beginning of the 1990s the restrictions on foreign investment in Colombia were significantly reduced. Law 9 of 1991 made possible the greatest transformations. This law established the foreign exchange principles upon which the government designed the statute of foreign investment: (i) the equality of treatment between nationals and foreigners and equal opportunities of investment; (ii) the universal access to all the sectors of the economy; and (iii) the automatic authorization for the

support programs of business renewal and define a general framework for foreign investment.

³ Barajas et al. 1999. p.160.

⁴ In 1985, the capital-asset ratio of the domestic banks was 4%, while the joint venture banks maintained levels near to 6%. In the same way, the percentage of non-performing loans in the domestic banks exceeded by more than double the percentage of the banks with foreign capital (17% vs. 6%, respectively). Differences

establishment of foreign investors in the country. For the financial sector this meant free entry of foreign investors to the country, all under the broader process of financial liberalization described above.

The institutional changes had a positive effect over foreign investment in the financial sector. The banks that had been of foreign property before 1975, and were transformed into mixed property banks in the second half of the seventies or eighties, became once again foreign owned banks. Foreign investors bought banks that had been nationalized during the crisis of the 1980s and others that weren't. Lastly, some banks entered Colombia for the first time. With this investment, the share of foreign banks in the total assets of the banks increased from 10% in the second half of the 1980s to more than 30% in 2000. The largest foreign banks are *Citibank* and the Spanish *Ganadero (BBV)* and *Santander*. These banks have similar businesses as the domestic banks. The Ganadero and Santander banks also have an extensive number of branches in the country. The rest of the foreign banks are significantly smaller and their main activity is investment banking⁵.

Barajas et al. (1999) recently performed a detailed evaluation of the role of foreign banks in Colombia's financial system. According to their descriptive analysis, foreign banks have less non-performing loans, less reserve requirements and are more productive than the domestic banks. Regardless of this, foreign banks don't appear to work with lower spreads, possibly benefiting from the lack of competition inside the financial system. However, based on an econometric analysis, the authors conclude that the lower administrative costs and the better quality of the loans in the foreign banks have allowed these banks to establish spreads slightly inferior than those of the domestic banks. Moreover, the largest improvements in the indicators of the foreign banks have been observed in the intermediaries that were formerly government property. As a consequence, these banks

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also existed in the average profits-asset ratio, even though they were negative for both groups. In the domestic banks was of -5% and in the foreign banks of -2%.

⁵ Some institutions don't have deposits from the public and most of them concentrate their risk by realizing depository and loan operations with triple-A sectors and multinationals. These types of institutions offer support to businesses oriented towards the international markets, related to commercial credit operations and the management of private foreign debt, and are involved actively in treasury management (e.g. the purchase and sale of foreign currencies).

have operated with lower spreads than the rest of the foreign banks. Finally and interestingly enough, the authors find that increased competition from foreign banks may have resulted in "increased risk and a subsequent deterioration in loan quality" of domestic banks (Ibid. p 157).

IV. Privatization

At the end of the 1980s, the financial intermediaries owned by the public sector represented around 40% of the assets of the entities of the credit sector. These intermediaries were classified into first floor and second floor intermediaries. The first floor intermediaries included a group funded with state-owned capital with a strong sectorial orientation, specially concentrated in the agricultural and livestock sector, as well as another group that became owned by the public sector during the financial crisis of the eighties. The latter maintained a balance structure similar to a private commercial bank's structure⁶. The second floor intermediaries comprised rediscount entities created during the 1980s with state-owned capital to focus on sectorial objectives, or intermediaries created to replace the functions that had been performed by the financial funds of the Banco de la República up to 1991.⁷⁸.

The privatization processes of the first floor credit establishments of the public sector took place between 1991 and 1996. The intermediaries that were privatized first, although not exclusively, were those who had been taken over by the government during the 1980s crisis⁹. After 1996, and especially since the financial stress episodes in 1998 and 1999, the state-owned share in the banking industry has been influenced by the transfer of ownership of some private financial entities to the public sector and by merger processes within public intermediaries. Currently, the only first floor financial entities that are still owned by the

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⁶ The Caja Agraria, Banco Cafetero, Banco Popular ad Banco Ganadero formed part of the first group while the Banco de Colombia, Banco de los Trabajadores, Banco del Estado, Banco del Comercio and the Banco Tequendama formed part of the second group.

⁷ The FEN and FINDETER belong to the first group, while the second group is formed by FINAGRO and Bancoldex.

⁸ As of 1991 Banco de la República was prohibited to assign credit to non-financial legal persons.

public sector are three commercial banks¹⁰ and a financial corporation that supports the manufacturing industry.

The aforementioned evolution is shown in Table 2. For the first floor banking, between 1990 and 1996 a pronounced decrease in the participation of public intermediaries occurred, both regarding the number of entities as well as in the assets value. That trend was mitigated from 1996 to 2001 due to the combined effect of the change of ownership of some entities and the mergers occurred within the state-owned banks.

V. Credit boom and financial crisis¹¹

Between 1991 and 1997 the Colombian financial system experienced an unprecedented credit boom. Total credit rose from 29.1% to 43.9% of GDP in that period (Graph 1). Deposits also expanded rapidly in the first part of the decade, climbing from a 25% of GDP in 1991 to 39.8% of GDP in 1997 (Graph 2).

Between 1998 and 1999 the system went through a deep deterioration of its solvency and profitability, as well as a sharp contraction in credit growth. During those years financial system losses reached US\$ 2514 million and net worth dropped by 31.1%. Credit annual real growth was -4.2% on average between 1998 and 2001 (Graph 3). The fall in the solvency ratios was related to the large increase in past due loans and non-performing assets, which reached historically high levels in this period (Graphs 4 and 5). Although the deterioration was widespread, the crisis was particularly severe in two sub-sectors of the financial system, namely the State-Owned banks and the Savings and Loans Corporations.

The roots of the boom and the crisis can be traced to the following: (i) the atypically pronounced business cycle undergone by the Colombian economy in the past decade, (ii)

⁹ The Banco de los Trabajadores, Banco del Comercio, Banco Tequendama, Banco Ganadero, Banco de Colombia and the Banco Popular were privatized during this process.

¹⁰ One of them specializes in the agricultural and livestock sector credit and the remaining two banks specialize in mortgage credit.

¹¹ Zárate Juan P. and Urrutia, Miguel. "La Crisis financiera de Fin de Siglo". Mimeo. Banco de la República, 2001.

several vulnerabilities present in the structure of the financial system at the time, especially in the abovementioned sub-sectors, and (iii) some failures of the supervisory and regulatory frameworks. These factors are discussed below.

1. Macroeconomic context

During the 1990s the Colombian economy experienced a complete business cycle in which GDP expanded rapidly between 1991 and 1995, and slowed down between 1995 and 1999 (Graph 6). In 1999 GDP actually dropped by more than 4%, the first contraction of output since the 1930s. This cycle was related to the capital flows that hit the economy throughout the period.

In the early 1990s most restrictions on international capital flows were lifted in the context of a broader reform program aimed at improving the efficiency of resource allocation and increasing competitiveness. A surge in capital inflows ensued as part of the phenomenon observed elsewhere in the region. In Colombia, most of these inflows took the form of private sector long term lending, privatisation revenues and, later in the decade, public sector external borrowing. In addition, there were large FDI inflows directed at the oil industry. These flows promoted a sharp increase in private spending and allowed a sustained upward trend in public expenditure. Public and private savings rates diminished and current account deficits mounted (Graphs 7, 8 and 9). The Colombian peso appreciated in real terms, as there was an expansion in demand for non-tradable goods, housing among them. Domestic credit provided by the financial system grew at record high rates and asset prices (real estate in particular) experienced a bubble (Graphs 3 and 10).

