April 2003
IMF Country Report No. 03/91

Ecuador: Selected Issues and Statistical Appendix

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International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

ECUADOR

Selected Issues and Statistical Appendix

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Approved by the Western Hemisphere Department

March 13, 2003

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Ecuador: Basic Data

I. Social and Demographic Indicators

Area (sq. km)	276,840	Nutrition (1996)	
Arable land (percent of land area)	5.7	Calorie or protein intake (per capita a day)	2,592
Population (2001)		Health (1999)	
Total (million)	12.9	Population per physician	588
Annual rate of growth (percent a year)	2.0	Population per hospital bed	625
Density (per sq. km.)	46.5	Population per nurse	2,174
		Access to electricity (1995)	
		Percent of dwellings	
Population characteristics (1999)		Urban	99.3
Life expectancy at birth (years)	70.0	Rural	74.0
Crude birth rate (per thousand)	24.0		
Crude death rate (per thousand)	6.0	Access to safe water (1995)	
Infant mortality (per thousand live births)	27.6	Percent of population	
Under 5 mortality rate (per thousand)	34.3	Urban	81.0
		Rural	10.0
Income distribution (1995)			
Percent of income received:		Education (1997)	
By highest 10 percent of households	33.8	Adult literacy rate	91.6
By lowest 20 percent of households	2.2	Gross enrollment rates, in percent (1997)	
Gini coefficient	43.7	Primary education	113
		Secondary education	56
Distribution of labor force, in percent (1998)		Tertiary education	10
Agriculture	7.3		
Industry and mining	21.4	GDP (2002) (US$, billion)	24,347
Services	71.3	GDP per capital (US$)	1,856

II. Economic Indicators, 1998–2002

	1998	1999	2000	2001	2002
	(In percent of nominal GDP)				
Origin of GDP					
Agriculture, petroleum and mining	26.5	29.6	30.7	29.6	28.3
Industry and construction	22.5	21.2	20.7	20.3	20.7
Services	51.0	49.3	48.6	50.1	51.0
	(Annual percentage changes, unless otherwise indicated)				
National accounts and prices					
Real GDP	2.1	-6.3	2.8	5.1	3.0
Real GDP per capita	0.0	-8.1	0.8	3.1	1.0
GDP deflator	-3.6	-23.5	-7.0	25.5	12.4
Consumer price index (period average, in U$S)	-0.6	-29.2	-7.7	37.7	12.6
Consumer price index (end of period, in U$S)	4.7	-25.2	-10.1	22.4	9.4
Unemployment rate (end of period) (in percent)	11.8	15.1	10.3	8.1	7.7
	(Ratios to GDP)				
Gross domestic investment	25.3	14.7	20.1	25.7	25.7
Of which: public investment	3.6	3.8	2.9	3.5	4.4
Gross national savings	15.9	20.5	26.4	23.2	20.7
External savings	-9.3	5.7	6.3	-2.4	-5.0
Private consumption	69.3	66.2	64.0	68.9	68.4
Public consumption	12.3	12.5	9.8	10.1	12.5
Public finances					
Central government					
Total revenues	13.8	16.1	20.4	18.3	18.8
Total expenditures	17.9	19.9	20.2	19.4	19.5
Of which: interest	4.0	7.7	6.3	4.5	3.4
Savings	0.4	0.3	4.3	5.8	4.3
Primary balance	-0.1	3.9	6.5	3.4	2.6
Overall balance	-4.1	-3.8	0.1	-1.1	-0.8
Consolidated NFPS public sector					
Primary balance	-0.9	3.4	7.7	4.3	4.5
Overall balance	-5.0	-4.6	1.0	-0.5	1.0

	1998	1999	2000	2001	2002
	(12-month percentage changes, unless otherwise indicated)				
Money and credit					
Banking system liabilities to the private sector	38.9	18.1	8.5	24.2	18.0
Of which					
Money	34.8	88.6	5.4	41.1	30.6
Money and quasimoney	31.9	19.2	12.4	23.6	18.3
Net domestic assets of the banking system	62.4	23.6	-12.1	26.3	22.1
Of which					
Credit to the public sector (net)	-147.8	-93.9	-56.6	-2.7	-54.5
Credit to the private sector	47.1	-29.7	-5.1	16.9	13.8
Liabilities to private sector, in percent of GDP	47.2	14.9	16.2	20.1	23.7
Representative deposit interest rate (in percent) 1/	49.2	47.1	8.5	5.5	5.1
	(In millions of U.S. dollars, unless otherwise indicated)				
Balance of payments					
Current account	-2,170	955	1,004	-509	-1,214
Merchandise trade balance	-995	1,665	1,458	-302	-974
Exports	4,203	4,451	4,927	4,678	4,953
Imports	-5,198	-2,786	-3,469	-4,981	-5,928
Services and transfers (net)	-1,175	-710	-454	-207	-240
Of which: interest	-1,063	-1,134	-1,205	-999	-1,032
Capital and financial account	1,775	-1,378	-847	357	1,037
Foreign direct investment	831	636	720	1,330	1,216
Other capital (net) 2/	944	-2,014	-1,567	-973	-179
Change in net foreign assets in the BCE	395	423	-157	152	177
Exports (in percent of GDP)	18.1	26.7	30.9	22.3	20.4
Imports (in percent of GDP)	-22.4	-16.7	-21.8	-23.7	-24.4
Current account (in percent of GDP)	-9.3	5.7	6.3	-2.4	-5.0
Merchandise exports (in US$, annual percentage change)	-20.2	5.9	10.7	-5.0	5.9
Merchandise imports (in US$, annual percentage change)	11.4	-46.4	24.5	43.6	19.0
Terms of trade (annual percentage change)	-13.3	6.9	8.9	-4.8	4.5
Real effective exchange rate (12-month percentage change) 3/	-8.1	-36.5	39.3	23.8	6.4
International reserve position and external debt (as of December 31)					
Net official reserves	1,698	872	1,036	884	707
(in months of imports)	3	3	3	2	1
Net foreign assets of the banking system	1,803	-224	137	506	721
Outstanding external debt, in percent of GDP	69.8	98.1	86.0	69.0	60.3
Public	56.2	82.8	72.0	54.5	46.9
Private	13.6	15.2	14.0	14.5	13.4
External debt service ratio (in percent of exports of gds. & serv.)	35.7	33.8	33.2	33.6	30.4
Of which: interest	21.2	21.5	20.4	17.5	17.0

IMF data (as of January 31, 2003)	
Membership status:	Article VIII
Intervention currency and rate	U.S. dollar
Quota	SDR 302.30
Fund holdings of currency	511.88
(as percent of quota)	169.33
Outstanding purchases and loans	SDR 226.73
SDR department	
Net cumulative allocation	SDR 32.93
Holdings	SDR 2.83

Sources: Ecuadoran authorities; and Fund staff estimates.

1/ Corresponds to the 84-91 days average deposit rate.
2/ Includes reschedulings and net change in payments arrears.

I. Overview[1]

A. Recent Economic Developments

1. **Ecuador went through a difficult period in the 1990s, and per capita income stagnated.** The 1998 oil price slump, damage from the *El Niño* weather phenomenon, and disease in the shrimp industry further complicated the situation and Ecuador experienced severe economic stress, culminating in accelerating inflation and a currency and banking crisis.

2. **The adoption of the U.S. dollar in January 2000 stabilized expectations, and economic activity began to turn around.** Moreover, demand was given further impetus by the start of the construction of a new (private) oil pipeline (*Oleoducto de Crudos Pesados*, OCP) and escalating public sector spending in 2001. However, economic growth slowed again in 2002 due to policy slippages and faltering confidence. Consumer price inflation came down from 91 percent at end-2000 to just under 10 percent by end-2002.

3. **After a strong improvement in 2000, the fiscal position weakened in 2001 and 2002.** The nonfinancial public sector (NFPS) primary surplus fell from 7¾ percent of GDP in 2000 to around 4½ percent of GDP in both 2001 and 2002. Revenues fell from 27½ percent of GDP in 2000 to 26 percent in 2002. Oil revenue declined with a drop in oil prices and inefficiencies in PetroEcuador that are causing a gradual but persistent shortfall in oil output. These losses outweighed the gains from improvements in the central government tax administration, revenues from the sharp jump in domestic demand, some one-time effects,[2] and strong social security receipts following the large wage increases and a broadening of the base for social security contributions in the private sector. At the same time, primary expenditures surged from 19 percent of GDP in 2000 to 21¾ percent in 2002. The main drivers were an increase in the wage bill from US$910 million in 2000 to almost US$2 billion in 2002; increases in purchases of goods and services and capital outlays; and a boost in social security benefits with the aim of restoring real pre-crisis (1998) benefit levels. The public debt-to-GDP ratio (including arrears) declined from 102 percent in 1999 to 60 percent in 2002. This result reflects the haircut received after the 1999 default and the growth in nominal GDP.

4. **Monetary aggregates expanded rapidly during 2001–02, as improved stability led to reintermediation.** Private bank deposits and credit to the private sector both increased by around 30 percent over 2001–02, while net credit to the NFPS declined as some government entities accumulated deposits. Average deposit rates have remained around

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[1] Prepared by Mayra Zermeño

[2] The VAT rate was increased in July 2001, but this increase was reversed by a decision of the constitutional court. Also, VAT refunds to private oil companies were suspended at end-2001.

5 percent, and average lending rates were close to 14 percent at end-2002. The high interest spread reflects bank's efforts to restore adequate revenue margins, and the continued high EMBI spread on sovereign bonds, which places a floor on lending rates. The private banks raised average return on equity to 17½ percent in 2002, and they have built a large liquidity cushion abroad, with total liquidity now at over 30 percent of deposits.

5. **Public banks have fared less well.** Filanbanco, owned by the treasury, received a capital injection of US$300 million in May 2001, but had to be closed soon after. Banco del Pacífico, owned by the central bank (BCE), and the only public commercial bank that remains open, received capital injections of US$129 million in 2001 and US$121 million in early 2002. The bank was placed under a recovery plan with private management in late 2001, and its financial position has stabilized as the new managers cut costs and benefited from expanded powers to collect collateral (*coactiva*). Some eighteen private banks that were taken over by the Deposit Guarantee Agency during the banking crisis remain unresolved. Little progress has been made toward collecting on US$1.6 billion in defaulted loans, and these banks still have blocked deposits.

6. **The external current account deficit widened to 5 percent of GDP in 2002.** While merchandise exports benefited from higher oil prices and continued growth of non-oil exports, imports grew rapidly on strong domestic demand (in part reflecting materials brought in to build the new pipeline), and an appreciating real effective exchange rate. In the capital account, FDI in the oil sector declined to about 4 percent of GDP as the construction of the OCP pipeline approached completion, while private sector capital showed some reflows for the first time since the crisis.

7. **The pace of structural reform slowed in 2002.** Achievements in 2001 included a social security reform,[3] the unification of private sector wages, and increased private sector participation in the water and telecommunications sectors. However, in 2002, the privatization of public enterprises was cancelled, after tariffs were frozen. The main achievement in 2002 was the approval of the *Fiscal Responsibility and Transparency Law*, which governs medium-term fiscal policies and is key to medium-term debt reduction.

8. **In January 2003, the new government started a bold program aimed at strengthening the fiscal balance and help eliminate arrears.** The program includes structural reforms to reduce rigidities in fiscal policy, resolve remaining issues in the banking system, and modernize the state enterprises. The successful implementation of this program would help to place Ecuador on a sustainable fiscal path, increase competitiveness, and improve living conditions for all Ecuadorans, but particularly the poor.

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[3] The reform strengthened the pension system by raising contributions and pensionable age, and opened up the possibility for private capitalized pension funds alongside the public pay-as-you-go system. However, regulations to implement this reform have not yet been issued, and there have been legal challenges to establishing private pension plans.

B. Selected Issues Covered in this Paper

9. **The adoption of the U.S. dollar as national currency and the associated loss of the monetary policy instruments, has increased the importance of fiscal policy in macroeconomic management.** Chapter II analyzes Ecuador's fiscal policy using the concepts of the fiscal stance and fiscal impulse adjusted for movements in the real effective exchange rate. It finds that fiscal policy has been expansionary in 2000 and 2001. This may have delayed the adjustment of Ecuador's dollar inflation to U.S. levels, putting additional pressure on competitiveness, particularly in the absence of structural reforms. However, the projection of fiscal policy for 2003 and 2004 seems appropriately cautious, and would be supported by the implementation of the recently adopted *Fiscal Responsibility and Transparency Law*.

10. **Chapter III shows that the growth of gross fixed investment was relatively strong during the 1970s (following the discovery of oil in the 1960s); thereafter it slowed, particularly in the public sector.** The private sector's net fixed capital stock (the gross capital stock minus depreciation) increased through 1998, before declining during the economic and banking crisis. The estimates suggest that the nominal U.S. dollar value of the public sector net fixed capital stock increased at an annual average rate of 4 percent in the period 1985–2002.

11. **Chapter IV explores the evolution of oil reserves in recent years and the projections for the medium term.** It finds that, depending on the assumptions for new oil discovery and extraction rates, oil reserves might be exhausted in about 20–30 years. As a counterpart to the oil economy, simulations of the economy without oil—the non-oil economy—show large fiscal and external imbalances. These imbalances are the result of fiscal policies and, intertwined with it, of price misalignments associated with the Dutch disease. The exhaustible resource, oil, has largely been used to finance consumption.

12. **The evolution of the public sector's net worth is introduced in Chapter V as a long-term indicator of fiscal sustainability and the country's solvency.** The chapter presents a preliminary public sector balance sheet for Ecuador. The most important asset is the oil reserves, while the most important liability is the registered debt (the actuarial pension deficit in the social security system also appears large, but the estimates are very uncertain at this time). Leaving the actuarial pension deficit aside for the moment, the figures show that the public sector net worth (valuing oil reserves at a constant 2001 oil price) has dropped significantly since 1970. With oil reserves projected to last for only another two decades or so, this decline in net worth suggests the need to strengthen fiscal position. Ecuador is making efforts to do this, as reflected in the new *Fiscal Responsibility and Transparency Law*.

13. **Ecuador has recently adopted the *Fiscal Responsibility and Transparency Law*** (see Chapter VI). The salient features of this law are: to restrict the growth in central government real noninterest expenditure to a maximum of 3.5 percent a year (consistent with potential real GDP growth); to cut the central government deficit, excluding oil export

revenues (the non-oil deficit), by at least 0.2 percentage points of GDP a year; and to use 70 percent of the public sector revenues coming from a new pipeline (the OCP) to repay debt, 20 percent to provide a stabilization cushion for (oil price) contingencies and national emergencies, and 10 percent for social spending. The new law is countercyclical in nature.

14. **The financial system has recovered significantly since the 1998–99 crisis, and banks have built large liquidity reserves.** Chapter VII suggests that fiscal consolidation, reductions in government debt, and bold actions to deal with the closed banks, would help to reduce further the remaining vulnerabilities. It also recommends that the government and the banks continued their work towards designing and implementing a new liquidity fund.

15. **Chapter VIII shows that Ecuador's trade regime is very complex.** It suggests that the country could move towards a more open trade regime to improve efficiency and facilitate the expansion of the non-oil economy. In particular, Ecuador could benefit from a more uniform import tariff structure, and reduced nontariff barriers, which impose a high burden on the poor, and, ultimately, constitute a tax on exports.

16. **The macroeconomic difficulties faced by Ecuador during the 1990s increased poverty and affected social conditions.** Chapter IX discusses the World Bank's proposed agenda for reforms in education, health, and social assistance.

II. Potential Output, Competitiveness, and the Fiscal Impulse[4]

17. **The adoption of the dollar as national currency and the associated loss of the monetary policy instrument has increased the importance of fiscal (and structural) policies in macroeconomic management.** While the main fiscal policy objectives have remained unchanged—providing good public services at reasonable costs and improving social indicators—fiscal policy is now the main instrument in managing demand and inflationary pressures. The success in implementing strong policies will determine international competitiveness and the sustainability of growth and dollarization itself.

18. **Experience in other countries** has shown that following the adoption of a peg, fiscal authorities often experience a strong boost in revenue against the background of a rapidly—and often unsustainably—appreciating real effective exchange rate (REER) and a deteriorating external balance. This revenue boost typically triggers demands for higher spending. However, the REER appreciation often needs to be reversed, at least partially, which in turn negatively impacts the tax base and revenues, forcing the authorities into strong procyclical adjustment.

19. **This chapter analyzes whether recent and currently programmed fiscal policy in Ecuador has been suffering from a similar revenue illusion brought about by the strong appreciation of the REER since dollarization and the remaining high inflation differential with trading partners.** To this end, it uses the concepts of fiscal stance and impulse adjusted for REER developments to estimate whether fiscal policies are cyclically appropriate.

20. **The results raise concerns that recent fiscal policy may have indeed been too expansionary.** As such, it may have delayed the adjustment of Ecuadoran dollar inflation to U.S. levels, thereby putting additional pressure on the country's competitiveness, in particular in the absence of key structural reforms. The fiscal policies currently programmed for 2003 and 2004 seem appropriately cautious, highlighting the importance of the recently introduced *Fiscal Responsibility and Transparency Law* (see Chapter VI).

A. Estimating Potential Nominal GDP at the Actual and the Constant Real Exchange Rate

21. **To calculate the fiscal stance and impulse it is first necessary to estimate the *nominal* output gap,** which is the difference between actual and potential GDP. Potential nominal GDP reflects the underlying trend or "potential" level of *real GDP*, at a *given price index*. Potential GDP can be different depending on the use of domestic or international prices for the price index. Using domestic prices would be equivalent to presenting potential GDP at the actual real exchange rate; using international prices would estimate potential GDP at a constant real exchange rate.

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[4] Prepared by Harald Hirschhofer.

22. **For the assessment of fiscal policy, the use of the actual GDP deflator as the price index for estimating potential GDP may be misleading.** Different GDP deflators, and different cumulative levels of inflation, result in different real effective exchange rates and competitiveness. If competitiveness is adversely affected by an appreciation of the real exchange rate, the potential GDP series at the actual real exchange rate may signal growth that is not sustainable. *Potential output and growth not only depend on the quantity of inputs, but also on relative prices.*

23. **Since Ecuador adopted the U.S. dollar as its currency, the relevant benchmark rate of inflation for policy considerations shifted from the domestic rate of inflation to the dollar rate of inflation of trading partners.** If domestic inflation is below this benchmark, the economy is likely to experience an export expansion and import contraction, and an acceleration of growth that eventually pushes domestic prices up to the international level. If domestic inflation is above that of trading partners, the economy is likely to experience a slowing of exports and strong import penetration, and a slowing of growth that eventually leads to lower domestic inflation until prices are back in line with trading partners.

24. **Table II.1 summarizes the key economic variables for the period 1995–2004.** Actual real GDP growth ranges from -6.3 to 6.0 percent, while the estimated growth rates for potential real GDP range from 2.3 to 3.8 percent.[5] On the time series for potential real GDP (i) the implicit GDP deflator (which reflects actual domestic price developments) is applied to estimate potential nominal GDP at the actual real effective exchange rate (AREER) and (ii) a GDP deflator reflecting trading partner inflation is applied to estimate the potential nominal GDP at the constant real effective exchange rate (CREER). Accordingly, two different measures of the output gap can be derived.

25. **Potential GDP at a constant real exchange rate (CREER) is much more steady than potential GDP at the actual real exchange rate (AREER)** (see top left panel in Figure II.1) because international U.S. dollar inflation is more stable than domestic (Ecuadoran) U.S. dollar inflation. When comparing the actual nominal GDP with potential nominal GDP (CREER), the estimated nominal output gap is shown to be as large as 34 percent of potential GDP in 1997, followed by a large swing during the economic crisis to a gap of minus 20 percent of potential GDP in 2000, before swiftly swinging back into positive territory in 2002 and 2003. The reason for the quick closing of the nominal output gap is that Ecuador's GDP dollar inflation was very high (26 percent) in 2001 and over 12 percent by in 2002, causing the rapid increase in actual nominal GDP.

