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Research Department

A Survey of Economic Policies and Macroeconomic Performance
in Chile and Colombia, 1970-95

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Abstract

This survey describes the timing and main macroeconomic results of the ambitious structural reforms adopted by Chile in the middle and late 1970s and by Colombia almost a decade later in the late 1980s and early 1990s. These reforms have enabled both countries to maintain vigorous real growth rates during the first part of the 1990s. However, they face challenges to their competitiveness as their real exchange rates continue to appreciate and real unit labor costs have been increasing. Although their exchange rate management system has helped to avoid an excessive inflow of short-term capital, interest rate differentials keep exerting pressures. Structural reforms have helped attract foreign direct investment, allowing the investment ratios of both countries to increase.

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Summary

This survey describes the timing and macroeconomic results of structural reforms adopted by Chile in the middle and late 1970s and by Colombia in the late 1980s and early 1990s. Although the two countries had similar exchange-rate management systems and wage and financial indexation, the timing and depth of their structural reforms have differed. These different approaches to establishing an open economy have not yet been evaluated, but the international debt crisis triggered by the Mexican exchange-rate difficulties in late 1994 and attendant fears of contagion effects make it prudent to re-examine the stance of external-sector policies in both countries. Particular attention should be given to export growth and debt-to-GDP ratios in the coming years.

While both countries experienced a severe decline in growth and productivity during the early 1980s, this trend reversed in the 1990s. Reforms enabled both to maintain, during the first part of the 1990s, vigorous real growth rates, averaging 6.3 percent a year in Chile and 4.4 percent in Colombia. These results compare favorably with the 3.3 percent average growth rate in both countries during the 1980s and slightly higher growth envisioned for the region in the near future. The acceleration of real growth was accompanied by an upward trend in labor productivity, which increased during the 1990s by an average annual 2.7 percent in Chile and 1.5 percent in Colombia. As a result of these positive shifts, both countries succeeded during the early 1990s in attracting foreign direct investment amounting to 2-5 percent of GDP a year.

Nevertheless, Chile and Colombia face serious challenges to their competitiveness as their exchange rates have continued to appreciate in real terms during the 1990s, as have their real unit-labor costs. Even though their exchange rate management systems have permitted both countries to avoid excessive reliance on short-term capital inflows, interest rate differentials induced by capital controls to exert pressure. Structural reforms have allowed the two countries to rely mainly on foreign direct investment and long-term debt financing to increase their investment ratios and sustain rapid economic growth.

I. Introduction

This survey describes the timing and main macroeconomic results of the ambitious structural reforms adopted by Chile in the middle and late 1970s and by Colombia almost a decade later in the late 1980s and early 1990s. The motivation for this long-term survey of economic policies and macroeconomic performance in Chile and Colombia during the years 1970-95 is twofold. First, although the two countries share important historical similarities in exchange rate management systems and wage and financial indexation, dating back to the late 1960s and early 1970s, the timing and deepness of each country's structural reforms have been different. The differences in approach to establishing an "apertura economica," or open economy, have not yet been evaluated. Second, the mini-international debt crisis triggered by the Mexican exchange rate difficulties in late 1994 and early 1995 and the attendant fears of possible contagion effects, make it prudent to re-examine the stance of the external sector policies in Chile and Colombia. Particular attention should be given to the export growth requirements to stabilize debt to GDP ratios in the coming years.

While Chile and Colombia both experienced significant declines in growth and productivity during the early 1980s, the trend was reversed in the 1990s. The reforms implemented in the period have enabled both countries to maintain vigorous real growth rates during the first part of the 1990s, averaging 6.3 percent a year in Chile and 4.4 percent in Colombia. These results compare favorably with the 3.3 percent average growth rate of both countries during the 1980s, and the 3.3-3.5 percent average growth envisioned for the region in the near future (IMF, 1995; World Bank, 1995). The acceleration of real growth was accompanied by a significant change in the labor productivity trend, and resulted in average increases of 2.7 percent a year in Chile and 1.5 percent a year in Colombia. As a result of these positive shifts during the late 1980s and early 1990s, Chile and Colombia have seen foreign direct investment inflows (FDI net) rise to 2-5 percent of GDP per annum.

Chile, however, still faces the challenge of consolidating a ten-year process of structural reforms, while Colombia must struggle to complement its recent "apertura" (opening) by developing the required infrastructure to boost export diversification and by implementing further reforms. Chile and Colombia have recently defined social spending and poverty reduction policies as part of their core socio-economic agenda. ^{1/} Both countries have extended and deepened (previously conceived) transient tax reforms in order to raise revenues, which would permit social expenditure to increase by nearly 1-2 percentage points of GDP. The institutional settings to accomplish these agendas include a commitment to finish restoring full democracy in Chile, and in Colombia to adopt the institutional and policy framework to be consistent with the new Constitution sanctioned in 1991, after modifying the country's 100 year old Charter.

^{1/} See "El Salto Social 1994-98" (Presidencia de la República-DNP) for an overview of the social goals in Colombia and for a recent assessment on poverty in Latin America, see World Bank (1994) and Psacharopoulos et al. (1992).

The main challenges under Colombia's recent constitutional mandate include: (i) finding the best and most expeditious way to decentralize public spending, in light of the increasing proportion of central government revenue (up to nearly 38 percent of total collections) that must be directly or indirectly allocated to local governments; and (ii) maintaining independence of the Central Bank, while assuring that coordination with the Government is consistent with macroeconomic stability.

Chile has apparently succeeded in working through the challenges now facing Colombia. First, given the relative size of Santiago, Chile's capital city, the municipalization of education and health that took place in the early 1980s was smaller in scope than what is needed in Colombia in the 1990s. 1/ Additionally, Chile's parallel adoption of a privately-run health system eased the pressure on government expenditures for health care. More recently, the increase in social expenditure of nearly one percentage point of GDP has been attended by similar increases in tax collections, including an extension of the tax reform. 2/ Second, with the administration that took office in March of 1990, full independence of the central bank of Chile was achieved, and there has been close economic coordination with the different branches of government, although there is no governmental representation on the five-member board of the Central Bank. 3/

The main conclusions of this survey can be summarized as follows:

(i) Chile has taken a lead by nearly 10 years with respect to Colombia, and with respect to many other Latin American countries, in effecting structural reforms. The trade, labor and financial reforms have been conducive to achieving sustainable economic growth in an environment of low inflation. However, in spite of improvements in the macroeconomic fundamentals, Chile experienced at least two serious setbacks during the reform process. First, inflation inertia undermined the nominal exchange rate anchor and led to overvaluation and to a financial crisis in 1982. Second, there was a marked slackening of growth in 1990 accompanied by an inflationary surge as the economy reacted to adverse commodity price shocks (oil, copper) and other external conditions. On the other hand, Colombia

1/ Santiago accounts for nearly 45 percent of Chile's population, whereas Bogota accounts for only 16 percent of Colombia's population.