As a result of these events, both public and private domestic and external debt rose sharply, leaving the economy vulnerable to a fall in income or a shortfall of external financing. As for the financial system, the number of financial intermediaries went up from 91 between 1986-1989 to 148 in 1995, and both deposits and loans surged, since the capital inflows were not completely sterilized. As it has been regularly observed in other episodes, fast

rates of credit expansion were coupled with a deterioration of the quality of credit allocation, thus increasing the vulnerability of the economy.

Between 1997 and 1999, there was a reversal in capital inflows and a sharp decline in its terms of trade (Graphs 11 and 12), which induced an abrupt correction of aggregate expenditure and the current account deficit. A large real depreciation ensued, real interest rates reached near-record high levels while output fell by more than 4% in 1999, as mentioned above (Graph 13). Asset prices dropped and, in particular, real state prices fell by more than 27% in real terms between 1995 and 1999.

The reversal in capital flows affected the financial system initially through a reduction in liquidity (as the Central Bank defended the exchange rate band) and an increase in the cost of funds. Later, the rise in the real interest rates and the economic slowdown caused a decline in the quality of the loan portfolio and the solvency ratios (Graphs 4 and 14). These indicators started to worsen as early as 1995, but they deteriorated deeper in 1998. The increased credit risk perception and the larger pressure of the public deficit domestic financing produced a credit crunch throughout 1999-2001¹². There was a shift in the composition of the banks' assets towards government bonds and away from loans (Graph 15).

The impact of the downturn on the financial system through the interest and devaluation risks was less important and indirect. For once, most of the lending rates were linked to the deposit (90 day CD) rates, thus mitigating interest rate risk. The exception in this regard were the Savings and Loans Corporations, whose case will be described in some detail later. Furthermore, Central Bank regulation prevented the financial intermediaries from net exposure in foreign currency. Hence, the effect of the devaluation on the system occurred by way of a climb of the credit risk of those non-financial borrowers directly exposed in foreign currency.

¹² Barajas et al. "¿Por qué en Colombia el crédito al sector privado es tan reducido?". Borradores de Economía # 185. Banco de la República. 2001.

As mentioned before, the state-owned banks and the Savings and Loans Corporations were particularly hard hit by the crisis. These sub-sectors were characterized by structural vulnerabilities that impaired their ability to face the external shock adequately. Their cases are discussed now.

2. Savings and Loans Corporations

a. Background

An important feature of the Colombian financial system in the last three decades was the existence of a relatively large subsector of savings and loans corporations called *Corporaciones de Ahorro y Vivienda* (henceforth CAVs) which specialized in long term mortgage and construction financing. CAVs were created in 1972 as an element of a strategy aimed at promoting economic growth throughout construction as the leading sector. They were in charge of providing inflation-indexed long term loans for construction projects and housing acquisition which they financed by means of inflation-indexed sight "saving" deposits and short term CDs for financing. Hence, from the outset there was a liquidity risk embedded in the design of these institutions. Such a risk, however, was dealt with through several "privileges" granted to CAVs:

- They were the only financial intermediaries authorized to offer saving accounts with non-negative real rates of return (other intermediaries could offer saving deposits with fixed interest rates below inflation). In a long term moderate inflation environment, this privilege gave in practice the quasi-monopoly of saving deposits to these institutions and guaranteed some stability to their liabilities.
- They were given special unrestricted and permanent access to a Central Bank facility ("FAVI") which provided liquidity in case of deposit shortfalls and absorbed excess liquidity from CAVs.

On the assets side, CAVs were restricted to lend exclusively to the construction and housing sectors. Even their short term investments were restricted to be held in FAVI liabilities. Their capital requirements were lower than those of other intermediaries, on the belief that their loan portfolio had the "real" collateral represented by the fixed assets they financed¹³. Caps on the "real" interest rates of loans and deposits were in place throughout the existence of these institutions.

The CAVs system functioned smoothly for more than 20 years. Sight saving deposits were a stable source of funding and CAVs became leaders in the transactional system, providing depositors with a large network of ATM and branches nationwide. They became an important sector in the financial system. Their share of total financial system assets went from 9.6% in the 1970s (4.1% of GDP), to 16.7% in the 1980s (8.2% of GDP) and to 23.2% in the 1990s (14.1% of GDP). The CAVs also weathered well the financial crisis of the 1980s, which affected mainly the commercial banks.

However, the privileges granted to the CAVs introduced a long term distortion in credit allocation, reflected in the fact that in the past 25 years 28% of total financial system deposits were channelled through government intervention to finance the construction sector, which has represented merely 4.1% of GDP or 5.5% of the gross value of production.

On the other hand, once the process of liberalization of the financial system was on its way since the early 1980s, the privileges enjoyed by the CAVs started to weaken. In 1981 the interest rates on CDs issued by financial intermediaries were freed. Thus, CAVs suffered competition in the deposit side and their liquidity problems ensued,

equalized at 12 and in 1993 they were reduced to approximately 11.

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¹³ The difference between capital requirements for mortgage and construction loans was also present in the Basle guidelines. For most of the 1980s, the required liabilities/net worth ratio was around 25 for the CAVs, while commercial banks had a requirement of 10. After 1991, the required risk-weighed assets/net worth ratio was 14 for CAVs and 12 for commercial banks. In 1992 the ratios for both types of intermediaries were

since any rise in the CDs real interest rate meant a substitution of CAVs savings deposits for CDs issued by other intermediaries¹⁴.

b. Liberalization and crisis

The financial liberalization reforms of the early 1990s substantially changed the institutional arrangement surrounding the CAVs. Their quasi-monopoly of the saving deposits was eliminated (other intermediaries were allowed to offer savings deposits with market rates), as well as the restrictions on their loan portfolio and the loan portfolios of the other intermediaries. FAVI was dissolved and most financial institutions were left on equal standing in terms of their access to restricted, transitory and costlier LOLR facilities at the central bank¹⁵. Higher capital requirements were established in 1989 for all institutions and the Basle guidelines were adopted afterwards.

At the same time, CAVs shared the credit expansion phase of the business cycle examined before, and financed a construction and housing boom in which real state prices skyrocketed.

At this point, the seeds for a crisis in the CAVs sector had already been planted:

• First, despite the fact that in 1994 the indexation formula for saving deposits and CAVs loans was defined as a fraction of the 90 day CD rates, competition on the deposit side forced them to rely more on indexed and peso-denominated CDs. The latter proved to be a costlier and less stable source of funds. Hence the interest rate and liquidity risks increased. This phenomenon plus the rise in interest rates prompted by the tightening of monetary policy in 1994 resulted in a sharp increase in the cost of funds for the CAVs. Their initial response was to raise the

One of the main reasons for the elimination of FAVI was that it weakened the control of the monetary aggregates by the central bank.

¹⁴ This was the reason why the indexation formula used to keep the "real" value of loans and deposits began to be partially linked to the CD nominal rates in 1988.

spreads on new loans¹⁶, but this led to a deterioration of the quality of the loan portfolio, especially after 1995, when the unemployment rate went up.