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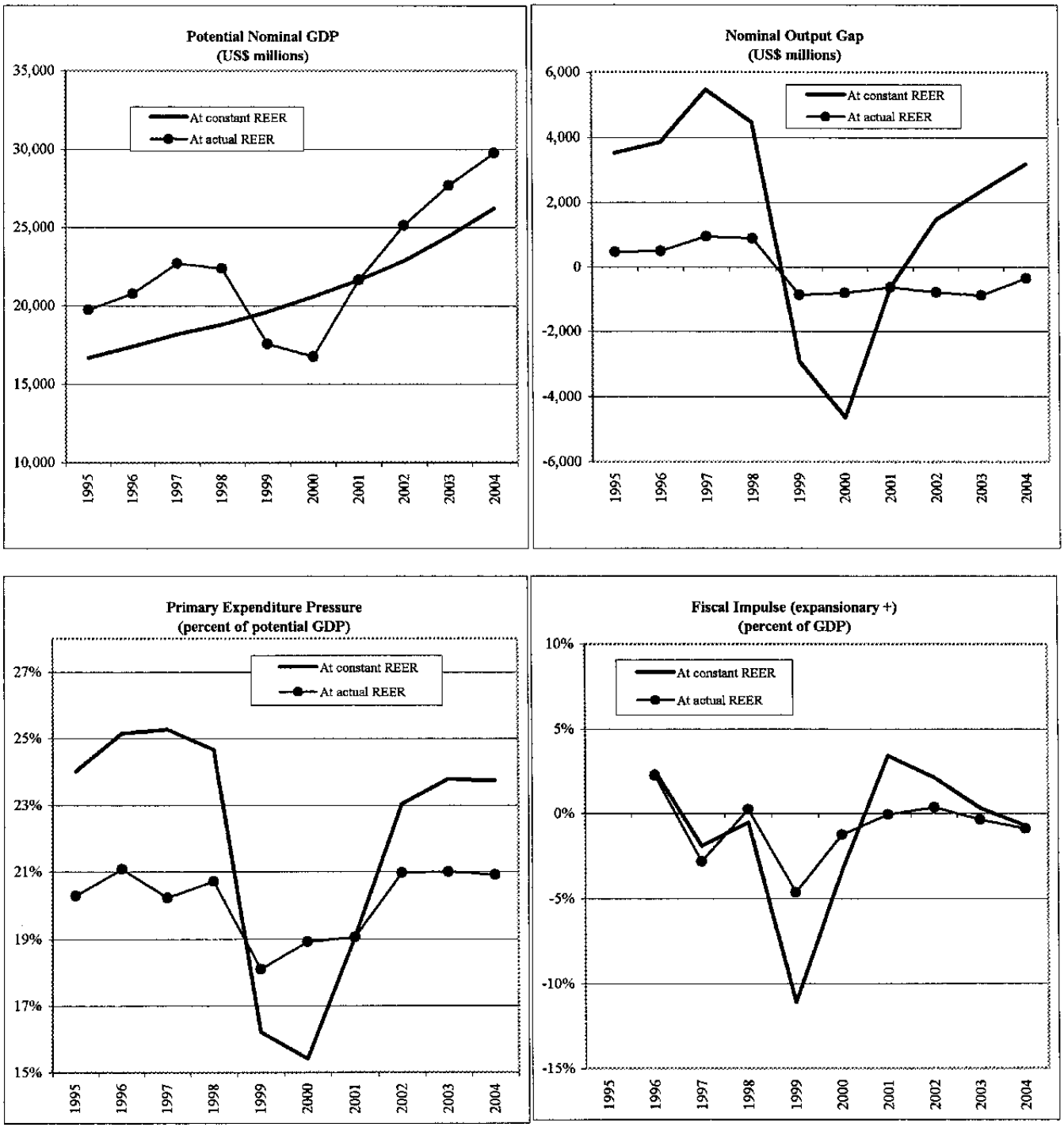
[5] Over a longer interval, the underlying real GDP "trend growth" was estimated by applying a Hodrick-Prescott filter to the data from 1970 through 2020. Real output growth was simulated to converge to 3.5 percent a year towards 2010 to address an "end-of-period bias" that can otherwise affect the HP filter.

Figure II. 1. Ecuador: Indicators of Output Gaps and Fiscal Impulse



Source: Fund staff calculations.

26. **Projections for 2003–04** suggest that the output gap measured using the potential GDP (AREER) would still be negative in 2003, suggesting further room for expansionary fiscal policies. In contrast, if output gap is measured using the estimate of potential GDP (CREER) the opposite is found; now projected nominal GDP is above its potential level by 16 and 21 percent in 2003 and 2004, respectively (top right panel of Figure II.1). This large difference demonstrates that, to decide whether there is room for fiscal stimulus or whether fiscal policies should be tightened to reduce demand pressures, it is important to consider the position of output both in relation to its potential level at the actual real exchange rate, and at the constant real exchange rate. Moreover, it would be important to compliment the analysis with other competitiveness indicators such as productivity growth, inflation, and the external current account balance. In the case of Ecuador, the persistent high inflation (despite some price controls) and the fast growing current account deficit, point towards excess demand.

B. Estimating the Fiscal Stance and Impulse

27. **The impact on aggregate demand of fiscal policies is measured by the fiscal stance and impulse.** The stance in any given year is equal to the difference between the cyclically neutral and the actual fiscal balance. If this stance is positive it is said to be expansionary, and vice versa. The fiscal impulse is calculated as the change in the fiscal stance. Thus, if the stance remains unchanged from one year to the next, the government is said to have kept fiscal policy neutral—the fiscal impulse is zero. When the stance weakens, fiscal policy imparts an expansionary (positive) impulse on aggregate demand; when it strengthens, it imparts a contractionary (negative) impulse on aggregate demand.

28. **When economic activity is at (or close to) potential, the ratio of cyclically sensitive revenues (mainly taxes) to nominal GDP reveals the structural level of revenue.** When GDP rises above its potential, these cyclical revenues tend to increase in line with *actual* GDP. At the same time, for stabilization purposes, primary (i.e., noninterest) expenditures should be allowed to vary only with growth in *potential* GDP. Then an increase in actual GDP over and above potential GDP would automatically shrink the deficit or expand the surplus—the functioning of automatic stabilizers. Fiscal policy is said to be expansionary or contractionary if the change in the fiscal balance exceeds the effects of the automatic stabilizers. Thus, if the economy enters into a recession and the deficit widens less than expected on the basis of the automatic stabilizers, fiscal policy would be contractionary (procyclical). If the economy is expanding, but the strengthening of the fiscal balance is less than that expected based on the functioning of automatic stabilizers, fiscal policy would be deemed expansionary (again procyclical). If the fiscal balance expands or contracts as expected from the automatic stabilizers alone, fiscal policy would be neutral.

29. **The cyclically neutral primary balance is the difference between the structural revenues and the structural primary expenditures** (i.e., the structural revenue parameter times the *actual* level of GDP and the structural expenditure parameter times the *potential* level of GDP). Since there are two estimates of potential output, there are also two estimates

of cyclically neutral primary expenditures, and thus two measures of the fiscal stance and impulse.[6] [7]

30. **Distinguishing between the two measures of the cyclically neutral expenditure is important for policy analysis.** If the REER appreciates, the level of cyclically neutral expenditures, as related to potential output at the actual REER, would increase as well. However, using potential output at a constant REER, such expenditures would increase much less. In fact, the expenditures calculated in this way could fall relative to actual GDP.

31. **Using exclusively fiscal analysis at the actual REER may underestimate the true expansionary stance of expenditures and can hide policy mistakes.** When the REER appreciates, the expansionary bias is not immediately observable. Policy makers see that GDP (and the tax base) is increasing fast, so there is a pressure to raise expenditure in line or faster than revenues, especially if social and political conditions are fragile. These higher expenditures get built into fiscal policy and develop a momentum of their own, even though they are based on an inflated and unsustainable revenue base. If economic activity and the REER subsequently adjust (i.e., the REER depreciates), the country is likely to have great difficulties in cutting back the inflated primary expenditures or raising the tax burden on a shrinking base. Painful adjustment decisions are then often delayed, resulting in (continued) procyclical fiscal policies and the total final economic adjustment costs turn out much larger than necessary (and may disproportionately fall on the weakest in the population).

C. The Analysis of Ecuadoran Fiscal Policies 1995–2004

32. **Table II.1 presents the calculations of the fiscal stance in Ecuador over the period 1995–2004.** The calculations start with the primary balance based on actual revenue and expenditure data ("Public sector operations, actual" in the table). From this information, and noting that actual real GDP was relatively close to its estimated potential in 2001, we set

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[6] The choice of the base year at which the two estimates of potential GDP are set to equal (assuming the REER is in equilibrium) is important. For the present analysis the base year is 2001, when the current account imbalance was relatively small and the economy had somewhat stabilized following the economic crisis. If the REER would be assumed to be in equilibrium at a higher level than observed in 2001, the measures for the output gap (and the fiscal stance) would differ, but relative results of both methodologies (and the fiscal impulse) would not change significantly.

[7] The benefit of the impulse over the stance is that it does not rely on the base year required to choose the structural revenue or primary expenditure parameters. As such, it is a more robust measure of fiscal policy, because if the base year to calculate the stance is chosen incorrectly, the latter may be biased.

the structural level of cyclical revenues in Ecuador at 17.7 percent of GDP. The structural primary expenditure ratio to potential GDP was set at some 19.1 percent.[8]

33. **Table II.1 also shows the calculations for the two measures of the fiscal stance and impulse using the above described calculations of potential output;** Panel A and Panel B present the calculations of the fiscal stance and impulse at the AREER and the CREER, respectively. As expected, the results show that swings in the fiscal stance estimated using the CREER concept are significantly more pronounced than using the AREER. This suggests that rather than progressing evenly, and in line with potential output, the volatility of fiscal policies has been large—and procyclical.

34. **Both estimation approaches show an expansionary fiscal policy stance in the period 1995–98,** setting the stage for the economic crisis in 1999. Revenue policies were tightened in 1997, when revenues from VAT and taxes on international trade were boosted by tax and tax administration reforms. However, in 1998 these efforts were not adequately sustained. Expenditure stance remained broadly unchanged until 1998 when investment spending increased in the wake of destruction of roads from of *El Niño*, and the wage bill expanded rapidly.

35. **In 1999, the authorities were forced into a large *procyclical* fiscal contraction.** The sharp economic contraction, weak oil prices, and an unsuccessful tax reform led to a collapse in revenues, while the banking crisis, the collapse of the exchange rate, and debt default prevented any access to financing. The wage bill fell by 40 percent in U.S. dollar terms (Table II.2). The total negative fiscal impulse (CREER) was -11 percentage points of GDP in 1999 and even at the AREER, it was negative 5 percentage points of GDP.

36. **In 2000, the year of dollarization, the fiscal policy stance was (procyclically) tightened further.** Revenues were boosted by higher oil prices, a nominal exchange rate based stabilization, and improved tax administration. However, the extreme financing constraints enforced additional expenditure adjustment, and the wage bill actually fell by an additional 23 percent in U.S. dollar terms (Table II.2).

37. **In 2001, fiscal policies eased noticeably, again in a procyclical fashion** (CREER approach). Revenues were boosted by various factors including improvements in tax administration, rapid growth in the nominal tax base caused by high inflation and a high real growth rate of 5.1 percent, and one-time income tax receipts related to bracket creep and the

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[8] The exercise may be extended by examining the structural parameters for real exchange rate effects (In the chosen base year, not all tradable and nontradable prices may be at their equilibrium level), thereby isolating discretionary fiscal policy from exogenous effects. Unfortunately, no detailed data were readily available to allow for this further examination. The net impact on the fiscal balance of such further analysis may well be small as revenue and expenditure effects could cancel each other out.

interruption of a VAT refund to oil companies. While some of these factors contributed to tightening the revenue stance, they were offset by very expansionary spending decisions; primary spending jumped by 30 percent in U.S. dollar terms. The wage bill and capital spending rose by 60 percent, and spending on goods and services by 30 percent. The expenditure boost added 3.4 percentage points to aggregate demand (CREER methodology).

38. **In 2002, fiscal policy remained expansionary** with a strong positive fiscal impulse of 3.7 percent of GDP from higher expenditures (CREER approach), especially the wage bill and social security benefits. However, revenues remained contractionary especially due to a jump in social security contributions (following a broadening of the contribution base) and continuing efforts to tighten tax administration. Overall, the CREER approach shows a positive fiscal impulse of 2.1 percent of GDP.

39. **The analysis of the fiscal program proposed by the current administration for 2003 and 2004 (at CREER) implies a small countercyclical negative fiscal impulse.** Some remaining expansion in 2003 is largely caused by expenditure carryover in the wage bill and social security benefits caused by rate hikes in 2002. The envisaged countercyclical tightening in 2004 will crucially depend on the successful implementation of the government's reform agenda in 2003 (Figure II.1, panel 4).

D. Conclusions

40. **In managing dollarization, changes in the real effective exchange rate and their temporary impact on revenues need to be taken into account in order to avoid revenue illusion when determining the size of expenditures.** A rapidly appreciating real effective exchange rate needs to be accompanied with fiscal strengthening.

41. **It will be important to save any increase in nominal revenues caused by the impact of relatively high domestic inflation on the tax base, or windfall revenues from higher oil prices or oil production.** Recent experience shows that the avoidance of procyclical policies is an important challenge in Ecuador. Primary expenditures were high during the period 1995–98, consistent with the notion of excessive aggregate demand. They dropped precipitously during the crisis in 1999–2000, but have been making a strong comeback in 2001–02 (Figure II.1, panel 3). Especially the procyclical nature of the wage bill and strong increases in social security benefits contributed significantly to these expenditure increases, which are very difficult to reverse.

Table II. 1. Ecuador: Fiscal Stance and Impulse at Actual and Constant Real Effective Exchange Rates

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Real economy parameters										
Real GDP (at constant 2001 prices)	19,083	19,541	20,333	20,763	19,455	20,000	21,024	21,664	22,428	23,772
Percentage change	1.8	2.4	4.1	2.1	-6.3	2.8	5.1	3.0	3.5	6.0
Potential real GDP	18,650	19,085	19,525	19,979	20,468	21,020	21,650	22,367	23,171	24,056
Percentage change	2.4	2.3	2.3	2.3	2.4	2.7	3.0	3.3	3.6	3.8
GDP deflator (2000=1; domestic inflation)	1.058	1.088	1.162	1.120	0.857	0.797	1.000	1.124	1.195	1.237
Percentage change	6.9	2.8	6.8	-3.6	-23.5	-7.0	25.5	12.4	6.3	3.5
Nominal GDP	20,196	21,268	23,636	23,255	16,674	15,934	21,024	24,347	26,806	29,416
Potential nominal GDP	19,737	20,771	22,696	22,377	17,543	16,746	21,650	25,138	27,694	29,766
Nominal gap (at AREER)	459	497	940	878	-868	-812	-626	-791	-888	-351
In percent of potential GDP (at AREER)	2.3	2.4	4.1	3.9	-5.0	-4.8	-2.9	-3.1	-3.2	-1.2
Trade partner dollar inflation	2.0	2.0	2.0	1.1	1.8	2.2	2.2	2.3	3.2	3.3
GDP deflator (trading partner inflation)	0.894	0.912	0.930	0.940	0.957	0.978	1.000	1.023	1.056	1.091
Percentage change	2.0	2.0	2.0	1.1	1.8	2.2	2.2	2.3	3.2	3.3
Potential nominal GDP at trading partner inflation	16,675	17,406	18,163	18,790	19,597	20,567	21,650	22,882	24,463	26,235
Nominal gap (at CREER)	3,520	3,862	5,473	4,465	-2,922	-4,634	-626	1,465	2,343	3,181
In percent of potential GDP (at CREER)	21.1	22.2	30.1	23.8	-14.9	-22.5	-2.9	6.4	9.6	12.1
Public sector operations, actual										
Revenue	4,583	4,644	5,103	4,432	3,751	4,391	5,184	6,318	7,204	8,196
Taxes, SS, other	2,704	2,596	3,529	3,508	2,581	2,793	3,728	4,709	5,294	6,035
Petroleum and operating result EE	1,879	2,048	1,574	924	1,170	1,598	1,456	1,609	1,910	2,162
Primary expenditure	4,005	4,379	4,591	4,635	3,177	3,169	4,127	5,273	5,818	6,227
Primary balance	578	264	512	-203	575	1,222	1,057	1,045	1,386	1,969
In percent of actual GDP	2.9	1.2	2.2	-0.9	3.4	7.7	5.0	4.3	5.2	6.7
Taxes, SS, other, in percent of GDP	13.4	12.2	14.9	15.1	15.5	17.5	17.7	19.3	19.7	20.5
Structural parameter	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7
Primary expenditure, in percent of pot. GDP	20.3	21.1	20.2	20.7	18.1	18.9	19.1	21.0	21.0	20.9
Structural parameter	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1
Primary balance, in percent of potential GDP	7.9	8.2	5.3	2.6	5.6	8.6	5.5	5.2	5.7	5.9

Table II. 1. Ecuador: Fiscal Stance and Impulse at Actual and Constant Real Effective Exchange Rates

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
A. Stance and impulse at actual real exchange rate (AREER)										
Public sector operations, cyclically neutral										
Revenue	5,454	5,812	5,757	5,040	4,121	4,418	5,177	5,918	6,655	7,368
Taxes, SS, other at structural parameter	3,575	3,764	4,183	4,116	2,951	2,820	3,721	4,309	4,745	5,207
Petroleum and operating result EE, actual	1,879	2,048	1,574	924	1,170	1,598	1,456	1,609	1,910	2,162
Primary expenditure at structural parameter	3,770	3,967	4,335	4,274	3,351	3,198	4,135	4,801	5,289	5,685
Primary balance	1,684	1,845	1,423	766	771	1,220	1,042	1,117	1,365	1,683
Fiscal stance (expansionary +)	**1,106**	**1,581**	**910**	**969**	**196**	**-2**	**-15**	**73**	**-21**	**-286**
Revenue (expansionary +)	871	1,168	654	608	370	27	-7	-400	-549	-828
Primary expenditure (expansionary +)	235	412	256	361	-174	-29	-8	472	529	542
Fiscal impulse (expansionary +)		**474**	**-670**	**59**	**-773**	**-198**	**-13**	**87**	**-93**	**-265**
Revenue (expansionary +)		298	-514	-46	-238	-343	-34	-393	-150	-279
Primary expenditure (expansionary +)		177	-156	105	-535	145	21	480	57	13
In percent of GDP		2.2	-2.8	0.3	-4.6	-1.2	-0.1	0.4	-0.3	-0.9
Revenue		1.4	-2.2	-0.2	-1.4	-2.2	-0.2	-1.6	-0.6	-0.9
Expenditure		0.8	-0.7	0.5	-3.2	0.9	0.1	2.0	0.2	0.0
Primary expenditure (% potential GDP)	20.3	21.1	20.2	20.7	18.1	18.9	19.1	21.0	21.0	20.9

Table II. 1. Ecuador: Fiscal Stance and Impulse at Actual and Constant Real Effective Exchange Rates

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
B. Stance and impulse at constant real exchange rate (CREER)										
Public sector operations, cyclically neutral										
Revenue	5,454	5,812	5,757	5,040	4,121	4,418	5,177	5,918	6,655	7,368
Taxes, SS, other at structural parameter	3,575	3,764	4,183	4,116	2,951	2,820	3,721	4,309	4,745	5,207
Petroleum and operating result EE, actual	1,879	2,048	1,574	924	1,170	1,598	1,456	1,609	1,910	2,162
Primary expenditure at structural parameter	3,185	3,325	3,469	3,589	3,743	3,928	4,135	4,370	4,672	5,011
Primary balance	2,269	2,488	2,288	1,451	378	490	1,042	1,548	1,982	2,358
Fiscal stance (expansionary +)	**1,691**	**2,223**	**1,776**	**1,654**	**-196**	**-732**	**-15**	**503**	**596**	**389**
Revenue (expansionary +)	871	1,168	654	608	370	27	-7	-400	-549	-828
Primary expenditure (expansionary +)	820	1,055	1,122	1,046	-566	-759	-8	903	1,146	1,216
Fiscal impulse (expansionary +)		**532**	**-447**	**-122**	**-1,850**	**-535**	**717**	**518**	**93**	**-208**
Revenue (expansionary +)		298	-514	-46	-238	-343	-34	-393	-150	-279
Primary expenditure (expansionary +)		235	67	-76	-1,612	-193	751	911	243	71
In percent of GDP		2.5	-1.9	-0.5	-11.1	-3.4	3.4	2.1	0.3	-0.7
Revenue		1.4	-2.2	-0.2	-1.4	-2.2	-0.2	-1.6	-0.6	-0.9
Expenditure		1.1	0.3	-0.3	-9.7	-1.2	3.6	3.7	0.9	0.2
Primary expenditure (% potential GDP at CREER)	24.0	25.2	25.3	24.7	16.2	15.4	19.1	23.0	23.8	23.7

Source: Fund staff calculations.