2/ The Congress of Chile made permanent most of the extraordinary tax increase measures adopted in 1990, which were to expire in early 1994. In particular, the VAT rate stood at 18 percent during 1994-95, instead of reverting to the 15 percent level that prevailed in July 1990. However, the Executive Branch has been empowered to modify this rate by 1 percentage point in either direction.

3/ In Chile, the Minister of Finance has non-voting participation in the five member board of the Central Bank, while in Colombia the Minister of Finance currently chairs a seven-member voting board, including the Governor of the Central Bank and five additional members appointed by the President of the Republic.

has maintained stability in terms of high economic growth, but has not yet achieved a satisfactory disinflation--inflation continues at its long-term average of nearly 22 percent a year;

(ii) Although unemployment has been significantly reduced in Chile and Colombia, due to a combination of sustainable growth in an environment of flexible labor markets, competitiveness in both countries seems to be becoming more difficult to maintain as real wage demands begin to surpass the significant increases in labor productivity that have been realized. This tendency is also reflected in the recent appreciation of their real exchange rates, although the current level is still comparable to that reached at the end of the stabilization programs of the mid-1980s.

(iii) Finally, we have estimated that in order to stabilize the external debt/GDP ratio (net of international reserves) at the current levels of 20 percent for Chile and 17 percent for Colombia, the ratio (exports-imports)/exports (of goods and nonfactor services (GNFS)) should be maintained at a surplus of 4-5 percent, which is the required "exporting effort." In the case of Chile, according to the latest available forecasts, this goal looks feasible, but for Colombia, a gap of nearly 15 points is expected. As a consequence, it is likely that Colombia's debt indicators may deteriorate slightly, but given the current strong position (a net external debt/GDP ratio of only 17 percent), there is room to increase external indebtedness without jeopardizing debt stability. Furthermore, given recent oil discoveries in Colombia, which are boosting FDI to nearly 5 percent of the GDP, it is likely that increases in the external debt may turn out to be of a lesser magnitude than currently projected.

This paper is organized in five sections. In Section II, macroeconomic reforms and results in Chile and Colombia are reviewed. The real growth and productivity performances of the two countries are analyzed, and a historical compilation of their main structural reforms is presented, highlighting the time differences. Section III analyzes real wages, unemployment, and inflation behavior, focusing on the competitiveness issue. Section IV looks at the external sectors of the two countries. It tracks the behavioral pattern of the fiscal and current account deficits. The analysis is complemented with an assessment of the real exchange rate situation in Chile and Colombia, including a brief comparison with those of Mexico and Argentina. The section also analyses external debt stabilization requirements using a simple framework that allows quantification of the export growth performance needed to maintain relatively sound debt to GDP ratios. Section V summarizes and concludes.

II. Macroeconomic Reforms and Results in Chile and Colombia

1. Real growth and productivity performance

During the 1980s, Latin America's average rate of growth was 1.7 percent per year, which was significantly lower than the 4.8 percent rate achieved during the 1974-80 period, or the 6.4 percent observed during the pre-oil shock period 1966-73. Although there has been a significant recovery in the early 1990s, to a rate of 3.2 percent, for 1995-96 a slowdown is expected, with growth forecast to average only 2.4 percent (IMF, 1995; World Bank, 1995).

In most instances, Chile and Colombia have surpassed these regional averages, both recording 3.3 percent real growth during the 1980s and more recently in the 1990s 5.3 and 5.5 percent, respectively (see Table 1). Note that the growth performances of Chile and Colombia during the 1980s and 1990s were practically double the rates observed in the rest of Latin America. For Chile the period 1967-74 is anomalous, however, since its rate of growth averaged only 2 percent a year, while the region (including Colombia) grew at nearly three times this rate. The difficult years of 1972-75, when a marked change in political regimes took place in Chile, negatively affected growth during the period.

The recent acceleration in economic growth in Chile and Colombia is clearly related to the adoption of deep structural reforms, which are leading to an opening of their economies and have fostered a contemporaneous increase in labor productivity. As shown in Table 1, annual increases in labor productivity during the 1990s have averaged 2.7 percent in Chile and 1.5 percent in Colombia. These figures compare quite favorably with the contractions observed in the early 1980s; for example, during 1983-89, the average increase in labor productivity in Chile was only one percent a year and was zero in Colombia.

Figure 1 depicts the cumulative real GDP growth of Chile and Colombia from the 1960s to the present. Notice the recent rise in growth experienced by Chile as a result of the successful opening of its economy since the late 1970s. The compound growth rate observed in Chile since 1980 amounts to 4.5 percent a year, which surpasses the 3.8 percent rate observed in Colombia. However, if one considers that growth in Colombia has not declined in any year since 1960, and takes account of the serious growth disruptions Chile suffered during 1972-75 and again in 1982, the compound rate of growth for the period 1960-95 amounts to 4.5 percent a year for Colombia, while for Chile it is 3.8 percent.

2. Structural reforms

Figure 2 illustrates the year-to-year growth rates for Chile and Colombia for the period 1967-95 and summarizes the timing of structural

Figure 1. Chile and Colombia: Cumulative Real GDP Growth
(Comparisons from 1960's and 1980's)

Source: IMF, World Bank and Author's Calculations

Figure 2. Chile and Colombia: Growth and Structural Reforms Timing
(1967 - 1995p)

Table 1. Chile and Colombia: Real Growth and Productivity

(Annual rates of growth in percent)

Period Averages	Real GDP Growth			Labor Productivity	
	Chile	Colombia	Latin America	Chile	Colombia
Selected periods					
1981-89	3.3	3.3	1.5	1.0 <u>1/</u>	0.0
1990-95 <u>2/</u>	6.3	4.4	2.8	2.7	1.5
1993-95 <u>2/</u>	5.3	5.5	3.4	1.6	2.9
1953-66	5.0	4.6	...	...	1.6
1967-74	2.0	6.1	6.4	...	3.2
1975-80	4.1	4.9	5.2	...	1.0
Selected years					
1980	7.8	4.1	6.4	...	1.0
1981	5.5	2.3	0.4	...	-1.1
1982	-14.1	0.9	-0.8	...	-4.6
1983	-0.7	1.6	-3.0	-2.0	-4.4
1984	6.3	3.4	3.6	2.0	1.1
1985	3.5	3.1	3.5	-5.0	-0.7
1986	5.6	5.8	3.7	1.1	2.0
1987	6.6	5.4	3.3	1.2	-0.9
1988	7.3	4.1	0.8	3.4	0.7
1989	9.9	3.4	1.6	6.1	-0.7
1990	3.3	4.3	0.6	2.2	3.3
1991	7.3	2.0	3.5	4.2	-2.2
1992	11.0	3.8	2.7	4.9	-1.1
1993	6.3	5.3	3.2	1.5	1.9
1994 <u>3/</u>	4.2	5.7	4.6	1.8	4.1
1995 <u>2/</u>	5.5	5.5	2.3	1.5	2.9

Sources: IMF, World Bank, and author's calculations.