- The increased liquidity and interest rate risks were hard to deal with because of several reasons:
 - i. The market for instruments to hedge them (e.g. swaps) was not developed.
 - ii. Securitization of the loan portfolio was authorized and regulated as early as 1993, but it did not develop either. This was due to accounting, tax and regulatory factors, as well as lack of homogeneity of the securities issued and insufficient experience in securitization by the domestic financial intermediaries¹⁷.
 - iii. The macroeconomic environment did not support the diversification of the loan portfolio of the CAVs. The capital inflows, the high demand for real state and the asset price bubble prevented more aggressive diversification plans. Furthermore, the lack of experience of CAVs management in other credit markets, as reflected in the ex-post excessive growth of consumption and commercial PDLs, may have inhibited a faster diversification of the loan portfolio.
- The capital requirements for the CAVs turned out to be too low in terms of the ex-post observed volatility of the prices of collateral and the probability of a sectoral crisis. The provisions regime was clearly not adequate, even when compared with other Latin American countries.

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¹⁶ The loan contracts of the CAVs had fixed interest rates on the indexed stock. Hence, as the cost of funds rose, only the new loan contracts could be charged higher rates.

¹⁷ Avella (1998), *Las corporaciones de ahorro y vivienda. Itinerario y perspectivas*. Mimeo. Banco de la República.

 Some CAVs offered some kinds of mortgage loan contracts that allowed for initial high leverage ratios of their customers and increased credit risk in the future.

CAVs credit growth had slowed down since 1997, while PDLs had been rising fast since 1995. With the reversal of capital flows aggregate expenditure weakened and real state prices fell by more than 27% in real terms between 1995 and 1999. These events prompted a crisis in the CAVs and construction sectors. Increased unemployment and rising interest rates impaired the repayment ability of borrowers¹⁸. At the same time, falling collateral prices may have induced borrowers to renege on their debts and hand in their property to the CAVs.

The results were appalling. Real mortgage credit growth from CAVs went down from 12.7% in 1997 to 0.3% in 1998 and -11.8% in 1999. The PDL to total loans ratio for CAVs rose from 8.7% in 1997 to 13.3% and 22.1% in 1998 and 1999, respectively, compared to ratios of 7.1%, 10.7% and 13.8% for the financial system in the same years. The solvency ratios were 10.6%, 8.7% and 8.7% for CAVs in those years, while the figures for the financial system were 12.4%, 10.6% and 11% in the same period.

c. The policy response

The response of the authorities to the crisis in the CAVs system was to establish a relief program for borrowers in good standing, through loans with softer conditions. Later the Constitutional Court issued crucial rulings that changed completely the structure and perspectives of long term housing finance. First, the Court reduced the interest rates on *outstanding* mortgage loans and instructed the Board of Directors of the Central Bank to establish a maximum rate for mortgage loans in the future. Second, the Court detached the indexation formula for mortgage loans from the market interest rate and ruled that it must be based only on observed inflation. At the same time, it prohibited the use of composite real interest on mortgage loans. Third, the Court forced a

¹⁸ Recall that the indexation formula for CAVs loans was linked to the 90 day CD rate.

recalculation of the mortgage debt balances using inflation instead of the interest rate as the parameter for indexation since 1993 (a period of relatively high real interest rates), thus reducing in practice the size of the debts¹⁹. In none of the above rulings did the Court distinguish between good standing and delinquent borrowers.

The intervention of the Constitutional Court produced important distortions in the long term mortgage and construction financing markets. First, it created a precedent by which debt reneging could be protected by the judicial system. The contractual uncertainty stemming from such rulings is possibly one of the factors withholding the recovery of mortgage loans. Second, it forced CAVs to assume all the interest rate risk. A new "Housing Law" was passed to address the challenges posed by the crisis and the rulings of the Constitutional Court, but the mechanisms introduced in it have not begun to work yet²⁰. Other instruments like a public fund to insure the interest rate risk on part of the mortgage loan stock and a securitization program are being implemented today.

d. Lessons and challenges ahead

The CAVs experience is an example of a financial sub-sector whose structure and regulation after liberalization was not compatible with the more volatile economic environment that followed the increase in the size and variability of international capital flows. The CAVs system was undercapitalized, especially when the ex-post behaviour of real estate prices is considered. The amplified interest rate and liquidity risks embedded in the old CAVs structure could not be managed through market mechanisms in the context of liberalization and large capital flows, simply because the relevant markets or their underlying institutions did not exist. These markets as well as a low and stable inflation environment are essential for the provision of long term credit for construction, housing or any other sector, if government intervention in credit allocation is to be kept at a minimum.

¹⁹ The government provided a subsidy to cover the resulting losses of the CAVs. The subsidy was financed with a tax on the financial system, collected through mandatory investments.

²⁰ The Law included, in addition, tax incentives to the holders of "mortgage bonds", which were intended to be the funding source of mortgage loans.

3. State-owned banks

a. Behavior of the state-owned banks²¹

State-owned financial institutions have characteristically maintained efficiency and performance indicators lower than those of the private sector. This behavior could be attributed to the fact that, because of its nature of state-owned institution, its objectives are not necessarily the same as those of private banks. However, this does not seem to be the case for most of the state-owned intermediaries during the nineties. Only one bank, the Caja Agraria, had functions that differed from the private intermediaries.

Deficiencies within public banking were mainly due to inadequate allocation and follow-up of its asset portfolio, which derived in its own deterioration, and to high inefficiency in its labor and administrative costs. These factors were reflected in profitability levels extremely lower than those shown by their counterparts within the private sector. Graphs 16, 17 and 18 show the behavior of some indicators that confirm the deficient performance of the sate-owned banking regarding the previously mentioned aspects.

b. State-owned banks during the financial crisis

During the crisis, state-owned banks performance showed an even more pronounced deterioration than that of the private sector as a whole (Graphs 16, 17, 18 and 19). This led to a pro-cyclical behavior and generated strong pressure upon public finances. Among the reasons explaining the higher vulnerability and the accelerated deterioration of the state-owned banks are the following:

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²¹ The financial intermediaries owned by the public sector are taken into account for the following analysis between 1992 and 1996. For more recent dates the information of the public intermediaries is used for each period of time.

- The incentives facing the managers of these banks did not lead them to maximize profits, but the size of their loan portfolio. This resulted in high operational costs (excessive number of employees or office branches) and inadequate credit allocation, granting resources to agents or projects with higher marginal risk or which were more sensitive to changes in the economic context. Usually the higher risk of these loans was not correctly priced (i.e. the interest rates dis not reflect it –Table 3). Also liquidity risk was underestimated and public banks relied on short term liabilities more than private banks did (Table 4). Public shareholders found costly to monitor these actions by managers.
- Under-capitalization of the public entities, which did not take advantage of the positive macroeconomic context present prior to 1997, to strengthen their net worth²².

Liquidity problems were added to these vulnerabilities since mid 1998. Deposits fell due to the loss of confidence of institutional investors and the public in general, since a fast deterioration of the solvency conditions of these entities was observed²³. The contraction of liquidity and the accumulation of losses caused loans to fall faster in the state-owned institutions than in the system as a whole (Graph 19)

c. Government measures and the fiscal cost of intervention

Government intervention in the solution of state-owned banks crisis focused in performing an adequate assessment and qualification of their assets, withdrawing assets with low probability of collection from the balance sheets, and capitalizing the entities with fresh resources in order to guarantee their solvency and feasibility. Similarly, a merger process of the different entities was initiated, suppressing the intermediation activity of those entities that were not considered to be feasible. It was expected that the banks resulting from the

²² "Memorias del Ministro de Hacienda". June 2000

²³ "Memorias del Ministro de Hacienda". June 2000

mergers would be privatized, leaving the Banco Agrario de Colombia (founded in 1999) as the only state-owned first floor bank, in charge of the duties of the former Caja Agraria.