Table II. 2. Ecuador: Wage Levels in Percent of Actual and Potential GDPs

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
NFPS Wages (in US$ million)	1,292	1,485	1,602	1,958	1,181	910	1,446	1,991	2,251	2,213
change in percent		14.9	7.9	22.2	-39.7	-23.0	59.0	37.7	13.1	-1.7
In percent of:										
Nominal GDP	6.4%	7.0%	6.8%	8.4%	7.1%	5.7%	6.9%	8.2%	8.4%	7.5%
Potential nominal GDP (AREER)	6.5%	7.1%	7.1%	8.8%	6.7%	5.4%	6.7%	7.9%	8.1%	7.4%
Potential nominal GDP (CREER)	7.7%	8.5%	8.8%	10.4%	6.0%	4.4%	6.7%	8.7%	9.2%	8.4%
Memorandum items:										
Nominal GDP	20,196	21,268	23,636	23,255	16,674	15,934	21,024	24,347	26,806	29,416
Potential nominal GDP (AREER)	19,737	20,771	22,696	22,377	17,543	16,746	21,650	25,138	27,694	29,766
Potential nominal GDP (CREER)	16,675	17,406	18,163	18,790	19,597	20,567	21,650	22,882	24,463	26,235

Sources: Central Bank; Ministry of Economy; and Fund staff estimates.

III. Fixed Investment and Capital Accumulation[9]

42. **This chapter considers Ecuador's fixed capital formation during the period 1970–2002,** and derives a preliminary estimate of the net capital stock available in the economy. Capital accumulation is a key factor in boosting productivity and thereby facilitating sustainable high growth and job creation. Developing favorable conditions for fixed (and human) capital formation is an important task for the government.

43. **The calculations are based on national accounts data for gross fixed investment spending in residential, government and business structures, and in machinery and equipment.** Such level of detail permits the construction of time series for the capital stock that reflect different rates of embodied technical progress and depreciation for the various components of investment. The data, however, were incomplete. Aggregate investment data go back to 1956, but information on the distribution between different types of investment covers only recent years. For this chapter it is assumed that the distribution in the earliest years was proportional to the composition of investment spending for the later years.[10]

44. **The preliminary findings are:**

- Investment spending was relatively strong during the 1970s (following the discovery of oil in the late 1960s). Thereafter it slowed, especially in the public sector.

- The net fixed capital stock of Ecuador steadily increased through 1998. It declined during the crisis of 1999–2000.

- The private and public sector net capital stocks have evolved differently. While the private sector capital stock has shown a fairly steady increase, the public sector capital stock has remained little changed over the last 15 years. The capital output ratios for the private sector show an increase from 1¾ in 1985 to close to 2 in recent years; in the public sector it dropped from 1.1 to 0.9, respectively. The total capital output ratio was between 2¾–3 throughout the 1990s.[11]

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[9] Prepared by Marco Rodríguez and Esteban Vesperoni.

[10] Moreover, the national accounts have recently been revised from 1993 onward. Data prior to 1993 were spliced onto the revised series.

[11] Hofman found net capital output ratios for a number of Latin American countries, including Argentina, Brazil, Venezuela, Mexico, and Colombia, in the range of 1.5–2.5. See Andre A. Hofman, "The Role of Capital in Latin America: A Comparative Perspective of Six Countries for 1950–89," December 1991, Working Paper No. 4, ECLAC. The discovery of oil in the late 1960s, and its subsequent exploitation, may be a factor why the capital output ratio has been somewhat higher in Ecuador.

- The data allow a calculation of the nominal U.S. dollar value of the net fixed capital stock of the public sector. This concept is equivalent to what a private corporation would enter on its balance sheet as gross fixed capital accumulation minus obsolescence from depreciation. The public sector net capital stock increased at an average rate of 4 percent in (nominal) U.S. dollar terms during 1985–2002, which is rather low (does not include holdings of public lands or other natural resources).

A. Investment Performance

45. **The table below shows that, relative to the 1970s, the growth in spending on real gross fixed capital formation has been low in the 1980s and 1990s.** In the 1980s the average rate was 1.5 percent, and in the 1990s the rate turned slightly negative. The latter outcome was influenced by a collapse in investment spending in 1998–99. Moreover, the ratio of investment to GDP declined from almost 23 percent in the 1970s to less than 19 percent in the 1990s. In comparison, investment ratios in some of the fast growing Asian developing countries has been above 30 percent. With dollarization in early 2000 the economy stabilized and investment spending rebounded. In 2001/02, together with the site preparations and the expenditure related to the construction of the new oil pipeline, investment rebounded substantially.

Gross Fixed Investment Spending

	1970–79	1980–89	1990–99	2000	2001	2002
	(Average annual real growth in percent)					
Total	**14.4**	**1.5**	**-0.8**	**12.1**	**12.1**	**11.1**
Private	8.9	2.1	3.3	22.3	9.0	6.7
Public	8.9	0.9	-2.5	-26.0	31.0	33.4
	(In percent of GDP)					
Total	**22.9**	**20.2**	**18.8**	**20.5**	**21.6**	**22.5**
Private	17.1	13.4	15.0	17.6	18.1	18.1
Public	5.5	6.9	3.9	2.9	3.5	4.4

Sources: Ecuadoran national accounts; and Fund staff calculations.

B. Constructing Estimates of the Net Capital Stock

46. **The net capital stock for Ecuador was constructed using the Perpetual Inventory Method (PIM),** pioneered in the 1950s by Raymond Goldsmith (Table III.1).[12] The PIM accumulates over the years the flows of investment onto the existing stock of capital at the end of the previous period, itself the sum of the investment flows in the years before. The capital stock is depreciated over certain periods, so that an investment flow undertaken many years ago would gradually be removed from the capital stock as the equipment or structure ages. Since the economically useful life of different classes of capital goods differs, the calculations are carried out separately for residential and nonresidential construction, and machinery and equipment.

47. **The calculations in this chapter assume a linear depreciation** of 40 years for residential and nonresidential structures, and a depreciation of 8 and 5 years, respectively for public and private machinery and equipment. Since the data start in 1950, the first fully-developed estimates of the net capital stock would be those of 1990, but the later years of the 1980s would also already provide reasonable estimates.

48. **The calculations incorporate an adjustment for vintage effects,** reflecting productivity enhancements as a result of embodied technical progress. In particular, this note assumes a 0.5 percent productivity gain per year for residential investment, a 1 percent productivity gain per year for both public and private nonresidential investment, and a 2 percent productivity gain per year for both public and private machinery and equipment.

49. **Figure III.1 shows the evolution in the overall net real capital stock,** that of the private and public sectors, and the corresponding capital output ratios. The overall net capital stock increased steadily through 1998 and then declined with the economic and banking crisis in 1999–2000.

50. **The private and public sector net capital stocks evolved differently.** The private sector net capital stock exhibited positive rates of growth throughout the period, with an interruption during the crisis, and a rebound in 2000–02. The public sector net capital stock—the public sector capital infrastructure—has essentially stagnated since the mid-1980s, and fallen when considering capital output ratios.

51. **Figure III.2 considers the public sector investment outlays in more detail.** Real public gross investment spending was around 8 percent of real GDP by the mid-1980s; from then on, after a peak in 1987, it declined to about 4 percent in recent years. Figure III.2 also shows an estimate of the real and nominal stock of net public sector capital (i.e., after depreciation). The nominal net capital stock is calculated by applying the PIM on nominal investment spending, including the vintage effect and adjusting for depreciation. The results suggest an average increase in the nominal net capital stock of 4 percent a year during 1985–2002, with some slowing visible during the 1999–2000 crisis.

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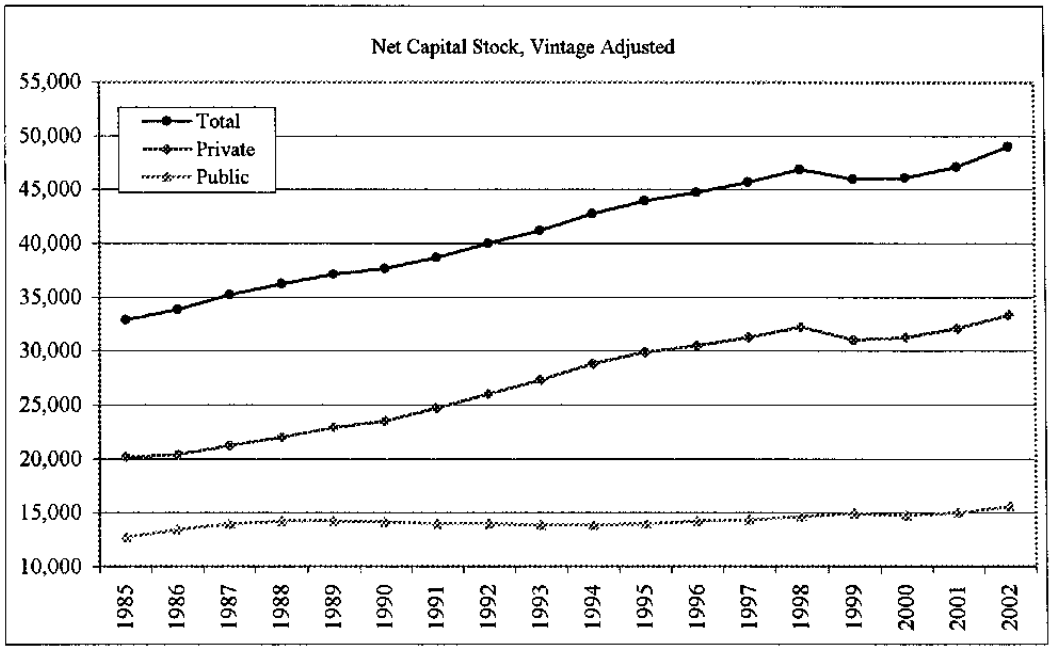
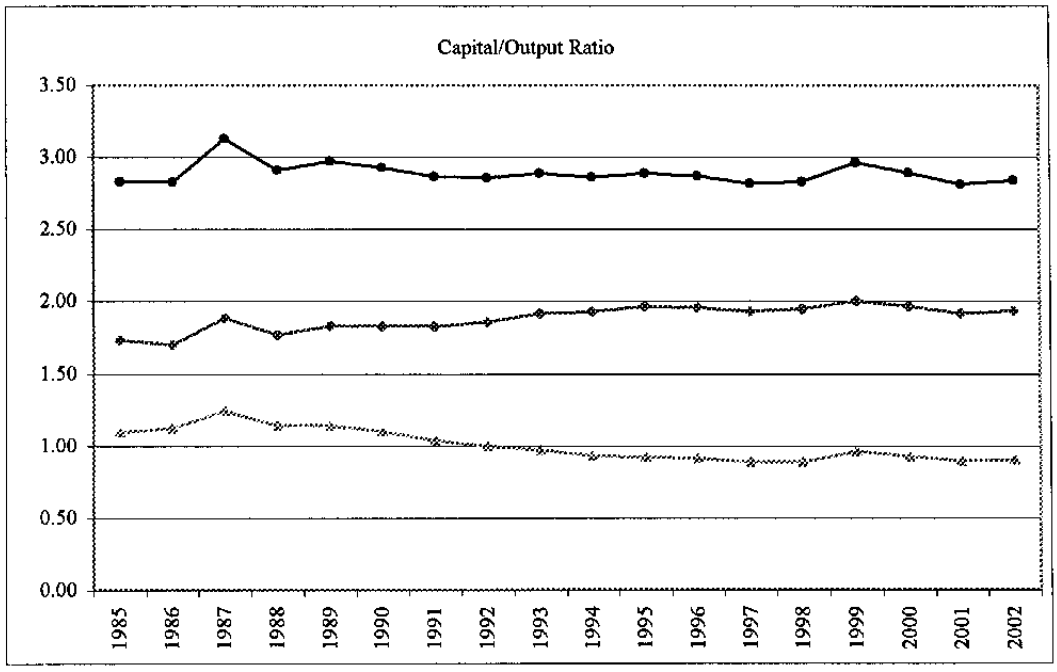
[12] See Raymond Goldsmith, "A Perpetual Inventory of National Wealth," Studies in Income and Wealth, Vol. 14, New York, National Bureau of Economic Research.

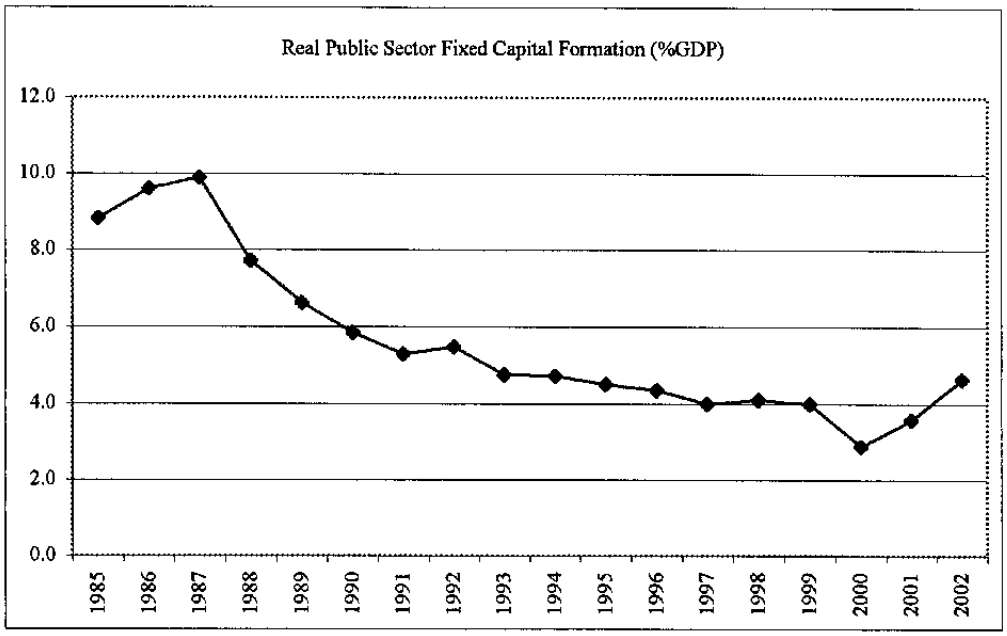
Figure III. 1. Ecuador: Net Fixed Capital Stock, Vintage Adjusted

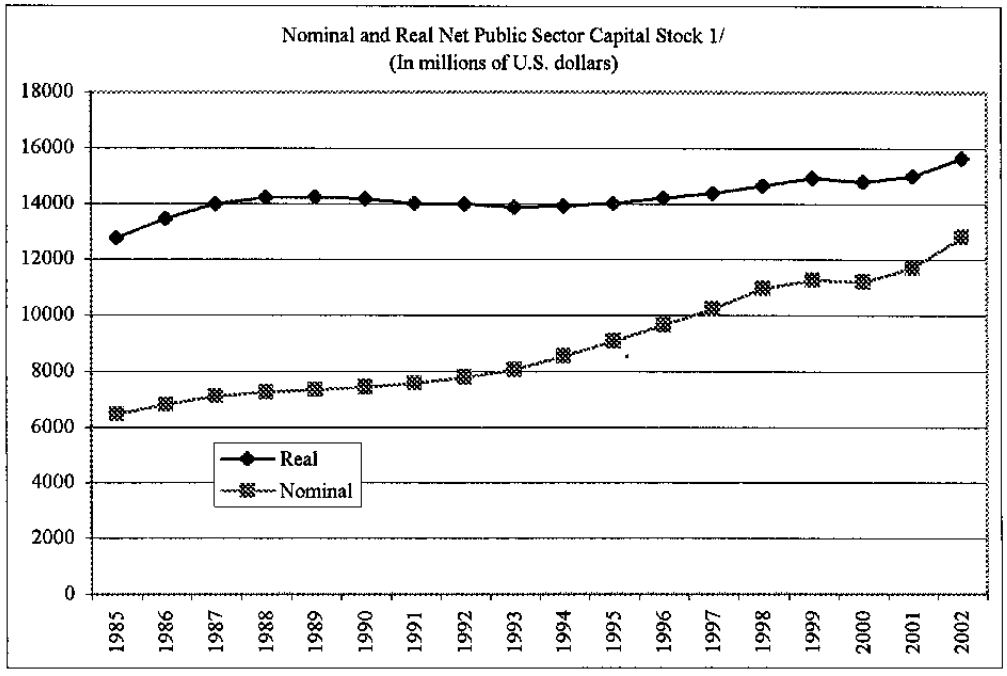




Source: Fund staff calculations.

Figure III. 2. Ecuador: Public Sector Investment and Net Capital Stock





Source: Fund staff calculations.

1/ Gross capital stock minus depreciation.

Table III. 1. Ecuador: Data Base and Capital Stock Calculations

Year	Real GDP (constant dollars of 2000)	Gross Fixed Investment Vintage Adjusted			Real Gross Fixed Capital Stock Vintage Adjusted			Cumulative Depreciation Vintage Adjusted			Real Net Capital Stock Vintage Adjusted			Capital/Output Ratio			Public Sector Capital Stock
		Total	Private	Public	Total	Private	Public	Total	Private	Public	Total	Private	Public	Total	Private	Public	
1970	4,457	2,461	1,644	818	29,204	21,207	7,997	17,885	14,646	3,239	11,319	6,561	4,758	...	...	...	...
1971	4,736	3,168	2,245	923	32,372	23,452	8,920	19,706	15,899	3,807	12,666	7,553	5,113	...	...	...	...
1972	5,419	2,642	1,992	650	35,014	25,444	9,570	21,694	17,300	4,393	13,321	8,144	5,177	...	...	...	...
1973	6,791	3,038	2,053	985	38,052	27,497	10,555	23,867	18,837	5,030	14,186	8,660	5,526	...	...	...	...
1974	7,229	3,910	2,595	1,316	41,963	30,092	11,871	26,323	20,583	5,740	15,640	9,509	6,131	...	...	...	...
1975	7,632	4,903	3,588	1,316	46,866	33,679	13,187	29,141	22,654	6,487	17,725	11,025	6,700	...	...	...	...
1976	8,336	5,057	3,620	1,438	51,923	37,299	14,624	32,242	24,960	7,282	19,681	12,339	7,342	...	...	...	...
1977	8,881	5,938	4,479	1,459	57,861	41,778	16,083	35,782	27,676	8,106	22,079	14,102	7,977	...	...	...	...
1978	9,466	6,840	5,281	1,558	64,701	47,059	17,642	39,918	30,937	8,981	24,783	16,122	8,661	...	...	...	...
1979	9,968	6,933	5,517	1,416	71,633	52,576	19,057	44,597	34,713	9,884	27,036	17,863	9,173	...	...	...	...
1980	10,457	7,481	5,596	1,885	79,114	58,172	20,943	49,736	38,840	10,896	29,378	19,332	10,047	...	...	...	...
1981	10,870	7,056	4,972	2,084	86,170	63,144	23,027	55,216	43,206	12,009	30,955	19,937	11,017	...	...	...	...
1982	10,999	7,224	5,422	1,803	93,395	68,565	24,829	60,917	47,757	13,160	32,478	20,809	11,669	...	...	...	...
1983	10,688	5,426	3,930	1,496	98,821	72,495	26,326	66,463	52,118	14,345	32,358	20,377	11,981	...	...	...	...
1984	11,138	5,268	3,796	1,472	104,088	76,291	27,797	71,773	56,223	15,550	32,315	20,068	12,247	...	...	...	...
1985	11,621	5,725	3,937	1,788	109,813	80,228	29,585	76,910	60,090	16,820	32,903	20,138	12,765	2.83	1.73	1.10	6,468
1986	11,981	6,072	4,015	2,057	115,886	84,243	31,642	82,019	63,834	18,186	33,866	20,410	13,457	2.83	1.70	1.12	6,817
1987	11,264	6,446	4,443	2,003	122,331	88,686	33,645	87,098	67,444	19,655	35,233	21,242	13,991	3.13	1.89	1.24	7,120
1988	12,449	6,228	4,499	1,729	128,560	93,185	35,374	92,318	71,174	21,144	36,241	22,011	14,230	2.91	1.77	1.14	7,255
1989	12,481	6,281	4,813	1,468	134,841	97,998	36,843	97,698	75,109	22,590	37,143	22,890	14,253	2.98	1.83	1.14	7,351
1990	12,859	6,062	4,722	1,340	140,903	102,720	38,183	103,230	79,217	24,013	37,673	23,503	14,169	2.93	1.83	1.10	7,445
1991	13,505	6,845	5,603	1,242	147,748	108,324	39,424	109,056	83,651	25,406	38,692	24,673	14,019	2.87	1.83	1.04	7,578
1992	13,986	7,441	6,092	1,350	155,189	114,415	40,774	115,191	88,416	26,775	39,998	25,999	13,999	2.86	1.86	1.00	7,783
1993	14,270	7,651	6,490	1,161	162,840	120,905	41,935	121,631	93,569	28,062	41,209	27,336	13,873	2.89	1.92	0.97	8,070
1994	14,941	8,297	7,085	1,212	171,137	127,990	43,147	128,386	99,149	29,237	42,751	28,841	13,910	2.86	1.93	0.93	8,547
1995	15,203	8,267	7,084	1,183	179,404	135,074	44,330	135,477	105,168	30,309	43,927	29,906	14,021	2.89	1.97	0.92	9,088
1996	15,568	8,051	6,849	1,202	187,455	141,923	45,532	142,746	111,433	31,313	44,709	30,490	14,219	2.87	1.96	0.91	9,661
1997	16,199	8,410	7,283	1,127	195,864	149,206	46,659	150,213	117,943	32,269	45,652	31,262	14,389	2.82	1.93	0.89	10,238
1998	16,541	8,891	7,691	1,200	204,756	156,897	47,859	157,890	124,694	33,196	46,866	32,203	14,663	2.83	1.95	0.89	10,980
1999	15,499	6,542	5,324	1,218	211,297	162,220	49,077	165,314	131,173	34,141	45,984	31,047	14,937	2.97	2.00	0.96	11,271
2000	15,934	7,458	6,706	751	218,755	168,926	49,829	172,662	137,632	35,030	46,093	31,294	14,798	2.89	1.96	0.93	11,204
2001	16,749	8,505	7,417	1,088	227,260	176,343	50,917	180,147	144,225	35,923	47,113	32,118	14,994	2.81	1.92	0.90	11,701
2002	17,259	9,612	8,014	1,598	236,872	184,357	52,515	187,840	150,968	36,872	49,032	33,390	15,643	2.84	1.93	0.91	12,819

Sources: Ecuadoran National Account Statistics; and Fund staff calculations.