1/ Covers the period 1983-89 only.

2/ Projected.

3/ Estimated

reforms leading to the opening of their economies. 1/ Most of Chile's structural reforms occurred during the years 1974-79: (i) domestic financial markets were deregulated as early as May 1974, when interest rates were freed; (ii) foreign trade was liberalized in 1976, when all nontariff barriers on imports were lifted; (iii) import tariffs were progressively reduced to ranges of 0-35 percent by 1977, and to 0-10 percent by 1979 (with few exceptions); (iv) liberalization of the capital account included removal of restrictions on FDI in 1975, partial removal of those relating to private external investment in 1977, and on those pertaining to domestic banks' foreign investment in 1979 (although reserve requirements and limits on capital flows have remained in force most of the time to discourage short-term indebtedness); (v) liberalization of the labor market with the labor reform of 1979, which reduced uncertainty about dismissals and hiring costs and partially reintroduced collective bargaining (banned after 1973). This was later complemented with the well-known social security reform of 1981, which established the privately administered funded system. 2/

In Colombia, most of the structural reforms took place during the years 1989-93: (i) domestic financial reform scheduled to take place as early as 1975 had to be delayed because of disruptive financial flows caused by a coffee bonanza until 1980 when interest rates were freed; a more comprehensive deregulation of the financial system occurred only in 1990-93; (ii) foreign trade began to be liberalized in 1989, when nearly half of the nontariff barriers were eliminated; in the second semester of 1990 this process was accelerated, covering 97 percent of the import items; (iii) import tariffs had been reduced by the end of 1992 to the range of 5-20 percent, with the average rate of about 12 percent; (iv) capital account liberalization in 1991 included a drastic change in foreign exchange practices that had been in place since 1967, including the easing of procedures governing FDI and the substitution of the crawling peg system for a quasi-floating regime (as in Chile, reserve requirements and limits on capital inflows have been maintained in order to discourage excessive short-term indebtedness); (v) labor reform in 1990 eased the way to more open contracting by eliminating a cumbersome severance payments regime, and this was later complemented with a social security reform in 1993 which will gradually phase in a dual pay-as-you-go, fully funded system. 3/

Summarizing the above compilation of events, there is a difference of 11-13 years between the adoption of policy reforms in Chile and in Colombia, and the countries are consequently at different stages of the reform process. In Chile the consolidation of reforms has enabled the country to achieve an average real growth rate of 6.3 percent during the first half of the 1990s, and labor productivity has increased at a pace of 2.7 percent per annum. Colombia's recent adoption of structural reforms has permitted it to

1/ The growth rate for 1995 is a projection rather than an actual.

2/ For more details see Bolsworth et al. 1994.

3/ More details on the opening process of Colombia can be found in Cohen and Gunter 1992.

Figure 3. Chile and Colombia: Gross Fixed Capital Formation Ratios
(As a percentage of GDP)

Source: IMF and Author's Calculations

shift from low growth path with stagnating productivity to an average growth rate of 5.5 percent per annum together with productivity increases expected to average 2.9 percent a year over the 1993-95 period.

In spite of events in Mexico, Chile and Colombia are finding that the structural reforms they have instituted are thus far enabling them to continue receiving both FDI and medium- and long-term external borrowing as the main source of financing for their growing stock of capital. ^{1/} As shown in Figure 3, the two countries' gross fixed capital formation ratios have been rising quite steadily since 1991, reaching 24 percent in Chile and 21 percent in Colombia by the end of 1994. It is likely that both countries will maintain a similar pace of investment during 1995, in spite of the contagion effects of the events in Mexico on the international financial markets.

However, there has been some concern regarding the sustainability of such investment rates with regard to the recent behavior of gross national savings. For instance, in the case of Colombia a sharp decline was observed in the savings/GDP ratio from nearly 22-23 percent in 1990-91 to 15 percent in 1994 as private savings weakened. Aggregate demand was boosted by both trade and financial liberalization and, additionally, higher taxes affected private savings. It is too early to assess the net effect on private savings that might result from the recent social security reform in Colombia, but for the medium term, as in most developing countries, the main determinants will continue to be output growth, real interest rates, and changes in the terms of trade (see IMF, 1995, p. 75).

In the case of Chile, the savings-to-GDP ratio has been in the 22-25 percent range following recuperation from 1988 onwards. In the early 1980s, private and public savings had collapsed, and by 1985 the savings-to-GDP ratio was still below 10 percent. The adjustment program initiated in 1985 permitted public savings to recover quickly and later private savings also picked up. To foster private savings, a Capital Market Reform Law was approved in March 1994, aimed at developing new financial instruments, strengthening prudential rules, and re-addressing the subordinated debt issue.

^{1/} Recent studies suggest that FDI is an important vehicle for the transfer of technology, contributing relatively more to growth than what domestic investment does. This is especially true when the host country has a good threshold stock of human capital (see Borensztein, et al., 1994).

III. Wages, Unemployment and Inflation Performance

1. Competitiveness and real unit labor cost

One of the main issues for discussion in Chile and Colombia is competitiveness, which is closely related to the controversy about real exchange rate behavior, and the repeated calls on the need to diversify the structure of exports. ^{1/} Table 2 presents data on real wages and labor productivity in Chile and Colombia over selected sub-periods from 1967-94. The trend of the real unit labor cost in both countries is calculated as the difference between real average wage increases and labor productivity gains. During the 1990s, real wage increases have averaged 3.9 percent per annum in Chile and 2.9 percent per annum in Colombia. Given annual average labor productivity gains in these years of 2.9 in Chile and 1.4 in Colombia, real unit labor cost has increased at a annual rate of 1.0 percent in Chile and by 1.5 percent in Colombia.

In the more recent years of 1992-94, the real unit labor cost increases have been higher in Chile (1.6 percent)--driven mainly by increasing real wage demands--than in Colombia (0.8 percent). Although these real wage demands may be partially compensating for a decade of stagnation for the average wage earner, the macroeconomic result compares unfavorably with the real unit labor cost decline of -0.8 percent observed in the years 1982-89, which made Chile's economy more competitive.