This process faced considerable problems stemming from the difficulties in identifying the quality and price of the state-owned banks' assets, and from the fiscal pressures implied by the injection of fresh resources to the public banks. In fact, the estimated resources needed to restructure the public intermediaries increased as new assessments were performed of the asset quality, and as the losses quickly absorbed the net worth of the banks, which placed them in risk of being intervened or liquidated by the corresponding agents. The government faced this problem by performing partial capitalizations before knowing the true value of the whole asset portfolio of the institutions and by applying differential regulation for stateowned banks that allowed future government commitments to replace the net worth.

Due to the fiscal difficulties, the capitalization of public intermediaries had to be done through government bonds. Initially these bonds did not have much liquidity in the secondary market, limiting the ability of the capitalization to face the liquidity and financial problems of the entities. These problems subsided over time as the liquidity of the bonds increased.

The fiscal costs of the government intervention resulted from the need of resources to cover losses, to capitalize those banks that continued to operate and to perform the liquidations of other banks. An estimate of the expenses by the government is \$7.45 billion^{/TN} of year 2000 (equivalent to 4,4% of the GDP)²⁴. As it usually happens with these estimates, the final net cost of the intervention depends on the value of the recovered low quality assets. Unfortunately, this process has been very slow, so that a reliable estimate of such income is not yet available.

d. Lessons

[/]TN (In Spanish one billion is equivalent to 1,000,0000,000,000) ²⁴ "Memorias del Ministro de Hacienda". June 2000

- Due to an inadequate design of incentive schemes and to high monitoring costs within the state-owned banks, their performance was systematically poorer than that of the private banks carrying out basically the same duties.
- During the years of financial stress, the state-owned banks' indicators deteriorated
 more than the private banks'. This led to the appearance of liquidity and solvency
 problems that caused a pro-cyclical behavior of credit, and generated a high fiscal
 cost during especially difficult macroeconomic circumstances.
- The squandering of resources caused by the inadequate operation of the state-owned banks and the possibility that fragile state-owned banks would deepen the recessive phase of the cycle calls for special caution when creating or keeping state-owned financial intermediaries in the future. On the contrary, more efficient and transparent mechanisms for intervention shall be established should state intervention be desirable.

4. Failures of the regulatory and supervisory framework

Among the main failures in the regulatory and supervisory framework, the following deserve to be noticed:

- As mentioned before, the regulation of CAVs was plagued with problems regarding, low capital requirements, an insufficient provisions regime, lack of regulation regarding the treatment of the changes in collateral prices, and the non-exiistence of capital requirements to cover the pervasive inerest rate risk.
- The Bank Superintendency's treatment of public banks was more lenient than that of the private institutions. For example, the Superintendency admitted management plans to substitute capital requirements for public banks. Also, a public bank was allowed to operate for a long time without reporting its financial statements.

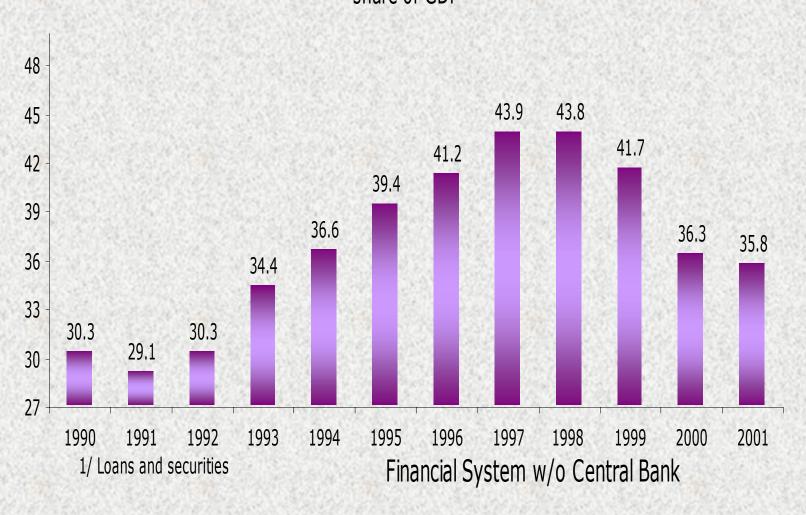
During the 1990s, there were failures in the supervision of the intermediaries specialized in the provision of consumption credit. Some of these institutions were "financial cooperatives", and thus were not subject to the minimum regulatory requirements applied to "formal" financial intermediaries. For the same reason, their supervision was not assigned to the Bank Superintendency, but to another agency with lower capacity for surveillance and control. Other consumption credit-oriented intermediaries were indeed formal financial institutions, but given their reduced size, fewer resources were destined to their surveillance, resulting in poor quality supervision.

VI. Conclusions

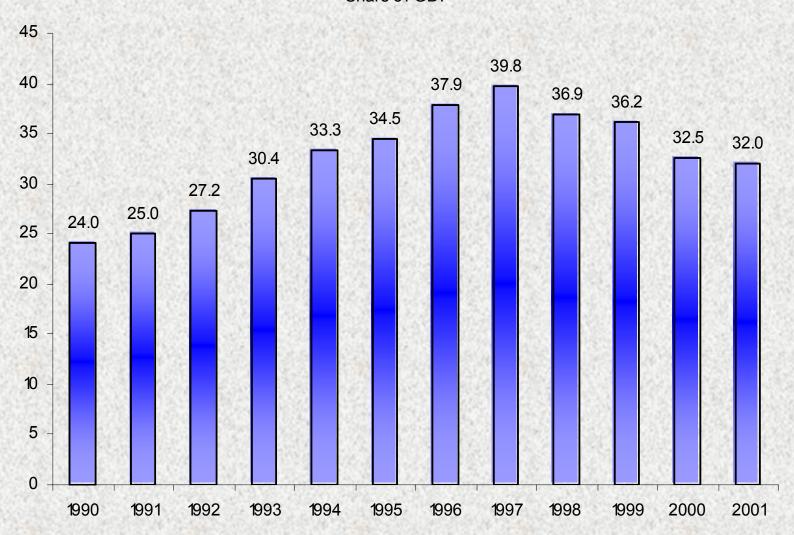
- The rapid structural change undergone by the Colombian financial system in the
 past decade was the result of the following sequence of events: Financial
 liberalization, foreign direct investment, privatization, and the credit boom and
 crisis prompted by the capital flows and the vulnerabilities of specific sub-sectors
 (Savings and Loans Corporations and State-Owned Banks).
- Liberalization and FDI seemed to have had a generally positive effect on the Colombian financial system, since they increased competition, reduced intermediation costs and improved the quality of loans in some cases. There is some evidence that increased competition by foreign banks may have deteriorated the loan quality of domestic banks.
- Capital flows caused large fluctuations of aggregate expenditure throughout the decade. Credit expanded rapidly in the context of a liberalized and growing financial sector. The rise in aggregate demand was reflected in an increase of the relative prices of non tradable sectors. Real estate prices soared. A reversal in capital flows produced a sharp contraction of expenditure and output, and a financial crisis ensued. The crisis produced a "credit crunch" from which the financial system is just starting to come out.