IV. Oil and the Non-oil Economy[13]

52. **This chapter provides information on Ecuador's oil economy, focusing on proven reserves and their valuation.** It also discusses the counterpart of the oil economy—the non-oil economy, where large imbalances are present. Policies need to be directed at correcting these imbalances, in light of the projected sharp decline in remaining oil reserves.

53. Main findings:

- **Ecuador has limited proven oil reserves (stocks) left.** At the projected extraction rates, the wells could run dry in 2021. In a more optimistic scenario, in which the staff assumes new exploration and oil finds, the oil reserves could last until 2032—still a comparatively short time horizon. Moreover, new oil exploration needs to be weighted against environmental constraints, as Ecuadoran oil is located in the Amazon forest.

- **The gross value of annual oil extraction (flows) amounts to about 12.6 percent of GDP,** about half accruing to the public sector. Excluding oil revenues, the non-oil fiscal balance has been running large deficits of 5–10 percent of GDP.

- **The external current account is running deficits** too, averaging 2 percent of GDP in the last ten years, *including* oil exports. The non-oil external current account has been running very large deficits of over 16 percent of GDP a year.

- **The macroeconomic imbalances in the non-oil economy** are consistent with misalignments in relative prices resulting from the Dutch disease.

A. Estimates of Proven Oil Reserves

54. **There are several reported estimates of proven oil reserves.** The U.S. Department of Energy[14] uses official estimates of oil that can be extracted with current techniques available to Ecuador at average known cost (the most conservative method). In 2001 it estimated Ecuador's proven reserves at 2,100 million barrels. The Fund's 2000 RED[15] estimates, based on discussions with oil producers in Ecuador, were more optimistic at 4,400 million barrels. The 2002 estimates of PetroEcuador,[16] at 4,574 million barrels, take

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[13] Prepared by Mayra Zermeño and Bob Traa.

[14] http/www.eia.doe.gov/emeu/cabs/ecuador.html.

[15] EBS/01/72, p. 45. Based on discussions with PetroEcuador and private oil exploration companies in Ecuador.

[16] PetroEcuador, internal report received by the staff; includes a large increase in estimated reserves announced in early 2002.

account of proven reserves at productive wells, and an allowance for recoverable reserves at higher extraction costs. For the projections presented in this chapter, we have used PetroEcuador's estimates.

55. **It is not clear that all proven reserves can be extracted at economically viable cost, because Ecuadoran oil is mainly found in the Amazon rain forest.** Environmental concerns are an issue for Ecuador, as exploration and extraction cause damage to the rain forest, and there is a strong domestic and international coalition pressing the authorities to take account of the unique resource provided by the forest itself.[17] Moreover, oil needs to be transported over the mountains to the coast where it can be shipped out. This increases the risks of mishaps and total extraction cost. In particular, the pipelines have been bombed by action groups, and earthquakes and mud slides have destroyed sections of the existing infrastructure on at least two recent occasions, with the accompanying spillage and local pollution.

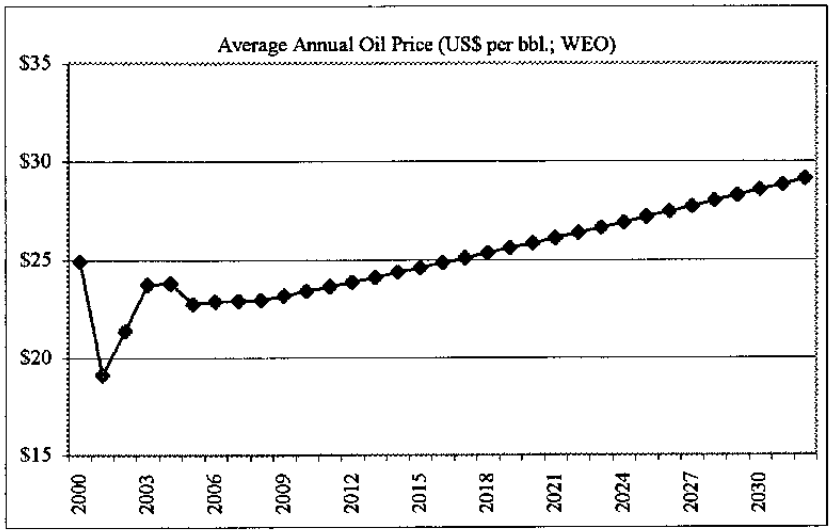
B. Oil Volumes

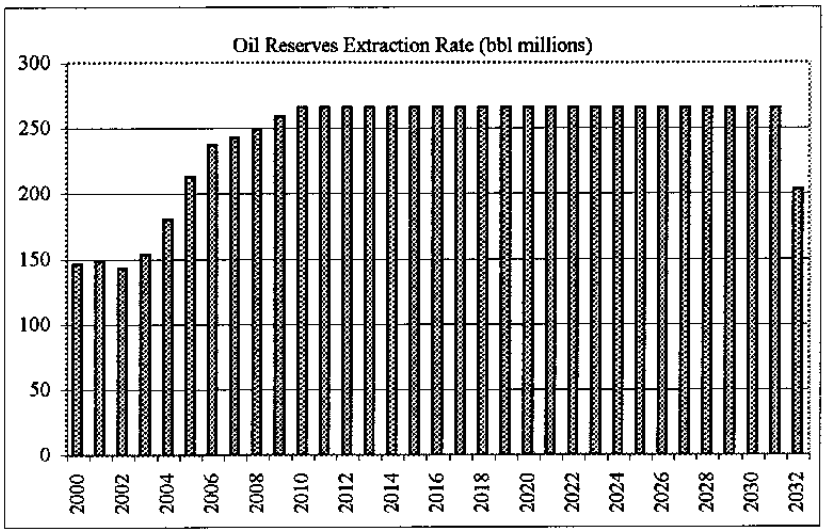
56. **This section discusses exports and domestic consumption of oil volumes in recent years, and provides medium term projections of proven reserves under different assumptions.** Oil available for exports is calculated by deducting from total oil extraction the number of barrels that are processed domestically. At present, the total domestic processing capacity is around 60 million barrels a year. If domestic consumption exceeds the domestic processing capacity, supplemental oil derivatives need to be imported. The BOP shows that domestic processing capacity falls short of domestic consumption and Ecuador imports between US$200–400 million in derivatives a year. Oil refining is a de-facto PetroEcuador monopoly, and there is no investment in refining capacity from abroad.

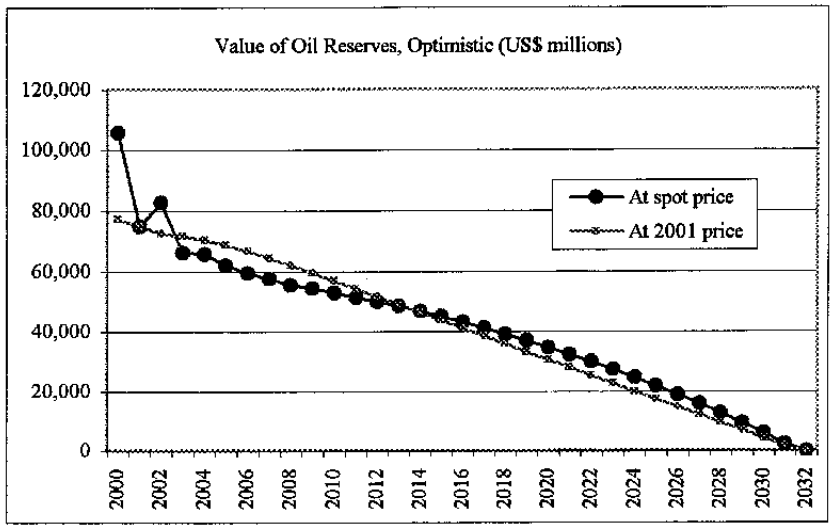
57. **The rate of oil extraction from PetroEcuador and private companies is currently around 150 million barrels a year** (all transported through the government-owned pipeline, the SOTE). This rate is expected to increase significantly in the next few years, when a new large pipeline, now under construction (the OCP), comes on line. The private sector is building the OCP to bring heavy crude oil from the Amazon to the coastal region. It is expected to be finished in 2003. Once the OCP is at full capacity, extraction rates will increase to about 200–265 million barrels a year (Figure IV.1 and Table IV.1). With the OCP in place, private oil companies will shift their share of total output from transportation through the SOTE to the OCP. It is assumed that PetroEcuador cannot fill immediately the vacancy thus created in the SOTE until it has completed additional investments in its own production. Therefore, the full use of total capacity (SOTE and OCP combined) will be phased in over several years.

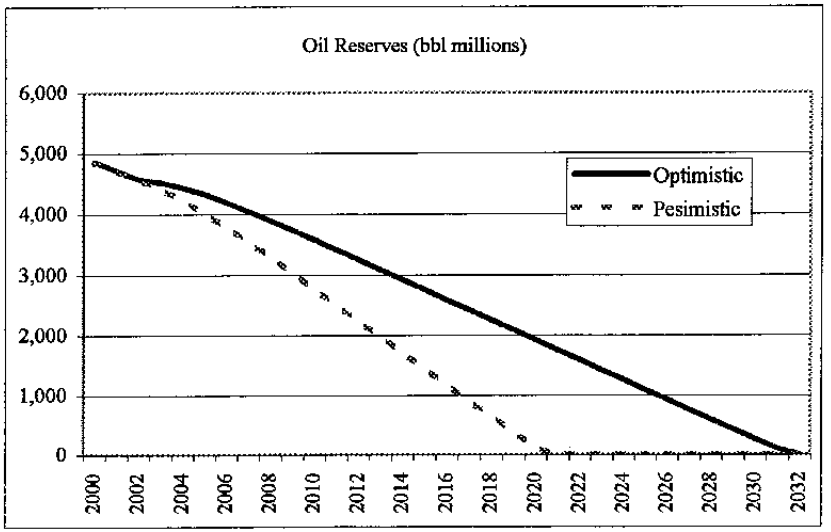
[17] Texaco is facing a US$1.5 billion lawsuit for alleged environmental damage.

Figure IV. 1. Ecuador: Indicators of Oil Reserves, Extraction, and Valuation









Sources: PetroEcuador; WEO; and Fund staff calculations.

58. **An annual projection for remaining oil reserves (stocks) under an *optimistic scenario*** can be obtained from PetroEcuador's report that reserves in 2002 amounted to 4,574 million barrels, assuming that 100 million barrels are discovered every year, and taking into account the capacity for oil extraction noted above. Alternatively, if no more oil is found, one can derive a *pessimistic scenario*. Under the optimistic scenario oil reserves will run out in 2032. If no more oil is found, or environmental or other reasons were to make the new reserves prohibitively expensive to extract, Ecuador could run out of oil in 2021 (pessimistic scenario) (Figure IV.1 and Table IV.1).

C. Valuation of the Oil Reserves

59. **Valuing the oil reserves in Ecuador has two dimensions:** the balance sheet entry, to account for proven **stocks** of oil reserves, and the annual **flows** for the fiscal balance and the external accounts, derived from this asset. This chapter addresses only the direct valuation effects related to oil itself. There are important multiplier effects that affect the economy as well, based on employment, support industries, and other services related to the oil industry. However, these effects are not quantified here.

60. **Table IV.1 provides a time series estimate of the balance sheet value of the proven oil reserves,** both at (projected) spot prices, and at a constant accounting price. The spot price for Ecuadoran oil is related to its benchmark West Texas Intermediate crude oil price, minus a quality discount (the mix of Ecuadoran oil is heavy and sulfuric).[18] Moreover, the net value per barrel needs to be further lowered by an extraction/shipping cost of around US$3.20 per barrel (at 2001 prices). After the discount and extraction costs, in 2002 the proven oil reserves were valued at US$82.8 billion. Table IV.1 and Figure IV.1 demonstrate the expected erosion of the value of Ecuador's oil reserves, under the optimistic scenario, assuming an extraction rate of close to 265 million barrels a year, at projected spot and constant prices. The estimated US$82.8 billion in reserves (340 percent of nominal GDP in 2002) would be used up in 30 years.

61. **Table IV.1 also presents the annual flow valuation of the oil reserves.** In 2002, the gross proceeds of extracting 143 million barrels of oil amounted to US$3 billion. Two-thirds of this amount was exported (US$2 billion, or 8.3 percent of GDP), with the rest consumed domestically. In recent years, the share of domestic consumption of oil production has steadily increased, in part because domestic oil and derivatives prices were not adjusted in line with international prices, which gave rise to over-consumption and smuggling. In 2002, the direct proceeds of the annual flow valuation of oil to the public sector (the budget) was US$1.4 billion (about 5.7 percent of GDP), or about half the gross value of oil production. According to the projections, the returns to the public sector of the higher oil production, from 2003 onward, could be between 2½–7 percent of GDP on an annual basis. This indicates a continued significant dependence for the economy on oil.

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[18] In recent years, the discount has been US$3–7 per barrel, depending on market conditions.

D. The Non-oil Economy—Competitiveness and Macroeconomic Equilibrium

62. **One could ask what would be Ecuador's economic situation without oil.** This question is of interest because it should be expected that oil will eventually run out. While 30 years or so seems a long way off, it is short enough to say that children that are born in Ecuador today will be in the labor market at a time when the oil will likely run out.

63. **Table IV.2 presents some preliminary calculations on this point,** considering the level of nominal GDP, the public sector finances, and the balance of payments. To simulate nominal GDP excluding oil, the value of oil exports is subtracted from total GDP, then imports are increased to account for the replacement need for energy (oil that is now processed from domestic extraction would need to be imported). If oil prices are relatively low, such as in 1998, the total and non-oil nominal GDP would be relatively close; when oil prices are high, the difference would be greater. Table IV.2 suggests that the oil factor accounts for the equivalent of between 7–24 percent of overall nominal GDP. In 2002, the non-oil economy amounted to about US$21.6 billion, some 11 percent smaller than the overall economy.[19]

64. **The impact of oil on the public sector** was simulated by deducting the direct oil receipts from total revenue. Since oil revenues contribute around US$1.3 billion to the budget, the overall deficit, and the PSBR would end up correspondingly larger. For the period 1998–2002, the PSBR, adjusted for a one-time debt relief effect in 2000, averaged some 10 percent of non-oil GDP. To achieve a "soft landing" for the economy, once oil runs out, the authorities need to correct a deficit in the non-oil economy of about this magnitude.

65. **The large deficits in the non-oil public finances spill over into large deficits in the balance of payments.** The non-oil current account can be simulated by taking out oil revenues and adding back into imports that portion of consumption that would no longer be available from domestic extraction. At the same time, the direct import needs of the oil sector would be eliminated. Taking these three main factors into account suggests that the non-oil external current account deficit amounts to around 16 percent of non-oil GDP. Moreover, most of Ecuador's FDI inflows in the capital account are related to the oil sector, so that without oil, the capital account is bound to weaken also. Therefore, at unchanged policies, the overall balance of payments deficit would show an even larger potential deficit (Figure IV.2, Table IV.2).

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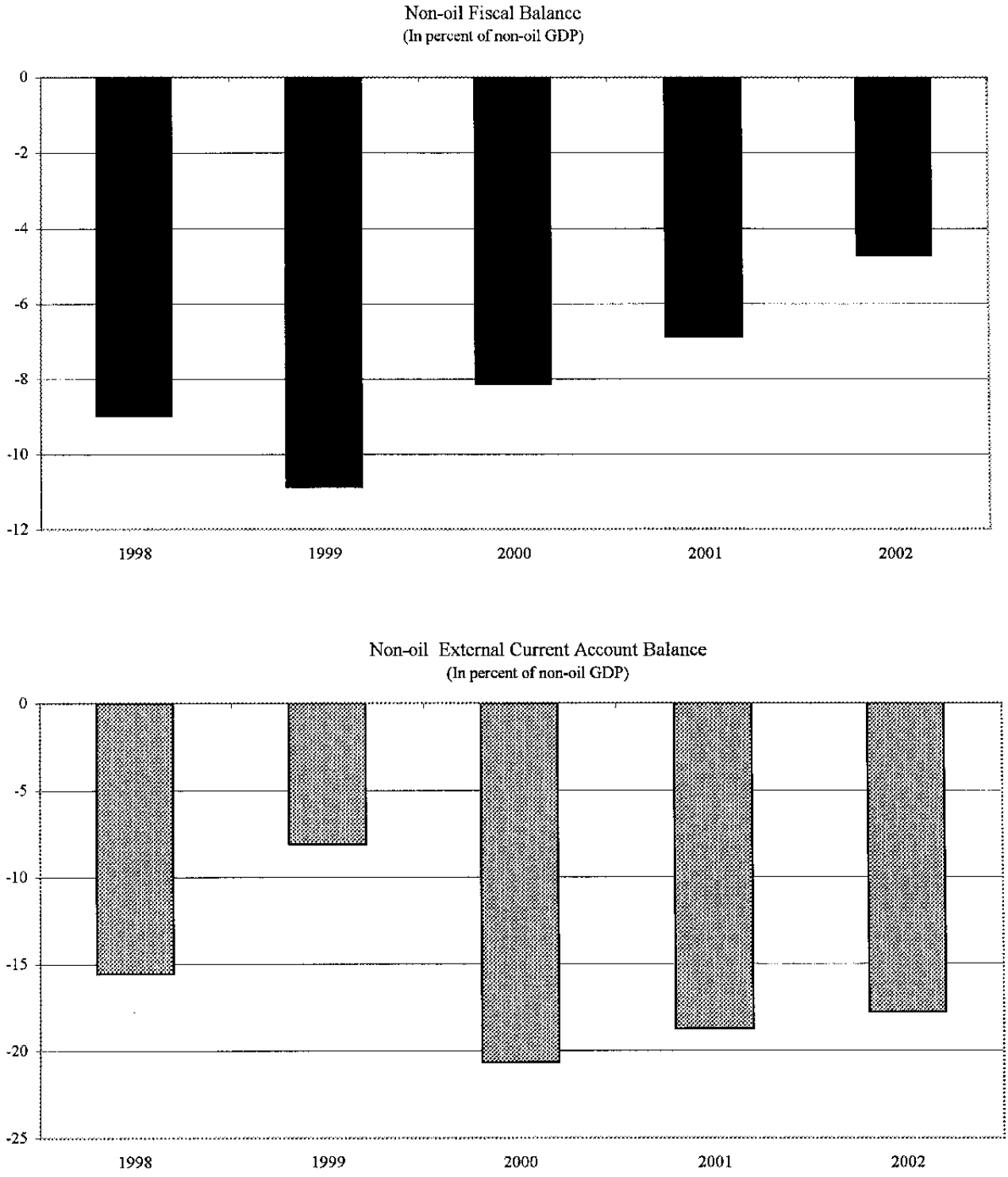
[19] As was noted above, if oil were eliminated from the economy, other structural adjustments would emerge that change considerably the non-oil economy. These interaction effects are difficult to predict and are not modeled here.