In the case of Colombia, the real unit labor cost during 1982-89 increased dramatically at 3.4 percent per annum, hurting export competitiveness, particularly in the so-called nontraditional export sector. During the 1990s the rate of cost increase has been cut in half, and for the years 1992-94 it is below Chile's unit labor cost inflation, although it is still increasing year on year. Although a dramatic correction of the real unit labor cost has taken place since the opening of the economy in the early 1990s, Colombia still has a long way to go before regaining the edge it had during 1967-74, when the real unit labor cost declined at a pace of 2.2 percent per annum.

In Chile and Colombia the way in which minimum legal wages are set each year plays a crucial role in driving expectations and determining the average wage bargaining process in the two economies, even though minimum wage earners represent only 10-15 percent of the labor force. In Chile, the minimum real wage has increased at an average rate of 6.7 percent a year during the 1990s, compared with a decline on average of -3.9 percent per annum in the period 1982-89. Despite the recent real increases, the minimum real wage index is still below the 1982 value, although slightly above the 1980 level (see Figure 4). As long as pressures to recapture the 1982 minimum wage level continue to build, as has happened with the average real

^{1/} In Chile nearly 60 percent of the export value is generated by the primary sector, mainly mining products, while in Colombia that figure is nearly 50 percent, represented mainly by coffee and oil.

Figure 4. Chile: Real Wages and Labor Productivity

(Index: 1980 = 100)

Source: IMF and World Bank.

—●— Labor Productivity Real Average Wage — Real Minimum Wage

Figure 5. Colombia: Real Wages and Labor Productivity

(Index: 1980 = 100)

Source: IMF and World Bank.

—●— Labor Productivity Real Average Wage — Real Minimum Wage

Table 2. Chile and Colombia: Real Wages and Labor Productivity Trends

(Average annual rates in percent for selected periods)

Period	<u>Labor Productivity</u>		<u>Real Average Wage</u>		<u>Minimum Real Wage</u>		<u>Real Labor Unit Cost ^{1/}</u>	
	Chile	Colombia	Chile	Colombia	Chile	Colombia	Chile	Colombia
	(1)	(2)	(3)	(4)	(5)	(6)	(7)= (3)-(1)	(8)= (4)-(2)
1992-94	2.7	1.7	4.3	2.5	4.4	-0.2	1.6	0.8
1990-94	2.9	1.4	3.9	2.9	6.7	-1.7	1.0	1.5
1982-89	1.0	-0.7	0.2	2.7	-3.9	-0.2	-0.8	3.4
1975-81	...	0.7	7.0	3.6	6.5	4.6	...	2.9
1967-74	...	3.2	-12.0 ₁ /	1.0	10.2 ₁ /	-0.7	...	-2.2

Sources: IMF, World Bank, and author's calculations.

^{1/} Increase (+); decrease (-).

^{2/} Covers the period 1970-74 only.

wage index, unit labor cost competitiveness in Chile may suffer, as it did during the 1992-94 period.

In the case of Colombia, the minimum real wage index has been declining at an average annual rate of -1.7 percent during 1990-94, reaching levels slightly below those of 1980 and 1982, but recently the index has tended to stabilize (see Figure 5). However, since the late 1970s the average real wage index has increased steadily, surpassing the 1980 levels by more than 40 percentage points in real terms. As mentioned before, although this increase has been accompanied by important productivity gains and the pace of wage increases has moderated recently, international competitiveness may still be at stake, particularly if modernization of transportation and communications systems is delayed.

2. Growth and unemployment

Unemployment in Chile and Colombia has been brought down significantly during the 1990s, in large part due to liberalization of labor markets in an environment of sustained growth. In Chile, open unemployment was reduced from an average of 11.1 percent in 1982-89 to an average of 5.2 percent in the first half of the 1990s (in Colombia the reduction was from 11.7 percent to 9.5 percent over the same period). Hence, in the 1990-95 period, real GDP growth in Chile accelerated by 3 percentage points over the 1982-89 period and unemployment was sharply reduced by 6 percentage points.

Figure 6 illustrates the paired behavior of real growth and unemployment reduction in Chile for every year since 1975. It should be noted that most of the observations that fall close to the negatively sloped line of unemployment reduction-GDP growth correspond to post-1984 observations.

Figure 7 depicts the unemployment reduction-GDP growth relationship for Colombia from 1967 onwards. The early period 1967-74 is highlighted to illustrate how modest accelerations of real growth were quickly accompanied by significant reductions in the unemployment rate. However, during the 1975-89 period when labor markets became less flexible owing to the imposition of taxes on wage bills and the mechanism for increasing severance payments became more pervasive, the relationship between the unemployment rate and real growth broke down. Only recently, as the market reforms implemented in 1990 start to gain momentum, has some relationship between these two variables begun to be re-established. For instance, during the years 1990-95 an average acceleration of 1.1 percentage points of real GDP has been matched by a reduction of -2.2 percentage points in the open unemployment rate.

3. Inflation and unemployment

In Figure 8 the previous analysis of Chile is extended to the realm of inflation and unemployment trade-offs, where it becomes clear that in the 1978-95 period Chile has not had the possibility of "exploiting" such a relation or trade-off. Note the two different relationships that exist

Figure 6. Chile: Growth and Unemployment Reduction

(1975 - 1995 p)

Source: IMF, World Bank, and Author's Calculations

Figure 7. Colombia: Growth and Unemployment Reduction

(1967 - 1995 p)

Source: IMF, World Bank and Author's Calculations

Figure 8. Chile: Inflation and Unemployment Trade-Offs
(1978 - 1995p)

Source: IMF, World Bank, and Author's calculations.

● 1986 - 1995 p ● 1978 - 1985

Figure 9. Colombia: Inflation and Unemployment Trade-offs
(1967 - 1995p)

Source: Author's Calculations

● 1975-95 ◆ 1967-74

between the adjustment period of 1978-85 and the 1990-95 period of consolidation. During the adjustment phase, unemployment rose above the long-term rate of 9 percent, and inflation fluctuated widely between 10-40 percent, while in the later period of consolidation unemployment has settled near 6 percent and inflation has steadily declined, from 26 percent to the one-digit level.