- The Savings and Loans Corporations were a sub-sector of the financial system that enjoyed privileges under the pre-liberalization regime. Liberalization implied the elimination of those privileges, leaving these intermediaries with large liquidity and interest rate risks that were not covered with higher capital requirements. Capitalization was also insufficient to absorb the risk involved in the volatility of asset prices (the value of collateral) that followed the wide fluctuations in the capital account of the balance of payments.
- Capital outflows produced initially a liquidity "crunch" for the S&Ls and a rise in real interest rates. The latter coupled with the fall in output precipitated a deterioration of the quality of the loan portfolio. Also, the sharp drop in real estate relative prices may have induced several borrowers to default.
- The response of the State (particularly the Constitutional Court) to the S&Ls crisis may have created serious moral hazard problems that could endanger the provision of long term credit in the future. The provision of long term credit may also be affected by the inadequate development of the instruments required to hedge the interest rate and liquidity risks embedded in the design of mortgage banks.
- Due to an inadequate design of incentive schemes and to high monitoring costs
 within the state-owned banks, their performance was systematically poorer than that
 of the private banks carrying out the same duties. Managers sought to maximize the
 size of their loan portfolio at the expense of credit and liquidity risks, and
 efficiency.
- There has been a consolidation of the financial system after the crisis through a process of mergers and liquidations. The number of intermediaries has decreased and nowadays there are almost as many intermediaries as before the liberalization process. Nevertheless, the current concentration of the financial system is lower than that of similar countries. Conglomerates play a bigger role in financial intermediation than before the crisis.

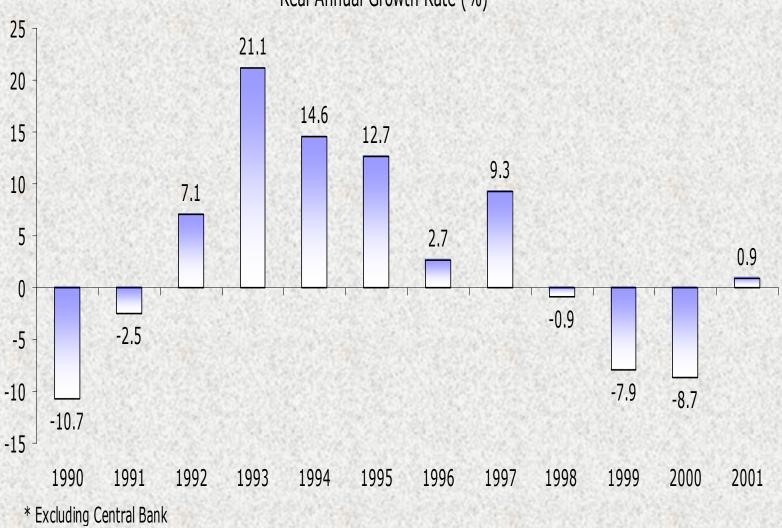
Graph 1
FINANCIAL SYSTEM TOTAL CREDIT¹
share of GDP



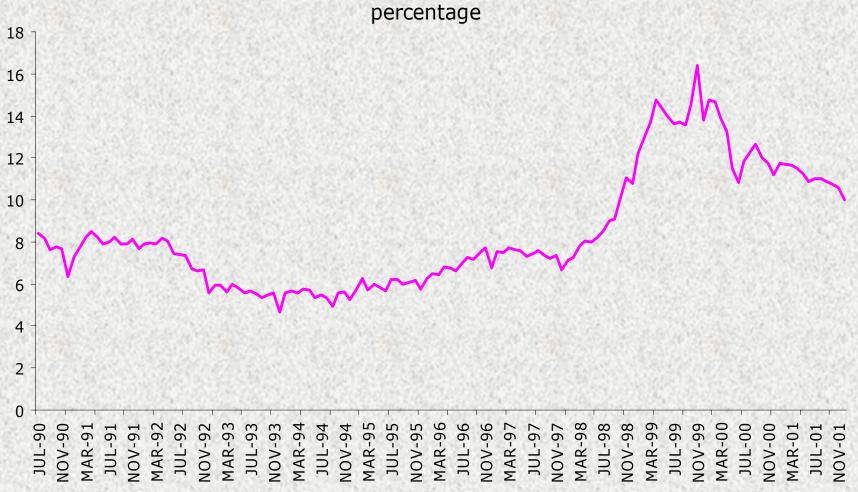
Graph 2
FINANCIAL SYSTEM TOTAL DEPOSITS
Share of GDP



Graph 3
Financial System Total Credit*
Real Annual Growth Rate (%)



Graph 4
Financial System*
Past Due Loans / Total loans
percentage



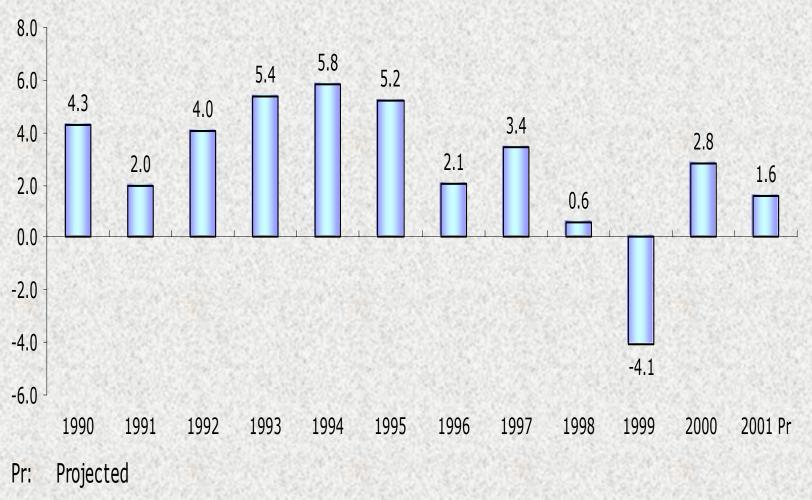
^{*} Excluding Central Bank

Graph 5
Financial System*
Non-Performing Assets / Total Assets
Percentage

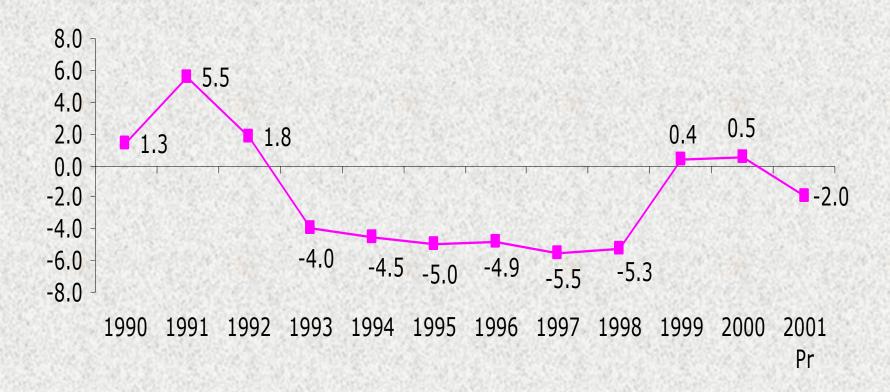


^{*} Excluding Central Bank

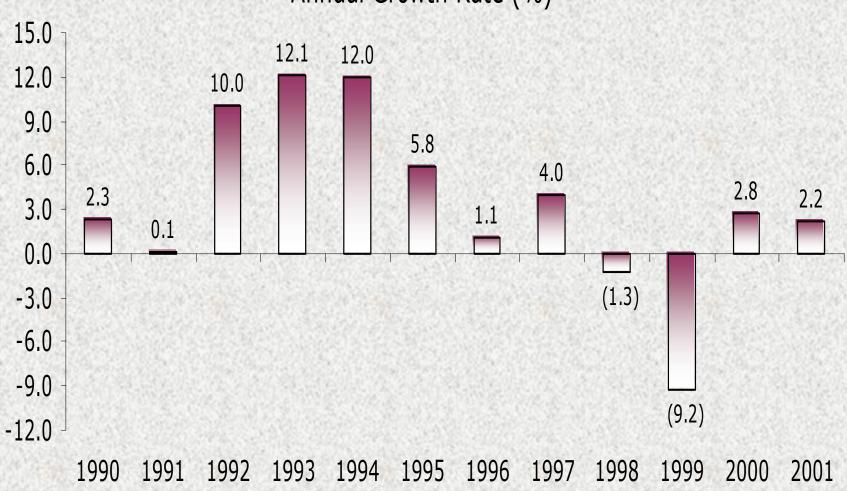
Graph 6
COLOMBIA's GDP
Annual Growth Rate (%)