Figure IV. 2. Ecuador: Non-oil Balances



Source: Fund staff calculations.

66. **The large underlying external deficit in the non-oil economy suggests that relative prices (wages and other domestic costs) are out of balance,** and that the oil wealth has not been used to construct a well-functioning capital stock and a productive non-oil economy—this is consistent with the Dutch disease, in which the presence of a single valuable resource supports high domestic consumption, and crowds out traditional economic activity through appreciation of domestic production costs and the real effective exchange rate.

E. Conclusions

67. **At current projections, Ecuador's oil reserves are declining by about 150–250 million barrels per year and will be depleted in 20–30 years, not long to correct the deep-seated structural problems the country faces.** The analysis suggests that the *non-oil imbalances* in the fiscal and external current accounts need to be reduced; and that *competitiveness* needs to be strengthen in anticipation of the oil wells running dry. Since Ecuador has adopted the U.S. dollar as its currency, nominal depreciation is not an option, thus productivity gains through a program of fiscal and structural reform, as the one proposed by the government, should be a central objective of any medium term macroeconomic strategy.

68. **The amount of capital stock that needs to be accumulated to build up the non-oil economy and to maintain current per capita incomes, if oil were to run out, would be large.** Commensurately, the saving effort required to facilitate this capital accumulation is also large. Therefore, it appears desirable to dedicate increasing amounts of future oil income to saving and investment in the economy—this is equivalent to shifting gradually oil receipts "below-the-line." As discussed in Chapter VI, the recently adopted *Fiscal Responsibility and Transparency Law*, will help to accomplish this objective by setting limits on public expenditure growth.

69. **One of the most productive uses of the oil still left for Ecuador may be to pay off the debt and restructure the public sector balance sheet.** By doing so, the country could regain access to long-term financing for the public and private sector at commercial terms (currently the sovereign faces spreads of around 1500 basis points). Such a strategy would be highly transparent, easy to monitor, and help to turn around some of the worst effects from the Dutch disease. This process has been envisaged in the new *Fiscal Responsibility and Transparency Law*.

Table IV. 1. Ecuador: Indicators of Oil Reserves, Extraction, and Valuation

	2002	Proj. 2003	2004	2005	2018	2021	2031	2032
	(In millions of barrels)							
Volume and value of oil reserves (stocks)								
Proven oil reserves, end-of-period, optimistic	4,574	4,521	4,441	4,328	2,254	1,757	103	0
Proven oil reserves, end-of-period, pessimistic	4,574	4,421	4,241	4,028	654	0	0	0
Annual discovery, optimistic	717	100	100	100	100	100	100	100
Annual discovery, pesimistic	717	0	0	0	0	0	0	0
Extraction rate	143	153	180	212	265	265	265	203
Of which: OCP 1/	...	21	101	131	160	160	160	160
SOTE	143	132	80	81	106	106	106	43
Domestic consumption	59	59	59	59	59	59	59	59
	(In U.S. dollars)							
West Texas Intermediate (WTI) price per barrel	25.76	23.75	23.79	22.74	25.34	26.11	28.84	29.13
Weighted average price of Ecuadoran oil 3/	21.37	18.00	18.20	17.80	21.82	23.16	28.23	28.79
Average oil price per barrel, SOTE 2/	21.37	23.75	23.79	22.74	25.34	26.11	28.84	29.13
Average oil price per barrel, OCP 3/	...	13.79	13.79	14.74	16.50	17.00	18.78	18.97
	(In millions of U.S. dollars)							
Value of oil reserves , eop, at spot prices	82,817	66,325	65,738	62,051	39,076	32,337	2,319	9
(optimistic), eop, at constant 2001 price	72,727	71,882	70,604	68,820	35,832	27,943	1,644	6
Value of oil extracted (flows)	**3,058**	**3,427**	**3,283**	**3,777**	**5,314**	**5,475**	**6,047**	**4,290**
Exported, total	2,033	1,887	2,396	2,909	4,584	4,723	5,217	3,451
Exported by OCP	...	290	1,391	1,932	2,636	2,716	3,000	3,030
Exported by SOTE	2,033	1,597	1,006	978	1,187	1,223	1,351	-453
Domestic consumption	1,025	1,540	887	868	730	752	831	839
Public sector budgetary revenue	1,393	1,666	1,925	2,175	3,014	3,217	3,922	2,953
Public sector revenue from OCP	0	41	207	261	297	297	300	301
Revenue accruing elsewhere	1,393	1,625	1,718	1,914	2,717	2,920	3,621	2,652
	(In percent of total)							
Value of oil extracted	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Exported	66.5	55.1	73.0	77.0	86.3	86.3	86.3	80.4
Domestic consumption	33.5	44.9	27.0	23.0	13.7	13.7	13.7	19.6
Revenue for public sector (budget)	45.6	48.6	58.6	57.6	56.7	58.8	64.8	68.8
Public sector revenue from OCP	0.0	1.2	6.3	6.9	5.6	5.4	5.0	7.0
Revenue accruing elsewhere	45.6	47.4	52.3	50.7	51.1	53.3	59.9	61.8
	(In percent of GDP)							
Value of oil extracted	12.6	12.8	11.2	11.9	8.6	7.7	5.2	3.5
Exported	8.3	7.0	8.1	9.1	7.4	6.6	4.5	2.8
Domestic consumption	4.2	5.7	3.0	2.7	1.2	1.1	0.7	0.7
Revenue for public sector	5.7	6.2	6.5	6.8	4.9	4.5	3.4	2.4
Revenue accruing elsewhere	5.7	6.1	5.8	6.0	4.4	4.1	3.1	2.2
Memorandum item:								
GDP (in millions of US$)	24,347	26,807	29,432	31,829	61,816	71,560	116,563	122,391

Sources: PetroEcuador; WEO; U.S. Department of Energy; and Fund staff calculations.

1/ New project Oleoducto de Crudos Pesados.

2/ WTI price starting in 2003.

3/ WTI minus a quality discount.

Table IV. 2. Ecuador: The Non-oil Economy

	1998	1999	2000	2001	Prel. 2002
	(In millions of U.S. dollars)				
National accounts					
Nominal GDP including oil	23,255	16,674	15,934	21,024	24,347
Nominal GDP excluding oil 1/	21,587	14,703	12,050	18,553	21,645
Percent of GDP accounted for by oil	7	12	24	12	11
Public sector finances					
Revenue, excluding oil	3,526	2,712	2,930	3,833	4,925
Noninterest expenditure	4,635	3,177	3,169	4,290	5,231
Primary balance	-1,109	-464	-239	-457	-306
Net interest bill	980	1,348	1,057	990	842
Overall balance	-2,089	-1,812	-1,296	-1,447	-1,148
Other debt creating operations (+)	616	-1,058	2,874	-137	227
PSBR	1,473	2,870	-1,577	1,583	921
	(In percent of non-oil GDP)				
Revenue, excluding oil	16.3	18.4	24.3	20.7	22.8
Noninterest expenditure	21.5	21.6	26.3	23.1	24.2
Primary balance	-5.1	-3.2	-2.0	-2.5	-1.4
Net interest bill	4.5	9.2	8.8	5.3	3.9
Non-oil fiscal balance	-9.7	-12.3	-10.8	-7.8	-5.3
Other debt creating operations (+)	2.9	-7.2	23.8	-0.7	1.0
PSBR	6.8	19.5	-13.1	8.5	4.3
Registered debt plus arrears, percent of non-oil GDP	71	115	121	80	67
Public sector net worth, excluding oil reserves					
(In millions of US$)	5,827	1,509	3,732	4,093	6,137
(In percent of GDP)	27	10	31	22	28
	(In millions of U.S. dollars)				
Balance of payments					
Current account	-3,235	-1,016	-2,880	-2,981	-3,916
Nonoil exports	3,280	2,971	2,484	2,778	2,921
Imports, incl. dom. oil consumption at WTI prices	5,341	3,277	4,910	5,552	6,597
Services and transfers, net	-1,174	-710	-454	-207	-240
Capital account	648	-2,416	-616	-771	-77
FDI, excluding oil companies	78	21	40	210	159
Other, non-oil, net	570	-2,437	-656	-981	-236
Overall balance (deficit -)	-2,587	-3,432	-3,495	-3,752	-3,992
	(In percent of non-oil GDP)				
Current account	-15.0	-6.9	-23.9	-16.1	-18.1
Non-oil exports	15.2	20.2	20.6	15.0	13.5
Imports, incl. dom. oil consumption at WTI prices	24.7	22.3	40.7	29.9	30.5
FDI, excluding oil companies	0.4	0.1	0.3	1.1	0.7
Overall balance (deficit -)	-12.0	-23.3	-29.0	-20.2	-18.4

Sources: PetroEcuador; WEO; Department of Energy; and Fund staff calculations.

1/ Value of nominal GDP minus oil exports minus the import value of domestic oil consumption.

V. The Balance Sheet as an Indicator of Sustainable Fiscal Policies[20]

70. **This chapter provides preliminary estimates of Ecuador's public sector balance sheet and a measure of its net worth.** It also suggests policy changes for improving this net worth in light of a significant decline over the past 30 years; particularly through the recently adopted *Fiscal Responsibility and Transparency Law*.

71. **The preliminary estimates of Ecuador's net worth suggest that the fiscal policies of the past thirty years would not be sustainable.** In particular, oil revenues have been largely consumed, instead of invested or used to lower the debt. With oil extraction to increase when the new OCP pipeline comes on stream in 2003, the oil reserves may last another 30 years or so,[21] and the overall public sector net worth could start declining at a faster pace, eventually leading to public sector insolvency, unless fiscal performance is substantially strengthened.

A. Rationale for the Use of the Public Sector Balance Sheet

72. **When considering the sustainability of fiscal policy, it is common to project and analyze the level of debt in relation to GDP.** If the debt ratio increases continuously, fiscal policies are said to be unsustainable. If the debt ratio is projected to peak at some near point in the future, but then starts to decline, the stance of fiscal policy may be less alarming, but it would still be important to consider the liquidity pressures up to the debt peak. In countries that are already experiencing limits on market access associated with severe creditworthiness problems, such as Ecuador, the debt ratio is already too high, and fiscal policy and asset management need to focus on reducing it.

73. **In the longer term, debt indicators by themselves provide an incomplete picture of financial health, and they can be misleading about the sustainability of fiscal policy and of the country's solvency.** The debt is only one part of the balance sheet, and governments can run unsustainable fiscal policies for a long time if there are marketable assets that can be sold to finance high expenditures. The public sector balance sheet should be an integral part of the fiscal policy analysis. The evolution of the net worth, which takes account both of the debt and the marketable assets, is a more complete measure of fiscal sustainability and solvency.

74. **Focusing narrowly on the debt has other limitations.** For instance, if the government reduces capital expenditure to meet a fiscal objective and to control the debt, the balance sheet would appropriately signal that the net worth of the public sector drops as depreciation of the physical public infrastructure overtakes the investment and maintenance effort—and the public sector capital stock on the balance sheet would contract. The debt ratio may not signal this problem for years until output growth is negatively affected by the lack of investment and the numerator of the debt ratio, GDP, begins to trail off.

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[20] Prepared by Bob Traa.

[21] For a discussion of this new pipeline, and the projections of proven oil reserves see Chapter IV.

75. **Alternatively, the level of spending may exceed significantly the ability of a country to generate sustainable income, without this being reflected in the debt ratio.** An example is found in the Dutch disease, in which a country lives beyond its means for extended periods of time, supported by the depletion of a single resource—in Ecuador's case, oil. The presence of oil makes it possible to sustain inflated domestic demand (often pure consumption) for many years, and the level of nontradable prices would also be higher than without access to this resource. The real exchange rate would appreciate, reinforcing the distortion brought on by the expansive fiscal policy. The problem could worsen if the authorities are able to borrow against the wealth of the depletable resource: public sector assets would decline and liabilities would increase. If GDP were to expand strongly as a result of inflated domestic spending, the debt ratio may not signal these difficulties for years. However, the net worth of the public sector would decline quickly and correctly indicate that fiscal policies are too expansionary. The latter phenomenon is visible in Ecuador's balance sheet since 1970, when oil came on stream (Figure V.1).[22]

76. **One complication of the balance sheet approach is that net worth is difficult to measure.** Some important assets of the public sector only recently have begun to be assigned market value (such as biodiversity and the ability of forests to capture carbon dioxide, to mention two). Nevertheless, even with these difficulties, over longer periods of time, the preliminary public sector balance sheet can still provide good indications whether or not the policies are sustainable.

B. Preliminary Public Sector Balance Sheet

77. **The preliminary calculations for the public sector balance sheet of Ecuador[23] show on the asset side:** the stock of public sector deposits in the banking system; the net worth of the Central Bank of Ecuador; the public sector equity ownership in a large number of enterprises and financial institutions; staff estimates, based on past fixed investment spending, of the accumulated net (after depreciation) fixed infrastructure; the port-side valuation of proven oil reserves; the port-side valuation of proven gas reserves; and the net present value of a stream of income that could be obtained from Ecuador's impressive biodiversity and carbon-dioxide capture.[24] (Table V.1).

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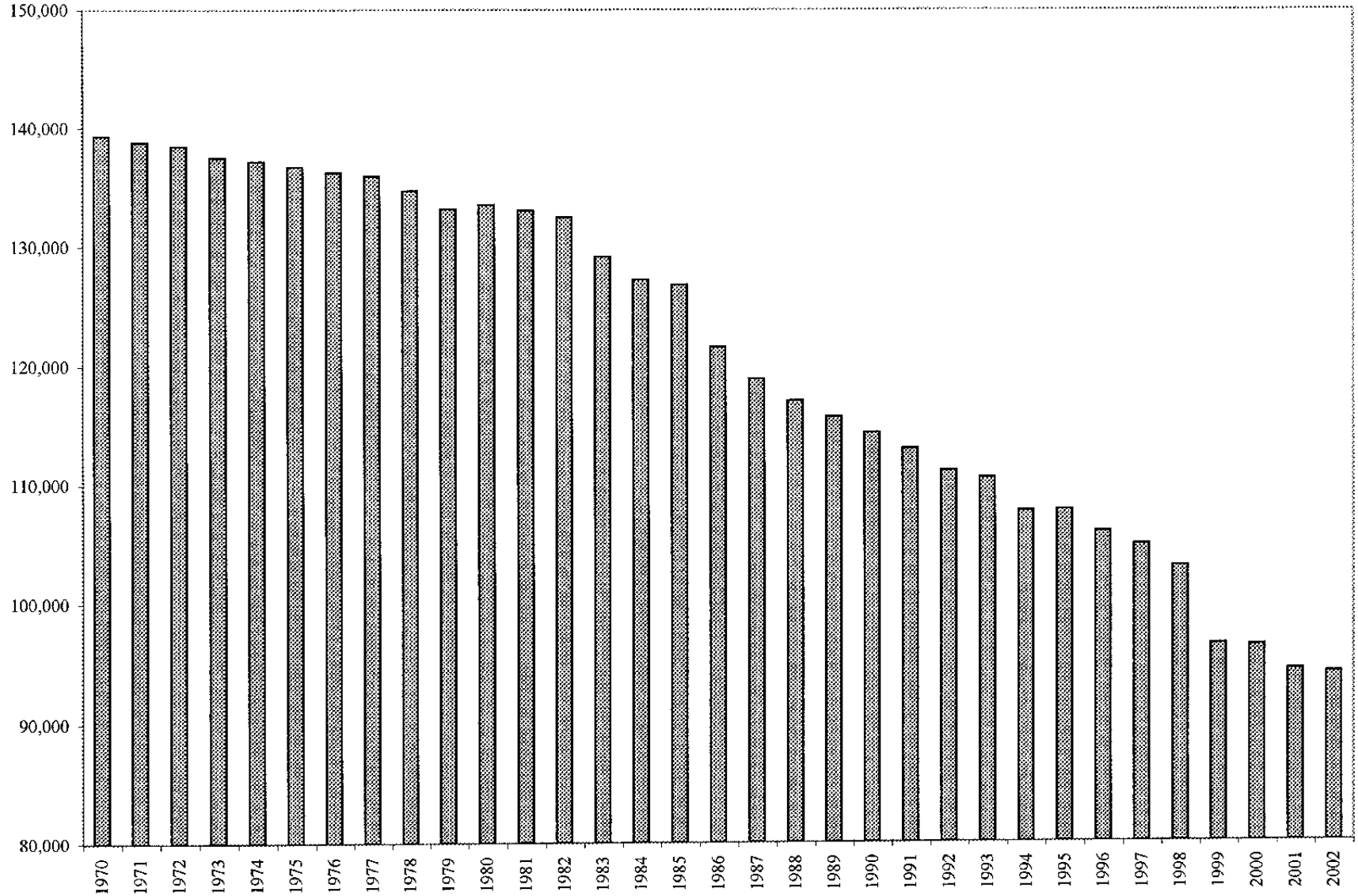
[22] The boom in the 1970s was largely financed with oil receipts and a buildup of debt. Even though the budget received an estimated cumulative nominal US$23 billion in direct oil revenues between 1970–2000, the public debt nevertheless increased.

[23] The scope of the balance sheet covers the entire public sector (as recommended in the *Government Finance Statistics Manual 2001* (GFSM 2001)). Data availability determined the classification of assets and liabilities, which may not be identical, for now, with the GFSM 2001.

[24] Several entries and the estimates of valuation are from Arteta and Samaniego in their study on "Patrimonio del Estado y Sustentabilidad Fiscal en el Ecuador" (World Bank, April 2001). While the staff's valuations are not always comparable to those of Arteta and Samaniego, the conclusions and policy implications from the analysis are identical.

Figure V.1. Total Public Sector Net Worth
(In millions of 2001 U.S. dollars)



78. **On the liability side are:** the registered debt,[25] accounts payable including arrears; and the reserve shortfalls in three insurance-type funds[26] (for deposit insurance; for predictable public assistance needs as a result of the recurring *El Niño/La Niña* phenomenon; and for predictable public assistance needs as a result of the recurring damage from volcanic and earthquake activity in Ecuador).[27] [28]

79. **The most important asset is the oil reserves.** This time series was constructed by deriving the existing stock of oil reserves from a benchmark figure in 2002 (of 4,574 billion barrels) and, backwards to 1970, from annual extraction data, multiplied in turn by the net oil spot price for Ecuadoran grade oil (i.e., the West Texas Intermediate benchmark price each year, minus a discount (the equivalent of US$6 per barrel in 2001) and extraction costs (the equivalent of US$3.20 per barrel in 2001). The NPV of biodiversity and carbon dioxide capture follow the calculations that have been done in the case of Costa Rica, and include the results of studies that were conducted for the Kyoto Protocol on trade in pollution rights,[29] as reported in Arteta and Samaniego (World Bank, April 2001).

80. **The most important liability is the debt.** At face value, the amount of the debt was US$13.7 billion at the end of 2002, according to official figures. The figures for the NPV of

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[25] The registered debt is recorded here at face value. Recording public sector debt at market value when there is a large discount for default-risk, which is the case in Ecuador, is distortionary; i.e., it would lead to the erroneous conclusion that engineering a huge default risk is positive because it increases the public sector net worth. At the same time, the GFSM 2001 recommends that debt be recorded at accrual value, not face value. The difference between accrual and face value accounting could indeed be large, and legitimate, if the government issues many zero-coupon bonds which accrue interest over time. However, these instruments are not prevalent in the case of Ecuador.

[26] In practice, the Deposit Guarantee Agency (AGD) formally exists, but it has no reserves.

[27] The balance sheet only attempts to include needed reserves, or their shortfall, for recurring public sector costs that result from adverse but insurable events. It does not include estimates for a truly catastrophic event, such as a large volcanic eruption in Quito (Pichincha), because these are not readily quantifiable.