Figure 9 on Colombia illustrates the inflation and unemployment trade-off during the period 1967-74, which is characterized by an early period of steady reduction in unemployment and stable one-digit inflation; later inflation rises to nearly 22 percent and unemployment stabilizes around 8.5 percent. Since the early 1970s, inflation has been stable around the 22 percent rate, while unemployment has fluctuated widely in the range of 8.5 to 14 percent. Given the widespread practice of indexation, particularly after the creation after 1972 of housing finance corporations with indexed instruments, there seems to be a tendency toward rising unemployment as attempts have been made to disinflate below the 22 percent threshold. For this reason, efforts have been made to combine heterodox disinflationary policies, mainly driven by forward-looking wage negotiations, with orthodox expenditure-reduction policies to mitigate the possible contractionary effects of the disinflation process. As the path marked with arrows in Figure 9 illustrates, there has also been a significant reduction of inflation from 32 percent in 1990 to 22.6 percent in 1994, and unemployment has been kept below the long-term rate of 10.5 percent. To further pursue the disinflation process, a more ambitious "pacto social" was launched at the end of 1994; by the first quarter of 1995 this effort had succeeded in lowering inflation to 21.5 percent and unemployment had declined to nearly 8 percent. ^{1/}

Table 3 summarizes the inflation and unemployment record for Chile and Colombia over the period 1975-95. In the last two columns Okun's immiserization index is calculated as the simple sum of average inflation and unemployment rates. For the years 1982-89, the index was similar in both countries, amounting to 31.8 percent on average for Chile and 34.3 percent on average for Colombia. This figure represents significant progress for Chile with respect to the average of 110.1 percent during the difficult years of 1975-81. By contrast, for Colombia the 1982-89 period presents a continuation of the long-term averages for inflation of 22-24 percent per annum and 10-12 percent for the rate of unemployment. In the first half of the 1990s, Chile has succeeded in lowering the index to

^{1/} However, it is too early to assess the possible damaging effects the severe drought that occurred in early 1995 and some recent public wage negotiations may have had on the inflation target. Unfortunately wage negotiations surpassed the 21 percent nominal target (composed of 18 percent inflation and 3 percent for productivity increases). The recent increase in real interest rates should have helped to reduce the pace of economic growth down to 5.5 percent by the end of the year, but in the first quarter the economy was growing at an annual rate of more than 6 percent.

Table 3. Chile and Colombia: Inflation and Unemployment

(Average annual rates in percent, for selected periods)

Period	<u>CPI Inflation</u>		<u>Open Unemployment</u>		<u>Immiserizing Okun's Index</u>	
	Chile	Colombia	Chile	Colombia	Chile	Colombia
	(1)	(2)	(3)	(4)	(5)= (1)+(3)	(6)= (2)+(4)
1993-95 <u>1</u> /	9.9	21.6	5.3	8.6	15.2	30.2
1990-95 <u>1</u> /	14.7	24.8	5.2	9.5	19.9	34.3
1982-89	20.8	22.6	11.1	11.7	31.8	34.3
1975-81	98.3	24.5	11.8	9.5	110.1	34.0

Sources: IMF, World Bank, and author's calculations.

1/ Projected.

about 20 percent, and the index is on the decline as a reduction to 15.2 percent is likely to be achieved over 1993-95. For Colombia, however, it seems very likely that the long-term average for the index of 34 percent will be maintained, which implies a still high value of index of 30.2 percent for the period 1993-95, which is twice the figure of Chile for the same period.

Thus, the basic message of this section is that both countries face serious challenges with respect to labor competitiveness. For Chile, the challenge takes the form of moderating wage demands given that they, by a significant margin, have already overtaken recent productivity gains. If average wage demands have been exacerbated by recent concessions in the minimum legal wage increase, the policy of continuing to compensate for the real wage stagnation of the past decade needs to be carefully reassessed. In the case of Colombia, the main challenge emanates from the failure to bring inflation below the long-term rate of 22 percent. In spite of the progress in accelerating real growth and reducing unemployment significantly below the long-term rate of 10.5 percent, further progress may be hindered by the difficulty of negotiating wage contracts based on forward-looking disinflation targets.

IV. The External Sectors of Chile and Colombia

1. Current account of the balance of payments and fiscal deficits

Chile and Colombia both experienced serious balance of payments and fiscal crises during the early 1970s and again in the early 1980s. However, fiscal deficits have been avoided in Chile since 1987 and in Colombia since 1990 and both countries had maintained current account deficits below 2 percent of the GDP until 1992, when the situation began to deteriorate.

Figure 10 on Chile illustrates the path described by the current account and fiscal deficits of Chile in selected periods. In the period 1970-74, the current account deficit averaged about 2 percent of GDP while the fiscal deficit of the nonfinancial public sector (NFPS) reached nearly 9 percent of GDP. We have previously summarized the broad structural reforms that this difficult situation generated. In particular, the introduction of the VAT system in 1975 and the drastic downsizing of the public sector contributed to turn the fiscal deficit into a surplus of nearly 3 percentage points during the period 1975-80. ^{1/} In spite of the real exchange depreciation of nearly 30 percent during the years 1975-80, the current account deficit widened to nearly 5 percent of GDP, mainly due to a serious deterioration in the terms of trade beginning in 1977, which affected the value of mineral exports.

^{1/} Government revenues from the first round of privatization (1975-80) amounted to nearly 6.2 percent of GDP and divestitures during the second round (1981-89) represented another 6.8 percent of GDP. For more details on privatization in Chile, see Hachette and Luders (1993).

As external shocks mounted (increasing oil prices, a copper price collapse, and surging external interest rates), Chile experienced a dramatic increase of its current account deficit of up to 10 percent of GDP on average during 1981-84, and its fiscal deficit averaged 3 percent of GDP, which represents a deterioration of 6 percentage points of GDP compared with the previous period.

The periods 1985-89 and 1990-92 marked continuing improvements in Chile, leading to a surplus of nearly 1 percent of GDP on average in the fiscal accounts (including the quasi-fiscal deficit, which has been brought down from nearly 3 percent of GDP in 1988 to practically zero in the current year) and to a current account deficit of 1 percent of GDP on average in 1990-92. However, during 1993-94 the current account deficit has continued to deteriorate, averaging almost 3 percent of GDP, but the fiscal deficit now shows a slight balance.

Figure 11 describes the path of the twin (fiscal and BOP) deficits for Colombia, which go from the difficult situation of deficits of almost 3 percent of GDP on both fronts in 1970-74 to deficits of only 1 percent of GDP in 1975-80. Broad fiscal reform (including the basis of the VAT system) and a prolonged coffee bonanza helped to correct the large imbalances of the early 1970s. However, mounting appreciation of the real exchange rate and a collapse of coffee production and its external price resulted in a drastic deterioration of the current account and the fiscal balance, averaging nearly 8 and 6 percent of GDP, respectively, in the early 1980s.

Compared to Chilean fiscal difficulties over the 1975-80 period, the Colombian fiscal crisis was more serious because structural adjustment had not yet taken hold. The external crisis (including the debt management problem), however, was of a lesser magnitude, which allowed Colombia to avoid restructuring and to rapidly return to fresh external financing.

As in Chile, the periods of 1985-89 and 1990-92 have been years of continuous recuperation for Colombia, allowing for an average surplus in the current account of nearly 3 percentage points of GDP and about equilibrium in the fiscal accounts. However, during 1993-94 the external accounts deteriorated due to the lagged effect of trade liberalization and continuous appreciation since 1991 of the real exchange rate. In fact, this most recent period shows a current account deficit of 4 percent of GDP, although the fiscal accounts, which as a result of the 1991 fiscal reform temporarily increased VAT and income tax rates, and the proceeds from privatization

Fig.10. Chile: Twin Deficits (-) in Fiscal & BOP
(% of GDP, Average of Selected Periods)

Source: IMF and World Bank.