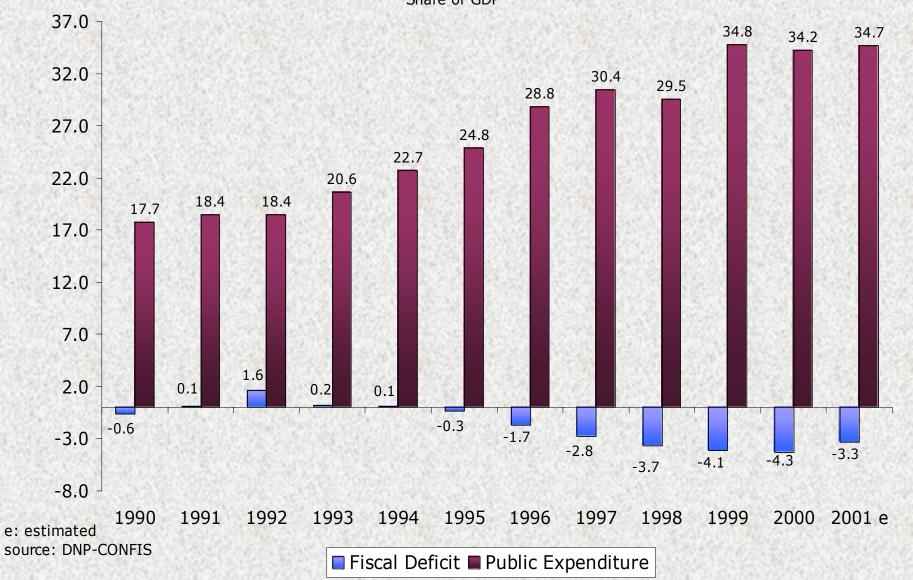
Graph 7 CURRENT ACCOUNT Share of GDP



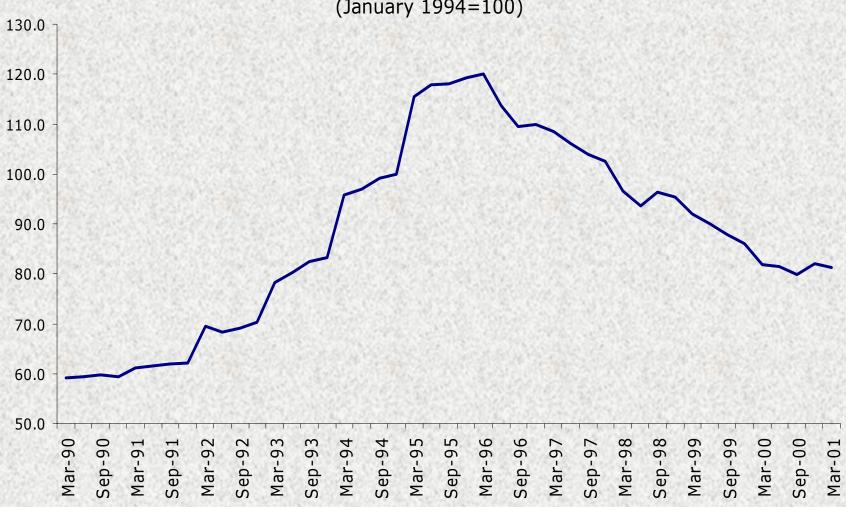
Graph 8
DOMESTIC DEMAND
Annual Growth Rate (%)



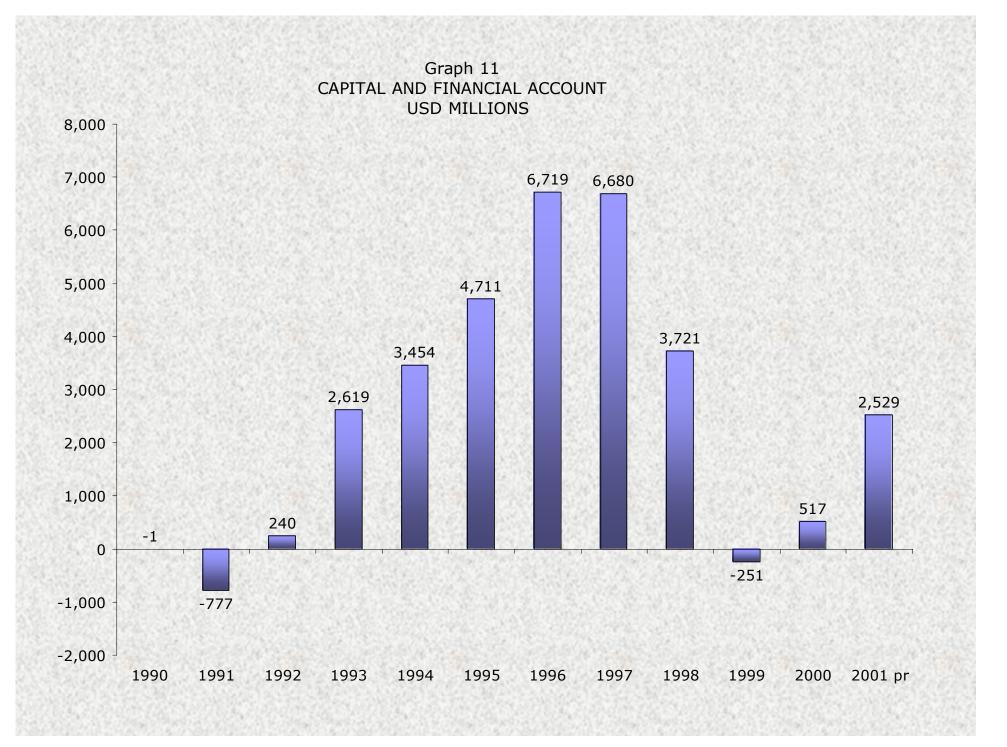
Graph 9
NON FINANCIAL PUBLIC SECTOR:
FISCAL DEFICIT AND PUBLIC EXPENDITURE EXCLUDING INTEREST PAYMENTS
Share of GDP



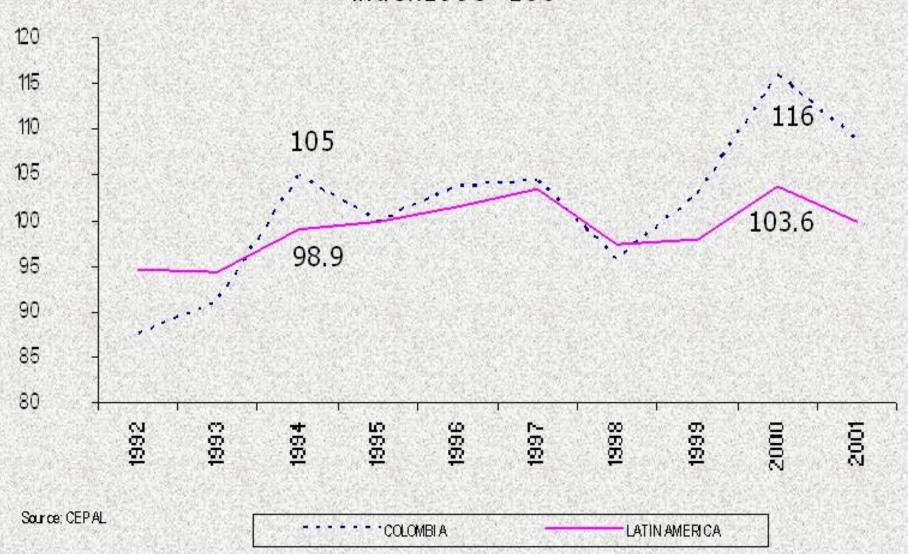
Graph 10
Relative Prices for Real Estate
(January 1994=100)