[28] The estimate of the actuarial shortfall in the pension system is highly preliminary. For this reason it has been included only as a memorandum item in Table V.1. The Ecuadoran congress has recently approved a social security reform law, which creates a private capitalized pension system along a public pay-as-you-go pension system. However, the corresponding regulations have not been issued.

[29] The valuation of environmental assets is difficult since one needs to show that the government has an enforceable claim on the stream of income resulting from them. The GFSM 2001 allows to place such assets in the memorandum items, in case of uncertainty.

the estimated shortfall in insurance reserves for the deposit insurance system, and to cover the reconstruction expenditures arising from the *El Niño/La Niña* phenomenon, recurrent volcanic eruptions and earthquakes, are quite preliminary and are adopted from the study by Arteta and Samaniego (ibid).

81. **Deducting liabilities from assets results in the estimated net worth of the public sector.** The nominal net worth in Ecuador jumps around a lot over the years, reflecting the high volatility in oil spot prices. Therefore, one alternative estimate of net worth is to exclude the oil (and gas) reserves (the non-oil net worth). This calculation suggests that the non-oil net worth has increased between 1970–2002 from about US$0.7 billion to about US$6.1 billion in 2002.

82. **A more informative estimate of the public sector balance sheet can be arrived at by including oil and gas reserves at a constant accounting rate.** At a constant accounting rate of the average oil price for 2001, the net worth of the Ecuadoran public sector was over US$139 billion in 1970. In 2002, some US$94 billion were left—a decline by over 30 percent. The deterioration is attributable for the largest part to the consumption of the oil wealth, and the simultaneous buildup of debt, without putting lasting income generating capital in its place.

83. **The rapid erosion of the public sector net worth does not automatically make the country worse off.** If the high spending levels are addressed to human capital formation (education, health care, building a strong social infrastructure, etc.), the erosion in the public net worth could be offset by an increase in the private sector net worth. The estimates for Ecuador, however, suggest that the country has consumed the bulk of its oil wealth, neither building public sector assets, nor human capital.[30]

C. Some Policy Implications

84. **Ecuador has recently adopted the *Fiscal Responsibility and Transparency Law*.**[31] If fully adhered to, the new law would largely preserve the oil wealth that remains for future generations by reducing debt and building reserves and new capital stock. The law implies effectively a shift from treating the oil resource as an "above-the-line" revenue toward a "below-the-line" financing item. Instead of consuming the oil wealth, it could be used to lower the debt, and lead to higher investment in income generating productive capacity in the

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[30] Arteta and Samaniego also document that funding for education has been running well below legally mandated levels (an unrecorded "social debt"), and that infrastructure investments have not kept pace with the needs of the country. While there are no comparable social indicators for Ecuador for the full period 1970–2000, indications are that the poverty rate has increased from the time when oil was discovered.

[31] See Chapter VI.

non-oil economy as the risk profile on the Ecuadoran debt drops and credit becomes available again at commercial terms.

85. **Some political representatives have considered securitizing the oil reserves, or selling the oil forward, to obtain the resources for active fiscal policies.** This note, however, suggests that Ecuador can ill afford to use more oil resources to stimulate spending that is already in excess with the country's ability to generate recurrent (i.e., non-oil) income. Therefore, such use of the oil reserves would accelerate the erosion of the public sector net worth. An oil facility seems only justifiable if it can be used to eliminate—dollar-for-dollar—the domestic and foreign debt.

Table V. 1. Ecuador: Public Sector Balance Sheet (Preliminary)

(In millions of U.S. dollars)

	1970	1980	1990	2000	Prel. 2002
Assets	**7,818**	**258,725**	**131,083**	**140,400**	**116,488**
Deposits	54	494	359	1,228	1,282
Net worth Central Bank of Ecuador	35	327	237	1,343	1,037
Equity participation in enterprises or funds	586	5,404	3,927	4,430	5,389
Net fixed capital infrastructure 1/	606	3,777	7,445	11,204	12,819
Proven petroleum reserves 2/	5,187	236,261	110,083	104,440	82,817
Proven natural gas reserves 3/	947	8,739	6,327	13,653	6,877
NPV of biodiversity and carbon-dioxide capture 4/	403	3,722	2,704	4,102	6,268
Liabilities	**958**	**8,777**	**14,236**	**18,575**	**20,657**
NPV of shortfall in deposit insurance reserves 5/	200	1,847	1,342	2,036	3,111
NPV of shortfall in El Nino Contingent Insurance Fund 5/	195	1,798	1,306	1,981	3,027
Registered debt	563	5,132	8,554	13,227	13,730
Domestic	368	999	213	2,757	2,481
External	195	4,133	8,341	10,470	11,249
Accounts payable and arrears	0	0	3,033	1,331	789
Net worth	**6,860**	**249,947**	**116,847**	**121,825**	**95,831**
Net worth excluding oil and gas	**726**	**4,947**	**437**	**3,732**	**6,137**
Net worth at constant oil and gas prices of 2001	**139,303**	**133,486**	**114,280**	**96,374**	**94,139**
Index: 1970=100	**100**	**96**	**82**	**69**	**68**
Memorandum items:					
Registered debt + arrears in percent of GDP	35.9	35.5	110.3	91.4	59.6
Domestic	23.5	6.9	2.0	19.4	12.8
External	12.4	28.6	108.3	72.0	46.9
Actuarial shortfall in pension system (prel.) 6/	590	5,444	3,956	6,000	8,464
Net worth at constant prices incl. pension deficit	138,713	128,042	110,324	90,374	74,965
Index: 1970=100	100	92	80	65	53

Sources: Ecuadoran authorities; Arteta and Samaniego (World Bank, April 2001); and Fund staff calculations.

1/ Gross capital stock minus depreciation.

2/ Millions of barrels of proven reserves at a current oil price minus US$3.20 pbb for transportation/extraction costs.

3/ Ecuador's natural gas reserves are not heavily exploited at this moment (3.7 trillion cubic feet in reserves at average price wellhead per thousand cubic feet; source: Energy Information Agency/USDOE.

4/ Biodiversity was valued as the NPV of a notional annual income stream on 10 million hectares of national parks. The value per hectare (US$22.50) is obtained from biodiversity valuation in Costa Rica. The value of CO_2 capture of Ecuador's forests represents the NPV of polution rights as discussed in the Kyoto Treaty.

5/ Estimate of reserve needs for explicitly or implicitly insured events in the banking system (deposit insurance), recurring weather-related damage (El Niño), or recurring earthquake/volcanic damage. The estimates reflect minimum quantifyable recurring funding needs; they do not include insurance coverage against catastrophic events.

6/ The estimate of the actuarial shortfall in the pension system is preliminary (Comision Interventora del Sistema de Seguridad Social).

VI. Fiscal Responsibility and Transparency Law[32]

86. **In September 2002, congress approved a final draft of the *Fiscal Responsibility and Transparency Law*.** The main objectives of this law are to establish rules on the growth of primary budgetary expenditures, to save a significant part of the fiscal revenue coming from the new oil pipeline (OCP), and to improve transparency of the budgetary process.

A. The Original Draft Law

87. **The draft law presented to congress in March 2002 had three main features.** First, it established a ceiling of 3.5 percent for the annual growth of primary expenditures in real terms, and an annual reduction of 0.3 percent of GDP in the non-oil budget deficit until it is fully eliminated. Second, it established a stabilization fund (called the FEIREP) that would receive the public sector resources generated by the OCP. Twenty percent of these inflows were to constitute a fund for oil price stabilization and emergencies, and 80 percent would be dedicated to debt reduction. Third, it established guidelines to develop multiyear budget plans to be presented to congress at the beginning of each administration, based on consistent macroeconomic assumptions. It also established new disclosure rules for monitoring better the progress in implementing the annual budgets.

B. The Congressional Draft Law and the Presidential Vetoes

88. **Congress modified and then approved the law in late April, which was subsequently partially vetoed by the president.** The modified law approved by congress reduced the ceiling on the annual growth of primary expenditures to 2.5 percent in real terms, reduced the annual decline of the non-oil budget deficit to 0.2 percent of GDP, and left it to the executive to decide each year the proportion of the OCP revenue that would be assigned for contingencies and debt buybacks. Also, the modified law introduced a requirement to devote 10 percent of the oil revenues accruing to the FEIREP for new social spending (revenues for debt reduction were cut to 70 percent), and several other off-budget expenditures, with new revenue earmarking to pay for them. One example was that the savings from the debt reduction would have to be used to stimulate the economy irrespective of its cyclical position. It also specified that the reduction in budget revenues that might result from the transfer of heavy crude oil from the SOTE (the government-owned pipeline) to the OCP, would need to be compensated by OCP-related revenues.[33] Lastly, the modified law required that out of the FEIREP, the treasury would repay debt to the social security system. These resources would be assigned to increasing pension benefits, also irrespective of the cyclical position, or to strengthen the actuarial situation of the pension fund. Most of

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[32] Prepared by Mayra Zermeño.

[33] Currently the heavy crude oil is mixed and shipped through the SOTE; with the new pipeline, all of the heavy crude would be shipped through the OCP; the light crude would continue to be shipped through the SOTE.

the new expenditure assignments would take place outside the budget and, in principle, could take place without congressional disclosure or oversight.

C. The New Law and Its Regulations

89. **President Noboa returned the modified law to congress with several vetoes, which were approved in May and September 2002.** As approved, the key elements of the new law are:

- Restricting the growth in real primary expenditures of the central government budget to a maximum of 3.5 percent a year (benchmarked on the estimated potential output growth of the economy);

- Requiring a reduction in the non-oil fiscal deficit (excluding oil exports) by at least 0.2 percentage points of GDP a year;

- Channeling 10 percent of the revenues from the new oil pipeline to social spending; 20 percent to the FEIREP; and 70 percent to debt reduction, in addition to the regularly scheduled amortization; and

- Reducing the ratio of public debt to GDP to a maximum of 40 percent, not to be exceeded once this objective is reached.

90. The staff estimates that this new law can help reduce the public debt to below 40 percent of GDP by 2007; and it would gradually eliminate the non-oil deficit.

91. **Regulations were recently issued to specify what type of oil revenues should be accounted in the FEIREP.** They state that all heavy crude oil revenues generated from the use of the OCP constitute FEIREP revenue. This implies that none of those revenues will enter the expenditure stream, except for the10 percent that is dedicated to social spending.

D. Conclusions

92. As approved, the *Fiscal Responsibility and Transparency Law* allows for a decline in the stock of public debt, sets limits on public debt ratios and annual increases in real primary expenditures, reduces the non-oil deficit, and builds cushions for emergency and social spending. By design, the law is counter cyclical, but, it is in conflict with Ecuador's extensive revenue earmarking, which is procyclical. To help resolve this conflict, the authorities intend to introduce new legislation in 2003 eliminating earmarking not mandated by the constitution.

VII. Recent Developments in the Banking System, Liquidity Needs, and Next Steps[34]

93. **This chapter describes developments in the banking system after the 1998–99 crisis,** explains the main vulnerabilities in the system; analyzes the banks' liquidity needs and alternative ways to hold liquidity to face the remaining vulnerabilities; and suggests policies to manage the liquidity needs better.

A. Recent Developments

94. **Ecuador had a major banking crisis in 1998–99.** In the midst of this crisis, the authorities implemented a full coverage deposit insurance rule that soon proved unsustainable, and a deposit freeze was imposed in March 1999. The crisis led also to the intervention and closure of about 16 banks or 65 percent of the financial system on-shore assets, and contributed to the decision to fully dollarize the economy in early 2000.[35] After the crisis, Ecuador's banking system has experienced some consolidation, is being recapitalized, and its financial soundness indicators have improved notably.

95. **Deposits grew strongly in the past three years, but most are of very short maturity,** reflecting that confidence has not yet fully returned to the banking system (Table VII.1). In response to the maturity structure of their liabilities, the banks hold large amounts of liquid assets. This large liquidity position is deemed necessary for the banks to face potential runs; however, it is expensive and has contributed to high interest rates spreads (Table 34).

96. **Credit to the private sector increased in the past three years, while the ratio of nonperforming to total loans declined** (Tables 29 and 36). However, the credit market has been influenced after the banking crisis by Ecuador's entrenched culture of no payment. In 1999, the government defaulted on its domestic and external obligations and this behavior extended to the private sector. The government-run Deposit Guarantee Agency (AGD), has been managing the closed banks and their large nonperforming loan portfolio. The political and institutional barriers to collect these loans have encouraged private banks to be cautious in their lending practices.

B. Financial System Vulnerabilities

97. **Despite significant improvements in its financial soundness, Ecuador's financial system remains vulnerable.** There are several sources of vulnerability. First, the lack of fiscal consolidation. Second, lack of confidence in the system associated with the deposit

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[34] Prepared by Mayra Zermeño

[35] See IMF, Ecuador: Selected Issues and Statistical Annex, Report No. 00/125, October 2000, Chapters III and IV.

freeze of 1999. Third, the absence of a lender of last resort, the limited liquidity support provided by the existing mechanisms, and the lack of a credible deposit insurance. Fourth, the gradual strengthening of the financial situation of the banking system. Fifth, the role of the state-owned development banks in the financial system.

98. **The fiscal position improved significantly during 2000, but there were policy slippages in 2001–02.** The wage bill more than doubled in nominal terms during 2000–02, and the government incurred in new payments arrears. This outcome increased the banking system vulnerabilities through different channels. First, the banks have some government bonds in their portfolios,[36] and delays in interest or principal payments would affect their financial soundness. Second, the government's arrears raise the probability of default on restructured debt with a large potential negative impact to the rest of the economy, including the banks. Third, an increase in default risk increases the EMBI spread and the domestic interest rates and has a negative impact on lending activities. The EMBI spread ranged between 1,000 and 4,712 during 2000–02.

99. **The 1999 deposit freeze had a very negative impact on the public's confidence in the banking system.** The open banks returned the blocked deposits rapidly, confidence returned after dollarization and deposits grew fast. However, the closed banks have taken much longer to return the blocked deposits and about US$275 million are still unpaid in early 2003. The slow loan recovery in the closed banks has significantly delayed the repayment to depositors.

100. **The legal aspects of dollarization and the transition mechanisms to put it in place were established in the Trole I Law in March 2000.** The law established that the central bank would no longer lend to either the public or private sector. In so doing, it took away the role of lender of last resort from the central bank.[37] In principle, this responsibility could have gone to the treasury, but the fiscal situation has not allowed it.

101. **The law established two transitory liquidity mechanisms, the recycling facility and the liquidity fund.** The recycling facility works as an interbank window with the central bank as intermediary. This is a self-financed operation by which the central bank places short-term dollar-denominated bonds among banks and provides repurchase agreements (repos) to banks facing liquidity needs. Since 2000, the recycling facility has had very limited use, and only during periods of instability (mostly associated with Filanbanco) has there been any large placement of paper and repos (Table 30). Banks have been reluctant to use this facility for fear of reputational risk associated with using liquidity assistance.

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[36] The banks held about 8 percent of their assets in government bonds at end-2002.

[37] See Ley para la Transformacion Economica del Ecuador, Law No. 4, RO/Supplement 34, March 13, 2000.

102. **The liquidity fund is a facility pooling together contributions from the banks and the government to provide short-term loans to banks under pressure.** The resources in the fund include: (i) a contribution of 1 percent of deposits in the commercial banks, other financial institutions (*financieras*) and *mutualistas*, (it amounted to US$43 million at end-2002); and (ii) about US$74 million contributed by the government from a loan by the Corporación Andina de Fomento (CAF).

103. **The liquidity fund has rules of access at two different levels.** First, it can be used through an open credit line to cover liquidity shortages in the settlement system (*cámara de compensaciones*). The rules of access for this first tranche include:(i) to be up to date with the contributions to the fund; and (ii) to be in compliance with the agreements and documentation needed to access support in the settlement system. The requirements are assumed to be met when a bank asks for assistance, unless the bank itself notifies the implementation committee otherwise. Access to the first tranche is fairly automatic, but the access limit is each bank's contribution to the fund.

104. **Second, the facility can be used to cover other liquidity shortages.** The rules of access for this tranche are: (i) to be current on the contributions to the fund; (ii) to meet all information requirements requested by the central bank (BCE) and bank superintendency (SBS); (iii) to meet technical patrimony requirements or be subject to a regularization program with the SBS; (iv) to be current on payments obligations to the BCE and with the liquidity fund; (v) to present a certificate indicating that the bank is current on its obligations to other public financial institutions and to banks participating in the liquidity fund; (vi) to meet collateral requirements established in the liquidity fund regulations and have their value assessed by the technical secretary of the fund; (vii) present a cash flow of the bank and the financial group to which it belongs, if applicable; and (viii) meet a liquidity ratio of at least 14 percent of short-term deposits and other liabilities in the six months prior to the date of access request.

105. **The technical secretary of the fund analyzes the application for the use of fund resources in the second tranche.** The SBS determines if the bank faces a liquidity problem and certifies that the technical patrimony requirements are met. The SBS informs the technical secretary within 72 hours with a statement, indicating if the request can be granted and the maximum amount to be granted. If the SBS does not respond within 72 hours, it is assumed that the request is denied.

106. **Access limits to the liquidity fund by a single bank** cannot be higher than 10 times the technical patrimony of the bank or 10 times its contribution to the fund, whichever is less. At the same time, no more than 30 percent of the fund resources can be given to a single bank and no more than 50 percent can be with two banks.[38]

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[38] See Junta Bancaria Resolution No. JDFL-001-2001.

107. **The first tranche of the liquidity fund has been used regularly since it started operating in early 2001.** This has been used mostly by small private banks, requesting tranches of less than US$2 million, and only on two occasions by a large private bank. However the publicly-owned banks received large disbursements in 2001. The second tranche was not available to Filanbanco in 2001, because it did not qualify, but it was drawn by Banco del Pacífico and on one occasion by a small private bank in the same year. The interest rate charged has ranged between 16½ and 20 percent.

108. **The existing liquidity fund has several drawbacks:** (i) its resources are well below the minimum needed in case of a systemic run (as discussed below); (ii) it is held at a trust fund at the CFN and the banks believe is potentially subject to confiscation by the state; (iii) it is perceived by the banks as subject to interference by the authorities in the decision making process; and (iv) its use represents significant reputational risk for the private banks. In sum, as currently implemented this fund is not an adequate lender of last resort facility.

109. **The full-coverage deposit insurance that was established in the midst of the 1998–99 banking crisis soon proved unsustainable.** In 2001 congress set the limit on deposit insurance at four times per capita income, or about US$6,000.[39] It also determined the contribution of banks to the insurance fund at 0.065 percent of deposits. In practice, there is no deposit insurance, as this contribution has been used by the AGD to cover its operational expenses and pay part of the blocked deposits from the last crisis.

Financial situation of the commercial banks

110. **The banking soundness indicators have improved since the end of 1999** (Table 36). This is the result of: (i) system consolidation as the insolvent banks were closed and only the better run private banks survived; and (ii) reductions in operational costs including through personnel retrenchment. The private banks were also aggressive in collecting nonperforming loans or reaching refinancing agreements after the banking crisis, while becoming more selective in their lending practices. As a result, the share of nonperforming loans in total loans declined from 14.3 percent in 1999 to 6 percent in 2002. The private banks' profit margins have been high in the past two years, explained in part by the high deposits and lending spread. However, as the system consolidates further, and the country risk declines, efficiency gains will be needed to maintain adequate profit levels.

111. **The financial situation of the private commercial banks is gradually being strengthened to limit vulnerability.** First, in October 2001, the SBS started a program of semi-annual steps (of capital increases) for the banks to reach Basle capital adequacy criteria by November 2003. Under this program, banks should meet a ratio of tier-one to tier-two

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[39] Based on the estimate of per capita GDP for 2002, the revised ceiling would now be about US$7,800.

capital of 100 percent by the deadline. As a result, banks have been improving their capital adequacy ratios.

112. **Second, in the past two years, there has been a rapid expansion of consumer lending.** This has been triggered on the demand side by the return of confidence in the economy and higher employment levels, and by large profit margins on the supply side. To reduce vulnerabilities to their increased exposure to consumers, the SBS recently tightened the provisioning requirements for these loans.