Fig.11.Colombia: Twin Deficits (-) in Fiscal & BOP

(% of GDP, Average of Selected Periods)

Source: IMF and World Bank.

amounting to 3.6 percent of GDP, improved significantly such that a surplus of 1 percent of GDP was realized. ^{1/}

2. Real exchange rates

The dramatic exchange market crisis in Mexico at the end of 1994 makes it prudent for Chile and Colombia to reassess the stance of their external sector policies. In the period 1993-94, the average current account deficits of Chile and Colombia were nearly 3 percent and 4 percent of GDP, respectively. Current account deficits of the same magnitude are likely to be repeated in 1995 unless the two countries adopt policy measures to moderate economic growth, which until recently was in the range 5-6 percent in both countries, and to promote increased saving.

As a result of the structural changes and significant increases in foreign direct investment in Chile and Colombia since early 1990s, their real effective exchange rates have been appreciating. Figure 12 illustrates the similar path followed by the two countries' (inverse) real exchange rate throughout most of the 1980-95 period (an increase in the index indicates a real depreciation).

Note particularly how both exchange rates initially tended to depreciate, between 5-10 percent through the end of 1990 (December 1989 = 100). However, these policies of active real exchange rate targeting were rapidly counterbalanced by short-term capital inflows, which could only be partially sterilized at a relatively high price in terms of the quasi-fiscal losses incurred by the central bank (see Calvo, et al., (1994)). Since 1991, Chile has continued to appreciate, in nominal terms, its reference band, and Colombia abandoned its long-term crawling peg system in favor of a reference band system similar to Chile's (see Carrasquilla (1995) and Calderon (1995)).

By the end of 1994, Chile had experienced an exchange rate appreciation of nearly 16 percent over the December 1989 level, and Colombia's currency underwent an appreciation of 24 percent; these levels were very similar to those attained after stabilization programs of the mid-1980s. This real exchange rate behavior indicates a relatively stable path when compared to Argentina, which suffered a real appreciation of nearly 60 percent with respect to 1989, or Brazil, which had depreciated nearly 40 percent by 1992 but which during 1994 experienced a full reversal.

^{1/} The divestiture process in Colombia has been of a lesser scope than in Chile measured either by the government revenues from privatization (3.6 percent vs. 13 percent of GDP, respectively) or the net-worth of the enterprises involved in each case. The nationalization of enterprises that took place in Chile during the early 1970s, which practically doubled the share of state-owned enterprises to 39 percent, and the debt crises of the early 1980s somehow induced divestiture as a crucial part of the adjustment program in Chile.

The recent case of Mexico also illustrates variations in real exchange rate behavior (see Figure 12). It first experienced a depreciation of nearly 40 percent during the 1982 crisis, then an appreciation of 20 percent by 1985, and again a depreciation of 40 percent between 1985-87, followed by a reversal in 1989. Thereafter, Mexico's real exchange rate followed a path of gradual appreciation, which converged to levels similar to those of Chile and Colombia, before collapsing at the end of 1994 and suffering a 55 percent real depreciation during the first quarter of 1995 (for competing explanations about the recent Mexican crisis, see IMF, 1995, p. 90).

3. Domestic/external interest rate differentials

A factor that has exacerbated the appreciation of the real exchange rates in Chile and Colombia is the level of their domestic interest rates. These have been kept relatively high with respect to foreign deposit yields (adjusted by ex-post depreciation of the domestic currency), hence capital inflows have continued. ^{1/} It has been estimated that capital inflows (including net errors and omissions) into Latin America represented nearly 4 percent of the region's GDP during the early 1990s (Calvo, et al., 1992); Chile and Colombia played an important role in receiving part of these inflows, mainly as FDI and medium- and long-term capital inflows. In spite of imposing selective capital controls and costly reserve requirements, Chile and Colombia have also been receiving some short-term capital inflows as well, estimated at 2-3 percent of GDP per year.

Figures 13 and 14 show the evolution of interest rates on domestic deposits in Chile and compare them with the deposit yield in the United States. After experiencing large negative differentials between local and foreign yields in 1981-85, these became negligible in 1986-89. However, positive differentials, in the range of 5-15 percentage points, have been observed again particularly in 1990 and in 1994 and 1995. (For details on interest rate behavior and the targeting system used in Chile, see Mendoza and Fernandez, (1994)).

Figures 15 and 16 depict the domestic-external interest rate differential in Colombia, which has followed a similar pattern to that in Chile: large negative differentials in 1983-86, and positive differentials of 5-15 percentage points have been observed in the 1991-95 period. It has been estimated that transfers through the current account (plus the errors and omissions item in the BOP accounts) in Colombia are rather sensitive to interest rate differentials, helping to explain nearly 50 percent of their variation, in spite of the presence of capital controls (see Clavijo (1994)).

^{1/} Since the expected rates of return are not readily available, and depend on how one models expectation, here we look only at the stylized facts in the form of ex-post returns. See Calvo, et al. (1992, p. 9) for a more complete analysis.

Figure 12. Real Effective Exchange Rates (Inverse)
(Selected Latin-American Countries)

Trade Weighted
Source: IMF

..... Argentina --- Brasil ⊕ Chile ■ Colombia — Mexico

Although external sector consistency would call for a reduction in domestic interest rates in Chile and Colombia to avoid short-term capital inflows, and relieve the pressures leading to further appreciation of their currencies, domestic consistency calls for maintaining relatively high interest rates to avoid overheating of the real sector, to reduce excessive consumption and to increase savings. The alternative approach of dismantling capital controls altogether has been avoided by both countries because of the view that domestic intermediation of short-term capital is damaging for monetary, financial and exchange rate stability. ^{1/}

For Colombia, the approach adopted has at times required the imposition of temporary ceilings on either domestic interest rates or the rate of expansion of domestic credit. The rationale for invoking administrative measures is that, once attempts to partially close off the capital account are made in order to avoid undesired inflows of short-term capital, the domestic financial system is deprived of the competition it needs to assure a flexible interest rate response to the market conditions. Hence, additional quantitative measures are sometimes called for to help avoid misalignments and break down the oligopolistic behavior of the domestic banking system.

Additionally, Chile and Colombia have been implementing budget deficit reductions, paired with increases in VAT and income taxes, to avoid crowding out private investment. However, only recently have domestic interest rates begun to fall, and capital controls on short-term flows have been kept in place to avoid "contaminating" the domestic financial system. Given this framework, it should be possible for Chile and Colombia to stabilize their real exchange rates near current levels, without further sacrificing the need to continue diversifying their export sectors.