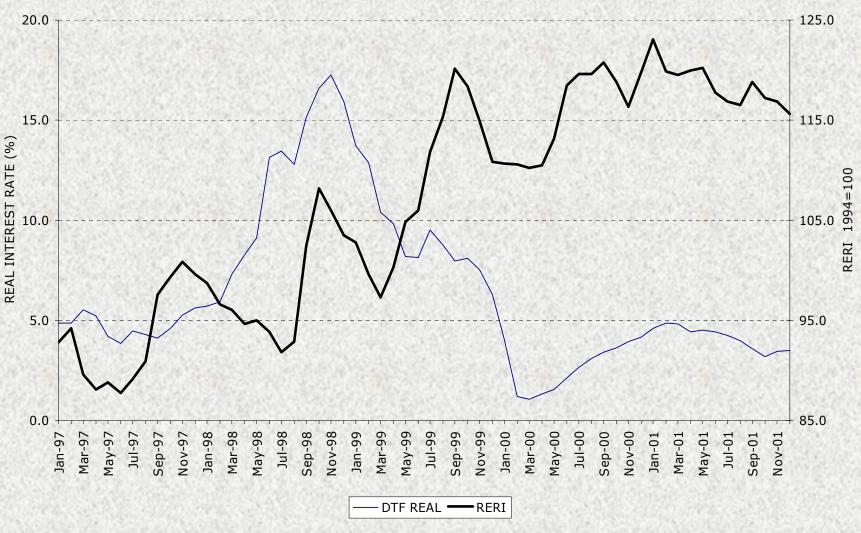
Real Estate Index / Consumer Price Index



Graph 12
TERMS OF TRADE FOR LATIN AMERICA AND COLOMBIA index1995=100



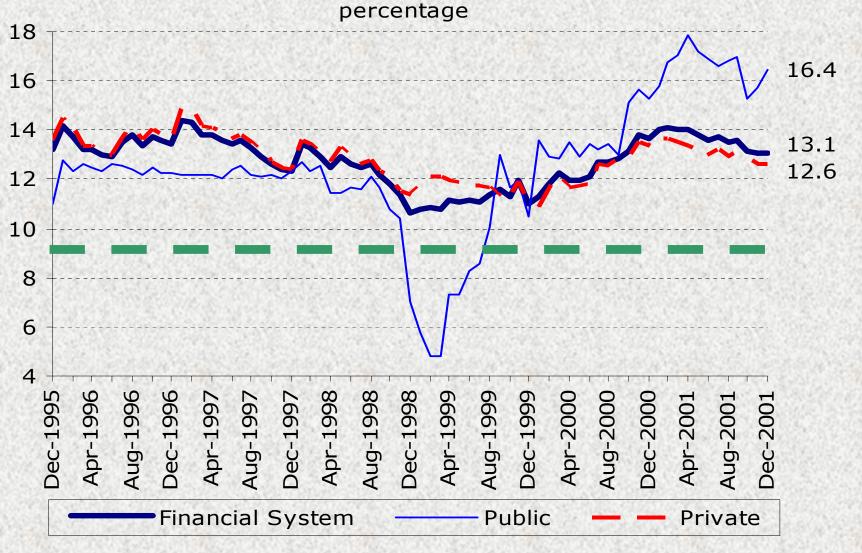
Graph 13
REAL EXCHANGE RATE INDEX (RERI) 1 Y REAL INTEREST RATE (DTF) 2



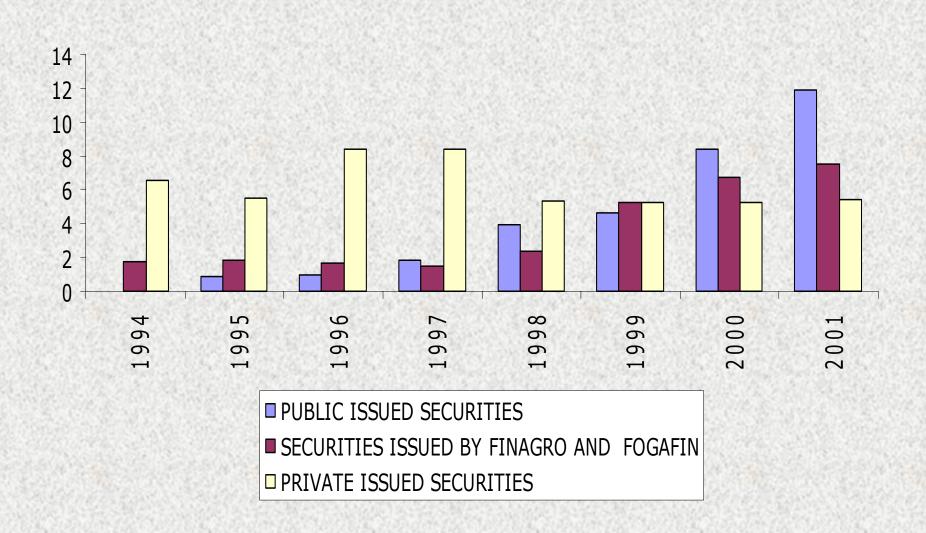
1/ RERI 1994=100, deflacted with PPI, weights: non traditional trade

2/ DTF: deflacted with CPI

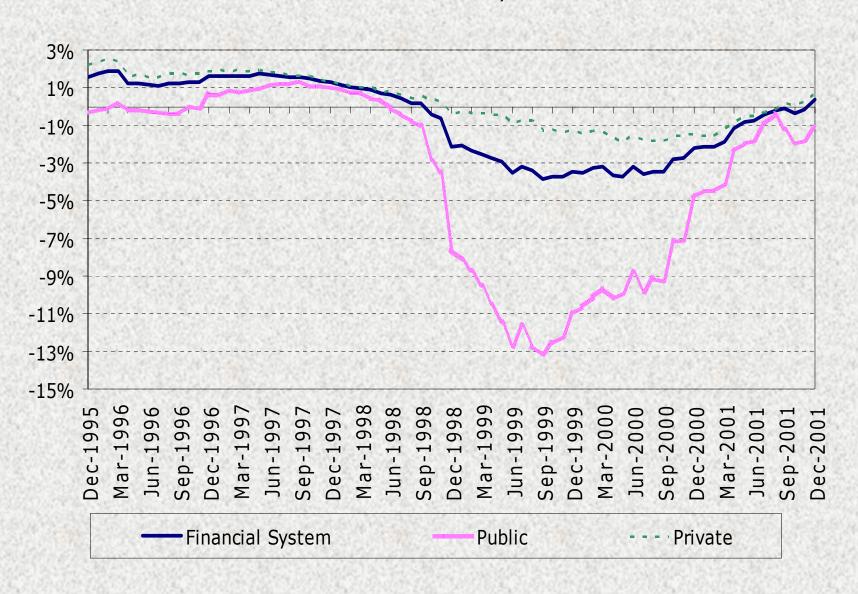
Graph 14
EQUITY / RISK-WEIGHTED ASSETS
percentage