113. **Other sources of vulnerability relate to the public commercial banks.** In 2000 there were two large publicly-owned commercial banks, Filanbanco, the largest in the system, and Banco del Pacífico, the fourth largest. Filanbanco was closed in July 2001 and in the months before its closure its liquidity shortages were a source of instability in the system. The government took steps to liquidate Filanbanco in July 2002, but completing the process has been slow. At present several trust funds exist to allocate the bank's assets and liabilities. These will be used to pay about US$126 million that is still owe to private sector depositors and about US$83 million to repay deposits of public sector entities. At the time of its closure, Filanbanco had a loan portfolio of about US$950 million. The expected recovery value is estimated at a fraction of that, as the legal process for the creation and implementation of the trust funds has taken a long time to materialize.

114. **Filanbanco's difficulties affected also Banco del Pacífico, the other publicly-owned commercial bank.** In the second half of 2001, the government decided to transfer ownership of the bank to the BCE who took care of its capitalization. Pacífico was capitalized through the transfer of government bonds for US$129 million in 2001 and US$45 million in 2002 from the BCE; and through a cash transfer of US$75 million from a CAF loan to the government in 2002. The bank has been under a regularization program closely supervised by the SBS and was placed under independent private management in 2001. During 2002 the bank management focused its efforts on reducing the nonperforming loan portfolio and reducing personnel and other operational cost. The corresponding indicators show the ratio of nonperforming to total loans declining from 53.3 percent in 2001 to 32.2 percent in 2002. Banco del Pacífico also reported profits in 2002, reflecting in part nonrecurrent revenues. An independent investment firm is expected to prepare the bank for sale by July 2003.

115. **The bank superintendency has been reorganized, the staff has been better trained, and has substantially strengthened its oversight of the banks.** This has been possible by increasing the on-site inspections, and by setting well-defined quantitative and qualitative standards that are closely monitored by the SBS. However, a weak judicial system and political interference tend to be obstacles to strong and timely enforcement of the regulations.

Role of the state-owned development banks

116. **The government has been managing a number of development banks,** including the Corporación Financiera Nacional (CFN), Banco Nacional de Fomento (BNF), Banco del Estado (BEDE), and Banco Ecuatoriano de la Vivienda (BEV). These banks have played an important role in segmenting the credit market through their preferred credit to selected groups. In particular, the CFN channels credit to small and medium firms in the main urban areas, BNF specializes in rural sector lending, BEDE lends to local governments, and BEV has specialized in mortgage financing. The performance of these banks remains a source of concern for the system as a whole. First, the banks have a tradition of poor loan recovery, which discourages repayment of loans to all banks. Second, their lending practices are not transparent.

C. Liquidity Needs

117. **In response to the vulnerabilities described above, the commercial banks have accumulated large liquidity cushions,** including legal reserve requirements at the central bank, cash in vault, short-term assets abroad, and their contribution to the liquidity fund. Moreover, three major banks have arranged their own contingent liquidity support credit lines from foreign creditors. Deposits in the banking system have grown fast since 2000, and short-term liquid assets expanded rapidly to cover about 46 percent of sight deposits and up to 30-day maturity time deposits by end-2002 (Table VII.1).The minimum liquidity ratio is 14 percent. This is calculated as the sum of all liquid assets available within 90 days divided by the sum of deposits and other obligations due within the same period. The average for all banks of this measure, known as "first line liquidity ratio," has normally exceeded the minimum requirement. In addition, as part of its close monitoring of liquidity conditions, the SBS is following on a weekly basis the volatility of the deposits of the 100 largest depositors by individual banks. As their systems become more sophisticated, it plans to incorporate sensitivity analysis of vulnerabilities in deposits and loan portfolios into the regular monitoring process.

118. **The recent experience of other highly-dollarized countries in Latin America shows that during a crisis a substantial decline in deposits in a few weeks is not unprecedented.** In such an event, Ecuador would need large banking system reserves to cover sight deposits and those with maturities of up to 30 days. In the absence of a lender of last resort, these resources will need to come from the banks' own liquidity cushions.

Alternative ways to hold liquidity

119. The **legal reserve requirement,** equivalent to four percent of deposits, must be placed at the BCE and is nonremunerated.[40] These resources can be used exclusively by the

[40] See Central Bank of Ecuador Resolution No. 073-2001, January 11, 2001.

bank that placed them in the BCE, and they are not pooled to support the banks facing liquidity needs. **Cash in vault** is also non-remunerated and is not pooled.

120. **Remunerated short-term assets abroad** constitute the bulk of the liquid assets of the banks. These holdings present a supervisory challenge to the SBS as it is necessary to be vigilant with respect to the form of assets held, their immediate availability, and their location to avoid misreporting.

121. Another way for the banks to hold their liquid reserves could be by holding a minimum amount of **short-term BCE bonds** in the liquidity recycling facility. However, this is likely to generate quasi-fiscal losses to the BCE, as there has been practically no demand for repos, the only possible use of the proceeds of these bonds (Table 30). Placing BCE bonds, not used for repos, would also be inconsistent with current regulations.

122. The **liquidity fund** was put in place as a transitory mechanism in the absence of a lender of last resort, and its resources have not been adequate to handle a systemic run on the system from the start. Moreover, although access by Filanbanco to the liquidity fund in 2001 was within the rules, the private banks perceived its use as an act of government policy, and that has reduced their willingness to make additional contributions to the fund. Moreover, the second tranche, where banks can borrow beyond their individual contributions to the fund, has been used mainly by Banco del Pacífico, also a public bank.

123. **The private banks, BCE and the SBS have been discussing ways to improve the functioning of the existing liquidity fund or to implement a new one.** The discussion can be separated on two main aspects. First, the needs of a single bank that may have to borrow to meet its settlement and other obligations. Second, the liquidity needs of one or more banks in the face of a deposit run.

124. **In the case of a single bank, with a nonrecurrent and minor liquidity shortage, a properly designed and well functioning inter bank facility would be enough.** At present, the recycling facility performs this function.

125. **However, in the case of a systemic run, there is a need to have access to an adequate pool of resources.** This has been handled through the second tranche of the existing liquidity fund, but its performance has not been fully satisfactory. An improved liquidity fund, may need to resolve the tensions between three main considerations: (i) how much to increase the fund resources and who will contribute; (ii) how to manage it; and (iii) how to institutionalize the interaction between the fund manager and the authorities. Three proposal (discussed below) have been identified to improve on the existing liquidity fund. However, none of these has yet been developed to implementation stage.

126. **Several private banks prefer a fully privately-owned and -managed liquidity fund.** They have suggested that the fund include only resources from the commercial banks, be administered by an independent manager, and be kept abroad. This idea would relieve the authorities from any lender of last resort responsibility. However, the proposal has not yet

established how many resources will be in the fund, how the independent manager would interact with the authorities, or how to deal with banks that decide not to join the fund.

127. **An alternative proposal calls for a new liquidity fund using some of the elements of the existing one, including the current contribution of the BCE.**[41] This proposal envisages to increase the liquidity fund resources by including the reserve requirements now held at the BCE and new contingent credit lines from the FLAR and multilateral organizations. The proposed fund will have the advantage of enlarging the resources available to assist the banks. However, it would involve more resources from the public sector without additional contributions from the private sector. Moreover, while the proposal includes the role of an independent manager for the fund, the roles of the BCE and SBS are not clearly established.

128. **A third proposal has been built around the recent experience of other highly-dollarized countries, where a large loss of deposits occurred in a few weeks.** Using this as a benchmark, a larger liquidity fund could include the resources that are now invested as short-term foreign assets, the legal reserve requirements at the BCE, and the contribution to the existing liquidity fund (1 percent of deposits). At the end of 2002, these components combined were equivalent to US$1.4 million or about 39 percent of all deposits or 46 percent of sight deposits in commercial banks (Table VII.1).[42]. The liquidity needs from banks' own sources will be less if the existing contribution of the government in the current liquidity fund would be transferred to the new liquidity fund.

129. **Regardless of the distribution between public and private resources in a new liquidity fund, questions remain on the role of the BCE in its operations.** First, access to the first tranche of the liquidity fund is interrelated to the well functioning of the payment system. Any changes will need to be carefully designed. Second, the BCE participates in the settlement system as it is the fiscal agent of the government. This may need to remain so in the near future as it might be difficult politically to place the treasury's resources at a commercial bank. Third, if cash reserves were to be part of the liquidity fund, enough cash should be held in Ecuador by the independent manager, in or outside the BCE.

130. **The role of the bank superintendency in the operations of the new liquidity fund will need to be clearly defined also,** as its mandate is to preserve the well functioning of the

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[41] Fondo de Liquidez Sistema Financiero Ecuatoriano: Un Nuevo Esquema, unpublished mimeo, January 2003.

[42] The incorporation of the short-term foreign assets and legal reserve requirement in the new liquidity fund, may not constitute a change in the banks' liquidity requirements established by the SBS. Rather, these resources will remain the property of each individual commercial bank, but administered by the independent liquidity fund manager. The advantage is that in so doing a larger amount will be "pooled."

financial system. The SBS is responsible for the early warning system, to determine and monitor corrective actions, and to take control of a bank if necessary. The private banks and the independent fund manager would need to work closely with the regulator, and to accept its recommendations as binding under circumstances that are precisely specified in the regulations. In this context, the discussion will need to focus on the use of confidential information provided by the superintendency to the independent manager, and the role of the superintendency in recommending or dismissing requests for the use of the liquidity fund resources.

131. **The fees for the use of the liquidity fund will need to increase *pari-passu* with the level of access to be determined as part of the regulations.** Access beyond liquidity needed in the settlement system will need to be at punitive rates to discourage use other than in emergency conditions. Access limits will also need to be established to avoid a situation in which only a limited number of banks can have access in case of a systemic run.

132. **An alternative way to have access to funds by banks with liquidity needs could be to use prearranged contingent credit lines.** These will be particularly useful if the creditor were to remain vigilant of the quality of the assets that the banks present as collateral, and in that way bring confidence that the lines would remain open when the banking system faces a systemic run. This, however, will be difficult when the economic environment deteriorates and the probability of a banking crisis increases.[43]

D. Options to Move Forward

133. **This chapter focused on ways to reduce the vulnerabilities faced by the banking system and to improve the liquidity management.** On the government side, an adequate macroeconomic framework with better fiscal policy is of the essence. This will contribute to the elimination of public sector arrears and bring increased confidence and stability to the banking system. At the same time, a better fiscal position with early repurchases of public debt will bring down lending rates and spreads by reducing risks. Privatization of Banco del Pacífico is likely to eliminate a potential source of instability and political interference in the banking system. The restructuring of the development banks and their eventual consolidation in one better run development bank could improve the public finances and take away distortions in the financial sector. The bank superintendency could move forward the on-going capitalization schedule and make the requirements more stringent than Basle standards. This could put the undercapitalized banks under pressure, but would strengthen the banking system and make it more resilient to shocks. Both the authorities and the banks are working on the design and implementation of a better liquidity fund. The future role of the BCE and SBS in the new liquidity fund needs to be carefully assessed, with a view to avoid political interference, but to maintain their regulatory functions.

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[43] Andrew Powell, Ensuring a Sound and Efficient Financial System in a Dollarized Economy: Assessment and Prescriptions for Ecuador, mimeo, January 2003.

Table VII. 1. Open Banks' Liquidity Position

(In millions of U.S. dollars)

	2000	2001	2002
Total liquid assets	761	1,122	1,401
Foreign assets abroad	608	895	1,147
Cash	98	143	195
Deposits in banks abroad	331	535	687
Remittances from abroad	0	0	3
Other assets in subsidiaries	179	216	262
	0	0	0
Reserve requirements at BCE	153	192	211
Contribution to liquidity fund	0	36	43
Deposits	2,143	3,618	4,308
Sight deposits	1,323	2,531	3,035
Time deposits	820	1,087	1,273
Up to 30 days	0	0	590
Up to 90 days	558	577	434
Up to 180 days	161	331	158
Up to 360 days	39	98	70
More than 360 days	63	81	22
Liquidity ratios (in percent)			
Total liquid assets/sight deposits	58	44	46
Total liquid assets/sight deposits			
+ up to 30 days maturity	58	44	39
Additional liquidity needed			
To cover 50 percent of sight deposits	-100	143	116
To cover 50 percent of sight			
and up to 30 days maturity deposits	-100	143	411

Sources: Ecuador Superintendency of Banks; and Central Bank of Ecuador.

VIII. The Trade Regime, Market Access, and Foreign Direct Investment[44]

A. Trade Regime

134. **Import tariffs.** Ecuador has seven import tariff rates ranging from 0 to 35 percent (see tabulation below),[45] with a simple average tariff of 11.3 percent.[46] There are two main criteria for tariff differentiation—the nature of goods, with final goods having a higher tariff rate; and whether goods are produced inside the Andean Community (CAN). Imports from outside the CAN, competing with domestically produced goods, also face a higher import tariff. Upon accession to the World Trade Organization (WTO) in 1996, Ecuadoran tariff rates were generally bound at about 10 percentage points above the CAN's Common External Tariff (CET). The CET covers about 62 percent of tariff items.

Import Tariff Structure

(In percent)

Tariff Rate	Proportion of Tariff Items	Proportion of Tariff Items with Nonzero Imports
0	3.0	2.2
3	0.3	0.1
5	35.8	27.9
10	18.2	14.9
15	18.5	14.8
20	23.9	19.9
35	0.2	0.1
Total	**100.0**	**79.9**

Source: Ministry of Trade, Industry, and Fishing.

[44] Prepared by Lisandro Abrego.

[45] The top tariff rate of 35 percent applies only to automobiles. During its February 2001 summit, the Andean Community, of which Ecuador is a member, agreed to eliminate the 15 percent rate by 2004. Tariffs against a wide range of intermediate and capital goods (comprising about 700 tariff items) not produced within the CAN were temporarily eliminated in November 2002. The measure, which tended to favor specific interest groups, was reversed in early 2003.

[46] For a more detailed description of the import tariff structure, see Marco Arias Rivadeneira, "Análisis de la Estructura del Arancel de Importación." Quito: Ministry of Trade Industrialization and Fishing, Working Paper DINI/01.

135. **Import tariff bands.** The import regime also has a rather complex price band system applied to about 140 agricultural goods. This system sets variable import tariffs depending mainly on the product's price in international markets. The scheme is currently part of the CAN agreements, although within the community, only Ecuador, Colombia, and Venezuela are subject to it.[47] In practice, the associated variable tariffs are used not only for domestic price stabilization purposes, but also as a safeguard and to impose countervailing duties. The system is difficult to administer and has not functioned properly, with most product's domestic price lying outside the bands.[48] On average, it seems to make goods subject to it more expensive, has undesirable income distributional effects, and contributes to high poverty levels, as most of the products under the price bands are food items consumed by the lower income groups. The scheme also reinforces the distortions associated with a multi-rate tariff structure (see below). Upon WTO accession, Ecuador committed to eliminate the price bands by the end of 2001; it failed to do so, and remains obliged to comply. Under the agreement with the WTO, tariff rates for goods under this scheme were bound at 95 percent.

136. **Import authorization and bans.** Ecuador makes extensive use of previous authorization to import, as these apply to 1,424 out of 6,707 tariff items,[49] mostly agricultural goods. This requirement constitutes a violation of Ecuador's agreements with the WTO, introduces discretionality to the import regime, and is redundant because it duplicates other authorizations that have been established for public health and security considerations. Ecuador applies import bans on used automobiles, clothing and tires. These bans substantially increase effective protection for these industries and are inconsistent with its WTO commitments, which called for their elimination by 1996. Ecuador justifies the ban on used automobiles and tires on environmental and safety grounds, respectively. However, establishing instead domestic standards for such goods would be more efficient and equitable.

137. **Import tariff rate quotas.** The import regime also includes tariff-rate quotas, which provide minimum market access at preferential (below most-favored-nation) tariff rates. They are applied to fourteen "sensitive" agricultural goods,[50] and were agreed with the WTO

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[47] Bolivia does not use price bands. Perú has its own price bands, but applies them to a more limited number of goods.

[48] See Dominique Hachette A. de la Fresnaye, "Ecuador: Política Comercial: Sugerencias para Reformas" (Parts I and II). Washington: World Bank, 2001.

[49] A detailed description of import preauthorizations in Ecuador is presented in Arias Rivadeneira (2001) and Hachette A. de la Fresnaye (2001), op. cit. See also Marco Arias Rivadeneira, "Breve Diagnóstico de Autorizaciones Previas." Quito: Ministry of Trade Industrialization and Fishing, mimeo.

[50] Including corn, wheat, chicken parts, and powdered milk.

at the time of Ecuador's accession. The tariff-rate quotas overlap with the price bands, and some of them appear to be redundant as they are nonbinding.

138. **Safeguards.** Ecuador has recently resorted to the use of import safeguards to protect its domestic producers against increased competition from CAN partners. So far, these have been applied to a limited number of goods imported from the CAN. The use of safeguards have resulted in the imposition of tariffs on goods that were being imported duty free before, or have increased existing, relatively low tariffs. The new import tariffs—which range between 5 and 10 percent—are expected to be in place for no more than six months and should be lifted during the first quarter of 2003.

139. **Overall assessment of the import regime.** With a rating of 5 out of 10 in the Fund's index of trade restrictiveness,[51] Ecuador appeared to have a moderately restrictive trade regime in 2002. However, the wide dispersion of tariff rates is very distortive when considering the effective protection this offers. Some agricultural products, as well as some items in the car industry, for example, enjoy effective protection rates in excess of or close to a hundred percent (Hachette A. de la Fresnaye, 2001). The dispersion in import tariffs contributes to resource misallocation. It would be desirable to move to a more uniform tariff structure, as recommended by technical assistance work in this area provided by the World Bank (see Hachette A. de la Fresnaye, 2001). A drastic reduction of nontariff barriers and compliance with WTO commitments would also significantly reduce distortions. Ecuador's participation in the Andean Community would, in principle, place limits on tariff reform, but the special status acquired by Bolivia and Perú demonstrates that alternative regimes can be implemented within the community.[52] The main opposition to tariff reform seems to come from domestic producers that benefit from protection.

140. **Export regime.** Ecuador has no export subsidies and the drawback system for import taxes has functioned relatively poorly in the past (see below). Therefore, the current trade regime appears to discriminate against exports. Effective protection for export activities seems to be negative.[53] This represents a problem for export diversification, which is

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[51] This index is based on a simple average of tariff rates and on the extent of nontariff barriers, including the effectiveness of the customs administration.

[52] Bolivia has a two-rate (5 and 10 percent) tariff structure. Perú has also departed significantly from the CET. Like these countries, Ecuador would have to ask for a special regime (of "less developed economy") under the community in order to adopt a different tariff structure.

[53] No direct estimates are available, but indirect evidence points in this direction. Eligible exports would get, on average, an effective drawback of about 1.2 percent. This, plus an effective import tariff rate of about 7 percent, would most likely result in negative protection for such exports.

reflected by Ecuador's relatively limited diversification in its export base despite substantial preferential access to external markets (see below). Export diversification is particularly important both for growth and to reduce the strong dependence on oil.

141. **Until recently, the export drawback system applied to all non-oil exports, but in practice its coverage was limited.**[54] The system resulted in relatively long delays in the reimbursement of taxes, and the costs it imposed on its intended beneficiaries was especially onerous for relatively small exporters. A new drawback system is in place since April 2002. This seeks to return to the exporters all import taxes effectively paid by making the drawback automatic at 4 percent of the export value.[55] Although oil exports are excluded, the system was expected to improve actual coverage and reduce significantly the time for reimbursements.

142. **In an effort to stimulate export growth and compensate for the anti-export bias of the trade regime, Ecuador has set up a number of free trade zones (FTZ) and maquiladoras.** The two schemes share basically the same trade and tax regimes. They exempt companies from both direct and indirect taxes.[56] Firms operating in FTZ may export to the CAN and are allowed to sell in the domestic market. In the latter case, however, goods would get the same treatment as those produced outside FTZ, and be subject to an import tariff. Despite their generous incentives and relative flexibility, these schemes do not appear to have been successful in boosting exports or attracting foreign investors. While the authorities are planning an expansion and strengthening of FTZ, there are serious drawbacks to such arrangements as they tend to increase distortions and are commonly abused to get around the official trade regime. In this regard, they can act as a licensing scheme for those few who obtain permission to set up an FTZ or a maquiladora.

B. External Market Access and International Agreements

143. **Preferential access.** Ecuador enjoys preferential market access to the U.S. and the European Union (EU) under the Generalized System of Preferences. It also benefits from the Andean Trade Preferences Agreement (ATPA) with the United States. The ATPA was renewed in 2002 and extended to about 700 new tariff items, including textiles and apparel,

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[54] About US$30 million (i.e., 1.2 percent of the value of drawback-eligible exports) was returned to exporters in 2001.