4. External debt and export efforts

a. Behavior of the ratio of external debt to GDP

Chile's external debt increased from 40 percent of GDP in 1980 (nearly US\$11 billion) to 100 percent in 1982 and peaked at 140 percent in 1985 (nearly \$19 billion) (Figures 17 and 18). Chile's net external debt (discounting international reserves) followed a similar path, increasing from 30 percent of GDP in 1980 (\$7.5 billion) to nearly 120 percent in 1985 (\$15 billion). After the well-known rescheduling and swapping of the Chilean debt during the second half of the 1980s, debt ratios were reduced

^{1/} Chile and Colombia are the only Latin American countries which have recently received investment grade ratings and have currently good footing to gain a better position as emerging markets (see Burki and Edwards, 1995 p. 5). So another argument used, particularly in Chile, to maintain selective capital controls, has to do with avoiding volatility in domestic financial markets as foreign investors look for portfolio diversification opportunities. See also Grilli, (1995, p. 5) for an interesting discussion on this topic.

by the beginning of the 1990s to nearly 60 percent of GDP (40 percent net) and by 1994 the debt ratios were rolled back to 40 percent of GDP (only 20 percent net, or the equivalent of \$10 billion).

Colombia's external debt ratios have been much lower, increasing from only 20 percent of GDP in 1980 (less than 5 percent net) to a peak of 45 percent in 1987 (35 percent net, or the equivalent of \$13 billion) (Figures 19 and 20). After the stabilization program of 1984-86, which did not require any debt forgiveness or rescheduling, and the program of partial prepayments of external obligations during 1991-94, the ratio of debt to GDP was reduced to only 27 percent (\$17.5 billion) by end-of 1994, which compares very favorably to 34 percent of GDP averaged by the region. In fact, the debt ratio (net of reserves) has recently come down to only 17 percent of GDP (\$7.5 billion) (see Clavijo (1995) for more details).

b. External debt dynamics and exports

Although Chile and Colombia have substantially reduced their stocks of gross and net external debt from the mid-1980s level, it is interesting to explore the export growth requirements that would assure stabilization of certain debt ratios near their current levels. This is particularly relevant in light of the increases of the current account deficits of these two countries, which have averaged nearly 3-4 percent of GDP in recent years.

From traditional models of debt dynamics (Simonsen (1985)), it becomes clear that the conditions required to stabilize the external debt to GDP ratio hinge on its initial value, the dynamics of the current account, and the level of the external interest rate. In particular, we are interested in establishing the required growth of goods and nonfactor service exports (GNFS) so that the external debt ratio (net of international reserves) is stabilized, say, in the next five years.

Equation (1) shows that the net external debt, $D = (\text{Debt minus Reserves}) = (S - R)$, increases with the current account deficit on GNFS, $(M - X)$, and with the absolute level of the external interest rate effectively charged on that debt, (i) .

$$\dot{D} = (M - X) + i D \quad (1)$$

Let $Z = (D/X)$, which represents the ratio of net debt to exports of GNFS, so that (1) can be written as (2), where solvency conditions can be seen more easily. A dot above the variable denotes percentage change.

$$\dot{Z} = (i - x) Z - H \quad (2)$$

Equation (2) indicates that if the external interest rate (i) charged on the debt stock is greater than the export growth (x) , then the ratio Z (net debt/exports) will increase, independently of the present current

Fig.17. Chile: Outstanding Net External Debt

(External Debt minus International Reserves)

Source: IMF and Author's calculations

Figure 18. Chile: External Debt

(As a Percentage of GDP)

Source: IMF and Author's calculations

Fig.19. Colombia: Outstanding Net External Debt
(External Debt minus International Reserves)

Source: IMF and Author's calculations

Figure 20. Colombia: External Debt
(As a Percentage of GDP)

Source: IMF and Author's calculations

Fig.21. Chile: Dynamic Burden on External Debt

(Percentage, (+) Relief or (-) Burden)

Source: IMF and Author's calculations

Fig.22. Chile: Export Growth Effort

[Ratio of GNFS (Export-Import)/Exports]

Source: IMF and Author's calculations

account behavior, i.e., even if $H = (X-M)/X = 0$. In this sense, positive values of $(i-x)$ constitute a "dynamic burden" on the external debt, and the positive values of H correspond to the "exporting effort" required to decelerate indebtedness, as measured by the ratio of net debt/GDP.

Figure 21 illustrates the path of the "dynamic burden" on the Chilean external debt $(i-x)$, which reached nearly -50 percent (in dollar terms) in 1982 as export growth collapsed and external interest rates on the debt were maintained at nearly 10 percent. A similar burden of -20 percent was also experienced in 1984 and reached nearly -10 percent in 1993. However, 1994 was an important period of relief as the growth of exports of GNFS surpassed external interest rates by nearly 20 percentage points, as had also occurred in 1983 and 1988, driven mainly by copper price surges. The Copper Stabilization Fund, created in 1986, began to fulfill its objective in 1988 by helping to replenish foreign reserves of the central bank.

It is possible to show that if the dynamic burden is negative (i.e., $x > i$), then the exporting effort required to stabilize the external debt takes the form shown in equation (3), where the initial values of the debt (Z_0) drive the conditions required to reach stabilization at time (t) , assuming convergence in exponential fashion.

$$H = \frac{Z_0 i(x-i)}{x e^{t(x-1)} - 1} \quad (3)$$

Figure 22 shows, in the case of Chile, the values of the "exporting effort" (H) required to move from a phase of increasing debt to a phase of stabilization of the external debt, scaled by the level of exports of GNFS. The "instantaneous" exporting effort refers to stopping debt increases in the following period, which is a function of the current Z value and the absolute level of the interest rate (i), while the dynamic effort refers to a five-year limit ($t=5$), which takes the form shown in equation (3). Chile's export growth efforts were not fulfilled in most of the 1981-85 period, since the required effort surpassed 30 percent in the instantaneous case and 60 percent in the dynamic case (except for 1983). The observed export effort $(X-M)/X$ was at 10 percent at its peak in 1985. In the period 1986-92, the observed export effort reached values of 12-20 percent surpassing the "instantaneous" and the "dynamic" requirements in all years (except for the former in 1986).

More recently, export requirements to stabilize debt have been lessened due to the reduction in the debt to GDP ratio and to the relief provided by export growth exceeding the level of interest rates. For the period 1994-95, we have estimated that surpluses of the GNFS, such that the ratio $(X-M)/X$ falls in the range of 2-5 percent, would be sufficient for stabilizing the Chilean debt at its current level of 40 percent of GDP. Preliminary projections indicate that, as occurred during 1994, such export performance is quite feasible during 1995, so that external debt ratios in Chile are likely to remain stable.