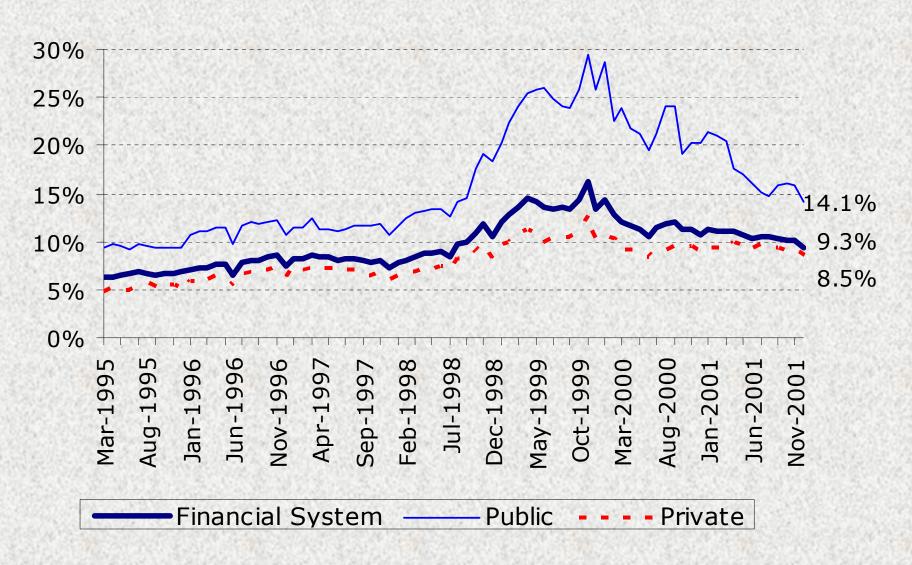
Graph 15 Share of Private and Public securities in total assets (percentage)



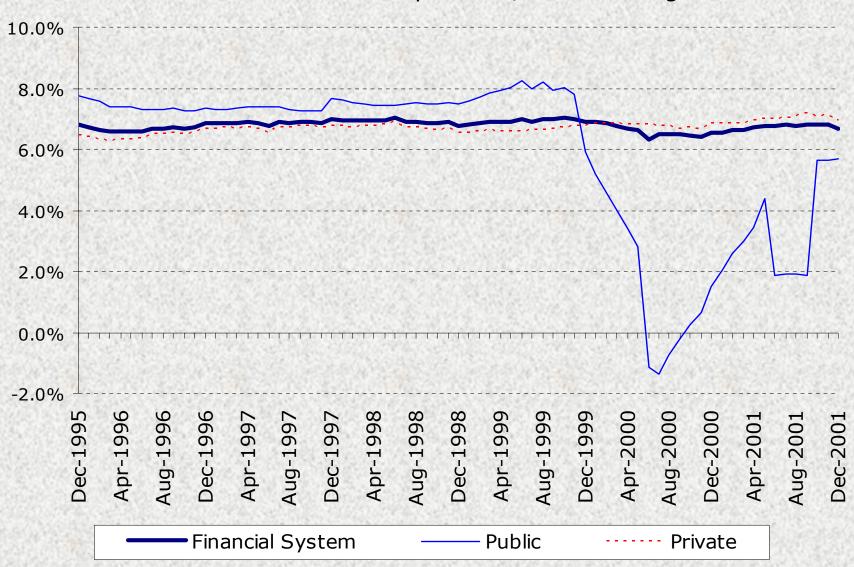
Graph 16 Assets Profitability



Graph 17
Past Due Loans/ Total Loans



Graph 18
Administrative and labor expenses / Total Average Assets



Graph 19
Gross Loans
Annual Growth rate (%)

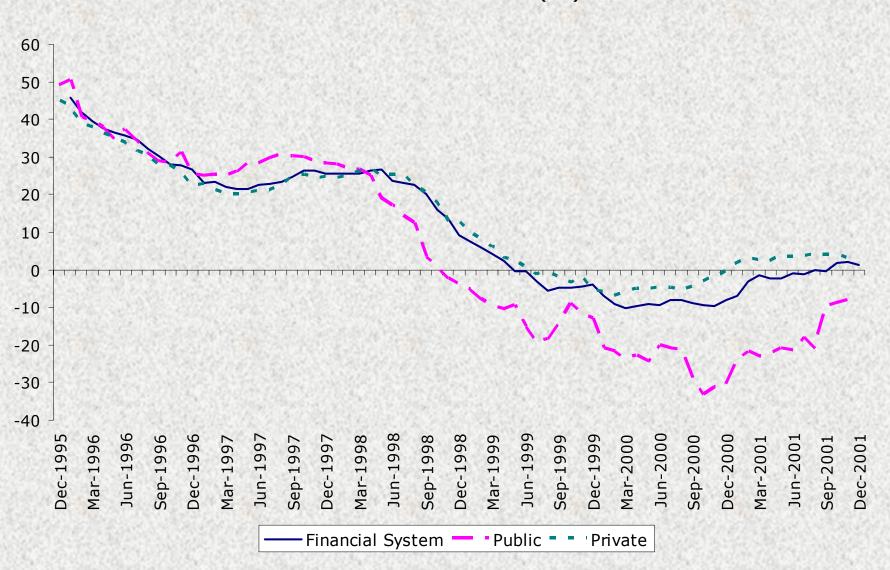


Table 1
Colombia's financial system in the 1990s

	Total				Banks						
			10191		Private domestic	Private foreing	State- owned	Savings & loans		Other	
	no	Assets ¹	no	Assets ¹	Assets ¹	Assets ¹	Assets ¹	no	Assets ¹	no	Assets ¹
1986-89	91	45.6		29.7	9.1	1.2	19.5		7	117	8.9
1990	135	64.5	26	29.9	14.1	2.3	13.5	10	10.5	99	24.1
1995	148	67.8	33	34.3	18.6	7.2	8.5	9	14.4	106	19.2
2000	105	61.4	35	33.6	20.3	7.7	5.6	6	11.9	64	15.9
2001	86	52.9	29	25.9	12.8	7.8	5.2	5	8.7	52	18.3

¹ As a percentage of GDP

Source: Superintendencia Bancaria

Table 2
Partipation in the financial system (% of total assets)

		Bar	Savings &				
	Total	Private	Private State-		loans	Other	
	Total	domestic	foreing	owned			
1986-89	65	20	3	43	15	20	
1990	46	22	4	21	16	37	
1995	51	27	11	13	21	28	
2000	55	33	13	9	19	26	
2001	49	24	15	10	16	35	

Table 3
IMPLICIT LENDING RATE

	1997	1998	1999
Private Finan. Institutions	27.67%	27.27%	25.36%
Public Finan. Institutions	24.51%	25.34%	21.61%
Total Financial System	27.31%	27.05%	24.85%

TABLE 4
Structure of Deposits of Private and Public Banking Institutions

	1996		19	1997		1998		1999		2000		2001	
	Public	Private											
INTERBANK FUNDS	1.8	11	3,4	4.9	7.5	5,5	19.5	4.7	13.1	6.6	6.4	5,9	
DEMAND DEPOSITS	43.3	35.5	41.8	25.7	24.0	18.3	19.4	19.1	18.5	24.1	23.5	21.5	
SAVING DEPOSITS	34.0	30.1	37.0	37.9	39.8	35.5	36.0	38.3	36.7	32.3	39.4	37.2	
TIME DEPOSITS	20.9	33.2	17.9	31.5	28.7	40.8	25.1	37.8	31.7	37.1	30.8	35.3	