Figures 23 and 24 illustrate a similar exercise for Colombia. The highest burden of the Colombian external debt also occurred during the 1981-85 period (except for 1984), with a noticeable relief of nearly 30 percent in 1986 owing to another coffee boom. As in the case of Chile, the existence of a 40-year old stabilization fund had helped to increase savings and allowed replenishment of foreign reserves at the central bank, thereby substantially reducing the net debt of the country. The dynamic burden on the Colombian debt has been kept below 10 percent since 1987, export growth has continued in the range of 10-15 percent per annum in dollar terms.

However, given the surge in imports since 1992, the required exporting effort has not occurred, although it is only in the range of 5-10 percent scaled by exports of GNFS. The ratio $(X-M)/X$ has instead been in the range of minus 15-20 percent in the 1993-95 period. This means that external debt ratios in Colombia are likely to increase modestly from the current low figure of 27 percent of GDP (or 17 percent for the net figure), but as new oil exploitation consolidates, the net debt/GDP ratio should stabilize again at rather low levels: ^{1/}

As illustrated in Figure 25 on Chile and Figure 26 on Colombia, the current account deficits (of GNFS) have been financed in a significant way by FDI. If the current account is adjusted to take account of the offset provided by FDI, in the spirit of the dynamic debt model just discussed, one would conclude that the barriers to stabilizing debt ratios are much reduced, as the current account surplus is increased by as much as 2-5 percent of GDP in the case of Chile during 1988-90. In the period 1994-95, the slight surplus of the current account of the GNFS for Chile is actually increased to a surplus of almost 2 percent of GDP after adjusting for the offset provided by FDI. A similar process is now taking place in Colombia where FDI, mainly connected to oil discoveries, has accounted for an increasing portion of financing the current account, up to 4 percent of GDP in 1995. Hence, once adjusted for FDI, the current account of GNFS has a negligible effect on the change in external debt. As shown earlier, the export growth rate is likely to surpass the level of the interest rate again during 1995, so the external debt should experience a "dynamic relief."

^{1/} The present value of recent oil discoveries in Colombia has been estimated at representing nearly 25 percent of the current GDP value (about \$16 billion) in a time span of nearly 10 years. This is equivalent to having a chain of small coffee bonanzas during the next decade. The recent implementation of an oil stabilization fund, based on the long-term experience related to coffee, and the approval of a Mineral Royalties Law should permit Colombia to efficiently administer this windfall resource.

Fig.23. Colombia: Dynamic Burden on External Debt
(Percentage, (+) Relief or (-) Burden)

Source: IMF and Author's calculations

Fig.24. Colombia: Export Growth Effort

[Ratio of GNFS (Export-Import)/Exports]

Source: IMF and Author's calculations

Fig.25. Chile: Current Account Deficit (-) of GNFS
(Percentage of GDP)

Fig.26.Colombia: Current Account Deficit (-) of GNF
(Percentage of GDP)

V. Summary and Conclusions

We have reviewed the structural reforms and macroeconomic policy results in Chile and Colombia in order to assess their long-term trends. These two economies have been mentioned as being on a particularly good footing to face the collateral effects of the recent travails of the Mexican economy.

Our assessment indicates that structural changes taken by Chile nearly 15 years ago are consolidating and Chile is experiencing sustainable growth, low unemployment rates and low inflation. Even in the face of negative external shocks from international financial markets, as occurred during early 1995, Chile maintained this solid record. However, this process has not been smooth and Chile has had to overcome very difficult situations, as recently as in 1990, when growth slowed and inflation resurged. The decision to maintain flexible markets in most areas of the economy has enabled Chile to continue the process of opening its economy and consolidating stable growth, as the political regime returns to full democracy.

Colombia has had a strong growth record since the 1960s, but as the rate of growth slowed during the 1980s, the authorities decided to open the economy in the late 1980s and early 1990s. Thus, with a lag of nearly 11-13 years Colombia adopted structural reforms very similar to those in Chile and some of them are still in the process of implementation. Favored by its long-term stability, acceleration of economic growth and reduction of employment have occurred rapidly in Colombia, although the process of disinflation has proven much more difficult, in spite of the adoption of different strategies combining heterodox and orthodox policies.

Chile and Colombia face great challenges to their competitiveness due to increasing real wage demands, which have been surpassing the favorable productivity increases. This situation is being aggravated by capital inflows, attracted by interest rate differentials, which have been pushing real exchange rate appreciation. The imposition of capital controls and high reserve requirements have succeeded only partially in stopping these capital inflows from penetrating the domestic financial system and the sterilization process turned out to be costly for the central bank's balance sheet during the early 1990s. Achieving the proper policy mix in the near future will require the two countries to moderate domestic interest rates and reduce differentials with foreign deposit yields, but they must also maintain them at a level that would preclude increases in consumption and would stabilize real economic growth.

By now it is clear that appreciation of real exchange rates and increases of debt to GDP ratios in Latin America were more pronounced than in the East Asian countries during the 1989-94 period. At least three main reasons can be identified for this. There are, however, important

qualifications that arise when considering Chile and Colombia, as follows: 1/

(i) The use of a nominal exchange rate as the main anchor, while the disinflation process was occurring at a slow pace hurt export performance. However, Chile and Colombia avoided this peril during the 1990s by moving from a crawling peg system to a reference band system, ending up with a more stable exchange rate, which appreciated less in real terms than Mexico's (before the adjustment) or Argentina's exchange rate under the Convertibility Plan. 2/

(ii) External financing in Asia has mainly taken the form of FDI, while in Latin America it took the form of short-term portfolio investments, which in part supported consumption increases. By contrast, FDI in Chile and Colombia has fluctuated in the range of 2-5 percent of GDP during the 1990s, which has helped to maintain low debt to GDP ratios. Relatively good prices for Chilean copper and Colombian coffee (and the new proceeds from oil in Colombia) in 1994-95 assure that these debt to GDP ratios will remain at favorable levels in the near future.

(iii) The strong relationship between Asian central banks and the public entities that administer public resources, including social security funds, have permitted these countries to drastically reduce the cost of sterilizing capital inflows. In Latin America, on the other hand and especially in Chile and Colombia, open market operations have been rather costly as they have tended to generate a vicious circle that reinforces capital inflows. Regarding this particular point, as long as Chile and Colombia do not find the required space to increase their fiscal surpluses, contributing to ease aggregate demand pressures, capital controls are going to be difficult to relax, and the puzzle of how to deal with the high domestic interest rate will continue to trouble the authorities.

1/ Some of these reasons are explained in, for example, Calvo, et al. (1994), and McKinnon (1995).

2/ On the interesting case of Argentina, see Schweickert (1994). Similar arguments are found in Svensson (1994).

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