[55] There is some concern that the automaticity of the new drawback system can result in subsidies for those exporters who have not paid their import taxes—apparently a frequent problem in Ecuador.

[56] Direct tax exemptions are for 20 years.

leather goods, tuna, and oil. Under these agreements, almost all (about 6,000 items in the tariff list) Ecuadoran goods enter the EU and the U.S. duty free.[57]

144. **Regional agreements.** Ecuador gets preferential treatment on a limited number of goods from various Latin American countries (Argentina, Brazil, México, and Uruguay) under the *Acuerdos de Alcance Parcial y Complementariedad Económica* in the context of the Latin American Association for Integration (ALADI). It also has a free trade agreement (FTA) with Chile, and is about to start negotiations on one with México. An FTA between CAN and Mercosur has been under negotiation for some time, and significant progress toward its conclusion has been made. However, disagreement on liberalization of goods subject to price bands and generally over the speed of tariff elimination have become important obstacles to its conclusion, which was for some time envisaged before end-2002 but did not materialize. The agreement is now expected to be finalized before end-2003. There is also keen interest in a bilateral FTA with the United States. Ecuador is also participating in the negotiating process on the Free Trade Area of the Americas (FTAA).

145. **Other agreements.** At the time of its WTO accession, Ecuador adopted the WTO's General Agreement on Trade in Services, which put into law the liberalization of trade in services. Further progress was made by the full liberalization of financial services. Ecuador also adopted the agreement on Trade-Related Intellectual Property Rights (TRIPs) as well as that on Trade-Related Investment Measures (TRIMs). Although problems remain in the enforcement of intellectual property laws, in 1999 the United States Trade Representative moved Ecuador from the "priority watch list" to the "watch list." There have been problems with the implementation of the agreement on TRIMs—Ecuador still seems to apply local content requirements in the car assembly industry, which are inconsistent with the TRIMs and should have been eliminated by 2000.

C. Foreign Direct Investment

146. **Overall, Ecuador has a liberal foreign direct investment (FDI) regime.** Foreign investors can establish freely in Ecuador without special authorization; they are allowed to repatriate profits; and there are no ownership restrictions, joint-venture requirements or performance requirements. Foreign companies and investors face the same tax regime as domestic companies, paying a flat 25 percent rate on profits. There are, however, some important sectoral restrictions. These include oil, telecommunications, water, energy, and roads, where investment must be carried out with a license from the relevant state company or institution.

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[57] The most notable exceptions are textiles, apparel and bananas in the EU. Ecuadoran banana imports by the EU are subject to a regional quota (applied to Latin American as a whole) and a tariff (20 percent), but access has improved recently. The quota will be phased out by 2006.

147. **In an effort to attract FDI, Ecuador has signed bilateral investment treaties (BITs) with more than 20 countries,**[58] including the U.S. and a number of other OECD countries. It also has treaties to avoid international double taxation with 8 countries. Besides the facilities provided by the FDI legislation, BITs provide for national and most-favored-nation treatment; adequate (market-based) compensation in case of damage from armed conflict or confiscation; and international arbitrage in dispute settlement.

148. **Despite an open regime, Ecuador has had little success in attracting FDI outside the oil sector.** According to UNCTAD (2001), Ecuador ranked last in the CAN in terms of FDI inflows relative to GDP during the 1990s. In absolute terms, even Bolivia, with a much smaller economy, received more FDI than Ecuador. The share of non-oil FDI, which averaged 20–40 percent during the first half of the 1990s, has fallen under 5 percent since 1999. Judicial insecurity, frequent changes in the rules of doing business, corruption, and lack of full enforcement of FDI legislation are mentioned by foreign companies as important factors in deterring them from setting up or expanding operations in Ecuador.

D. Conclusions

149. **Ecuador has a complex import regime with high levels of effective protection that discriminates against exports.** This suggests that to improve competitiveness, promote the expansion of non-oil exports, and make dollarization sustainable, the authorities should try to move quickly to a more neutral trade regime by adopting a more uniform tariff structure, reducing nontariff barriers, and improving the functioning of the drawback regime. The authorities may also need to move expeditiously to comply with the commitments under the WTO agreements while raising their concerns in international fora regarding international access for Ecuador's exports. Finally, a more stable macroeconomic environment—as recommended in the previous chapters—and stronger judicial security would likely promote foreign direct investment, which is highly needed for sustained vigorous growth.

[58] UNCTAD, *Investment Policy Review: Ecuador*. Geneva: United Nations, 2001.

IX. World Bank Proposals for the Social Sectors: Synthesis[59]

150. **This chapter presents the main issues and recommendations for the education, health, and social assistance programs.**

151. **Ecuador is committed to the Development Goals of the Millennium,** covering the areas of poverty, malnutrition, mother-infant health, education, gender equity, and environmental sustainability. The World Bank staff estimates that, it is "likely" that Ecuador will reach goals for primary education (100 percent coverage) and malnutrition (50 percent reduction); it is "possible" that Ecuador will meet goals for lowering infant mortality and mortality of children under age 5 (66 percent reduction), and also goals for sanitation (cut by 50 percent the number of people without access to potable water). The Bank staff believes it is "very unlikely" that Ecuador will meet poverty-reduction goals of 50 percent (for poverty and extreme poverty). Since these goals are sensitive to the rate of economic growth it is important that Ecuador achieve sustained growth at rates higher than historical levels.[60]

152. **The country's deteriorating macroeconomic situation in the 1990s led to increased poverty while social spending declined.** In 1999, 42 percent of the population was poor, about half of them residing in urban areas. The percentage of population living in slums in Quito (30 percent) and Guayaquil (60 percent) are significantly higher than those found in other Latin American cities of a similar size. The situation in certain medium-sized cities in the highlands is also of concern. At the same time, social spending has declined. Spending on education dropped from 6 percent of GDP in the 1980s to 2.7 percent in 2000, and spending on health dropped to 1.7 percent. Spending on social protection has increased to 1.5 percent of GDP in recent years (not including fuel subsidies).

153. **The health and education sectors share problems of poor coverage and low quality services,** especially for poor and indigenous people. There are no anticyclical social programs in Ecuador. The main social protection program is the cash assistance program, the *Bono Solidario,* and various food assistance programs.

A. Education

154. **Major challenges remain in education:** 11 percent of the population over age 15 is illiterate, and the net rate of primary school attendance is close to 90 percent. This drops to 51 percent in secondary school and 14 percent in higher education. There are great differences in coverage between rural and urban areas and between indigenous and other

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[59] The authorities have engaged in an intensive dialogue with the World Bank in the context of a new Country Assistance Strategy (CAS). This note, prepared by World Bank staff led by Vicente Fretes Cibils and José Roberto López-Cálix, synthesizes issues in the social sectors. It draws on several Policy Notes, whose publication is forthcoming.

[60] The estimates assume an annual GDP growth rate of 2.7 percent over the medium term.

groups. The system is unbalanced: the poor and indigenous schoolage population is at a disadvantage compared to the rest of the population, and basic, diversified, and university education are aimed mainly at the urban population with above-average incomes.

155. **The quality of basic education is quite low.** Results of academic achievement testing show deficiencies in the quality of teaching at the basic level. Moreover, few investments have been made in the sector, the maintenance of infrastructure is minimal, insufficient teaching supplies are provided, and teacher salaries are moderate. Spending on education is poorly balanced: the first quintile of the population (by income) receives 12 percent of public spending; the fifth quintile (highest incomes) receives 25 percent.

156. **The sector has serious problems of administration and governance.** There is high turnover of top-level authorities; a duplication of functions in some administrative units of the Ministry of Education and Culture (MEC); administration is excessively centralized; there is little communication between the MEC, its provincial offices, and schools; the selection, hiring, and promotion process of teachers is opaque; the distribution of teachers is inadequate (too many teachers in some areas and not enough in others); and the salary structure for teachers bears no relation to improving the quality and balance of the system.

157. **Solving these problems requires comprehensive reforms:**

- All children should complete basic education, and have access to better-quality schooling. Programs aimed at increasing coverage must be focused on underserved low-income groups living in rural and indigenous areas. The MEC must consider new methodologies, such as "tele-high school," to reach underprivileged groups.

- The MEC should valuate different strategies to attract new teachers on an ongoing basis, design a plan to provide the educational system with at least the minimum necessary teaching materials, and institutionalize the APRENDO system for measuring results, while giving special attention to bilingual education in the country.

- Public spending on education should be gradually increased.

- The sector should focus on improving resource allocation, including to pilot projects for greater decentralization, enhanced autonomy and greater parent participation.

B. Health

158. **There are coverage problems in health spending as well.** About 30 percent of the population does not have access to basic health services. More than two-thirds of the population does not have formal health insurance and the Ministry of Public Health (MSP) and other institutions are unable to provide service to almost half of those with the worst health indicators. Insufficiently attended births and lack of access to basic health care are the main factors responsible for an unbalanced epidemiological profile.

159. **Poor coverage is reflected in high infant and maternal mortality rates and premature births.** For every 100,000 births, 160 mothers die as a result of complications from pregnancy, birth, or postnatal problems; 4,300 children die every year before their first birthday. Deaths due to infections and violence particularly affect the young population and are as common as mortality due to cancer. Interregional differences are great: life expectancy in the province of Pichincha is 15 times higher than in the Amazon provinces.

160. **Reform of the health sector requires a number of actions:**

- Improving the Law on Free Maternity Care (LMC) to broaden its coverage, while considering the social and cultural factors that limit the demand for basic services.

- Increasing coverage by the Rural People's Social Security program (*Seguro Social Campesino*, SSC) along with that of the LMC. The SSC's financial limitations prevent it to be broadened to cover all, but the mother-child population may receive the same services under the LMC.

- Basic health services may be introduced through the *Bono Solidario* for the retired and disabled: preventive and informational services, outpatient treatment, and hospitalization for prevailing acute illnesses, and a basic package for chronic illnesses and surgery. This would provide coverage to approximately 230,000 pensioners and 8,000 disabled persons who have no other resources for medical attention.

- Redefining the essential functions of the MSP by shifting its role from a direct supplier of services to one of accrediting establishments, monitoring the service quality, creating a health monitoring system, and providing training for interventions in situations of epidemiological risk. As part of this redefinition, sectoral associations could be established with the Ecuadoran Social Security Institute (IESS).

- Creating a regulatory framework for a system of regional health services networks with levels scaled according to their complexity. The MSP installations, decentralized establishments, and the SSC would all participate, and at the local level would focus their efforts on primary care and basic services.

- Broadening SSC coverage, possibly creating a new insurance program for the poor population, which would consolidate and progressively replace the benefits of the LMC and the health provisions of the *Bono Solidario*.

- Increasing gradually public spending on health.

C. Social Protection

161. **The economic crisis of 1998–1999 generated new demands for social assistance.** The groups in chronic poverty have been joined by groups requiring temporary social assistance. In 2001, Ecuador spend close to $264 million on 22 Priority Social Programs (PSPs), or about 1.5 percent of GDP, similar to the average in the countries of the region.

About 60 percent of this amount was allocated to two programs for transferring cash: the *Bono Solidario* and the *Beca Escolar* (educational scholarships). The two most important programs are the School Breakfast and Lunch program—US$24 million—and the *Bono Solidario*—US$155 million. The subsidies on cooking gas and gasoline are not included in the 22 PSPs. They cost about US$500 million in 2000. They are nondiscriminatory, and are mostly consumed by higher income citizens.

162. **The social assistance network has some problems.** Its functions (and budget) do not expand in times of crisis and contract in normal circumstances. This manifests itself in the absence of PSPs with established minimum spending levels, and in the lack of a mechanism for automatically updating the list of beneficiaries. The network contains programs with regressive spending, and lacks consistent criteria for maintaining a steady focus. Indeed, a high percentage of spending on universal social programs benefits the population with higher-than-average incomes (e.g., energy subsidies and school meals). Also, targeted programs vary in their effectiveness, and do not use consistent criteria to assure that the truly poor are the main beneficiaries. Several programs do not adequately cover vulnerable groups despite their multiple focus. Finally, the *Bono Solidario* is static; it does not have a mechanism to update its intended beneficiaries; there were errors in its original focus on the target population; there is a lack of clarity in the program's objectives; and it does not generate mechanisms for ending the dependence on the *Bono*.

163. **Some suggestions to improve the social assistance network are:**

- Increasing its flexibility. For instance, with the establishment of certain PSPs with protected amounts within the budget to resist cyclical fluctuations.

- Improving the coordination and targeting of existing programs. This can be done by adopting a single criterion for targeting social assistance programs.

- Increasing and redirecting the *Bono Solidario*. The *Bono* should be oriented more toward protecting the health of children and pregnant women in poverty.

Table 1. Ecuador: Consumer Prices, 1998-2002 1/

(End of period 12-month percentage changes)

	Total	Food, Drinks, and Tobacco	Clothing and Footwear	Rent, Water Electricity, Gas, and Other Utilities	Furniture, Household Equipment and Maintenance	Health	Transport	Entertainment and Culture	Education	Hotels and Restaurants	Others
1998	43.4	35.4	30.1	85.4	38.7	42.1	61.9	46.6	27.9	42.5	30.6
1999	60.7	57.2	79.5	33.8	90.3	78.3	71.7	122.9	43.5	38.0	94.0
2000	91.0	107.8	104.7	41.9	89.5	106.2	79.1	70.9	75.6	109.4	97.3
2001	22.4	19.0	8.6	49.0	16.6	17.0	29.4	9.4	60.6	17.1	18.1
2002	9.4	6.0	-3.5	41.4	-0.3	7.5	1.6	-2.9	23.9	10.0	-1.6
2001											
January	78.7	83.2	84.7	51.6	60.3	93.1	98.5	45.6	75.0	94.6	82.1
February	67.2	72.3	61.9	49.7	46.8	80.9	92.8	34.8	74.5	84.0	52.2
March	58.8	56.0	51.4	52.2	43.8	63.2	92.2	32.9	74.4	76.3	45.4
April	46.5	39.5	45.1	54.4	37.2	50.5	51.0	26.8	77.9	66.7	39.9
May	39.6	29.2	38.8	54.1	33.0	41.5	47.6	27.2	78.4	53.3	33.5
June	33.2	21.7	31.1	53.9	29.7	33.6	39.2	25.2	75.2	45.2	26.3
July	30.4	19.4	25.8	51.7	25.1	30.4	38.1	22.2	75.2	41.9	23.0
August	29.2	19.1	22.3	51.9	22.6	28.1	36.6	23.0	75.1	38.5	22.6
September	27.2	19.1	18.5	52.0	22.7	22.9	35.1	13.3	69.9	29.7	21.6
October	25.3	19.9	13.3	48.1	20.4	20.4	34.2	13.1	62.4	24.3	20.8
November	24.6	21.4	10.7	48.6	18.8	18.7	29.8	12.7	60.5	23.0	19.3
December	22.4	19.0	8.6	49.0	16.6	17.0	29.4	9.4	60.6	17.1	18.1
2002											
January	16.5	14.4	7.8	41.4	14.5	16.6	2.1	9.7	60.5	15.4	10.9
February	14.4	8.5	6.2	45.0	11.3	16.0	2.0	9.1	60.5	16.5	9.9
March	13.2	6.5	5.4	45.4	9.6	15.7	1.8	4.8	60.5	14.7	10.2
April	13.0	6.5	4.4	47.5	8.8	15.6	1.9	3.9	45.7	14.6	6.3
May	13.4	9.3	3.0	45.5	7.6	14.3	2.0	0.6	43.0	15.3	3.0
June	13.3	9.1	1.4	52.3	5.2	13.8	1.4	-1.8	43.5	14.6	-0.1
July	12.9	8.8	0.8	50.5	5.3	13.1	1.7	-1.3	43.5	14.7	-1.3
August	12.9	9.4	-0.5	51.3	4.0	11.9	1.7	-0.7	43.5	11.9	-1.0
September	11.3	6.9	-1.6	49.3	2.7	11.0	2.1	-1.7	29.8	12.2	-2.3
October	10.7	7.6	-2.4	47.2	2.0	9.0	1.5	-1.7	23.8	11.6	-2.7
November	9.7	6.1	-2.9	44.2	0.7	8.0	1.5	-1.8	23.9	10.2	-2.3
December	9.4	6.0	-3.5	41.4	-0.3	7.5	1.6	-2.9	23.9	10.0	-1.6

Source: Central Bank of Ecuador.

1/ For the period 1998-2000, the consumer price index is based on prices in Sucres.

Table 2. Ecuador: Indicators of Employment 1/

	1998	1999	2000	2001	2002
	(Thousands of workers)				
Total urban employment	**1,474**	**1,490**	**1,463**	**1,605**	**1,668**
Agriculture and mining	25	32	28	59	44
Manufacturing	258	258	267	228	240
Construction	109	97	89	113	135
Commerce	515	496	485	590	572
Basic services 2/	93	103	114	133	135
Financial services	31	28	21	23	25
Other services 3/	444	477	458	459	518
	(Shares in total)				
Total urban employment	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Agriculture and mining	1.7	2.2	1.9	3.7	2.6
Manufacturing	17.5	17.3	18.2	14.2	14.4
Construction	7.4	6.5	6.1	7.1	8.1
Commerce	34.9	33.3	33.1	36.8	34.3
Basic services 2/	6.3	6.9	7.8	8.3	8.1
Financial services	2.1	1.9	1.5	1.4	1.5
Other services 3/	30.1	32.0	31.3	28.6	31.0
	(In percent of labor force, end of period)				
Memorandum items:					
Urban unemployment rate	11.8	15.1	10.3	8.1	7.7
Urban underemployment rate 4/	51.8	46.0	51.8	40.4	30.7
	(Thousands of workers)				
Urban labor force 5/	1,671	1,754	1,744	1,774	1,808

Sources: National Institute of Statistics and Census; and Central Bank of Ecuador.

1/ Covers Quito, Guayaguil, and Cuenca.
2/ Includes electricity, gas, water, and transport.
3/ Includes personal, social, and community services.
4/ Persons in the labor force working less than 40 hours per week or earning less than the minimum wage and complementary earnings.
5/ Able-bodied persons aged 12 or more.

Table 3. Ecuador: Nominal and Real Minimum Monthly Wage Indices, 1998-2002 1/

	Real Index 2/	Monthly Wages in U.S. Dollars
1998	136	141
1999	121	89
2000	88	82
2001	98	121
2002	97	140
2001		
January	105	121
February	102	121
March	100	121
April	98	121
May	98	121
June	98	121
July	98	121
August	97	121
September	95	121
October	94	121
November	93	121
December	92	121
2002		
January	104	140
February	103	140
March	102	140
April	101	140
May	100	140
June	100	140
July	100	140
August	99	140
September	99	140
October	98	140
November	97	140
December	97	140

Sources: Central Bank of Ecuador; National Statistical Bureau (INEC); and Fund staff estimates.

1/ Minimum wage and mandatory complementary payments earned by private sector workers.
2/ Deflated by monthly average CPI index. Average of 1990=100.

Table 4. Ecuador: National Accounts at Current U.S. Dollar Prices

(In millions of U.S. dollars)

	1998	1999	2000	2001	Prel. 2002
Domestic expenditure	**24,853**	**15,579**	**14,967**	**22,020**	**25,954**
Consumption	18,976	13,123	11,762	16,625	19,691
Private	16,120	11,035	10,199	14,491	16,647
Public	2,857	2,088	1,564	2,134	3,044
Gross domestic investment	5,876	2,456	3,205	5,395	6,263
Fixed capital formation	4,623	2,826	3,265	4,541	5,484
Private	3,787	2,197	2,807	3,797	4,415
Public	836	629	458	744	1,069
Changes in stocks	1,253	-371	-60	854	780
Balance of goods and nonfactor services	**-1,598**	**1,096**	**967**	**-995**	**-1,607**
Exports of goods and nonfactor services	4,997	5,257	5,906	5,613	6,054
Imports of goods and nonfactor services	6,595	4,161	4,939	6,608	7,661
GDP at market prices	**23,255**	**16,674**	**15,934**	**21,024**	**24,347**

Source: Central Bank of Ecuador.

Table 5. Ecuador: National Accounts at Current Prices in Relation to GDP

	1998	1999	2000	2001	2002
	(Annual percentage change)				
Domestic expenditure	**5.1**	**-37.3**	**-3.9**	**47.1**	**17.9**
Consumption	2.1	-30.8	-10.4	41.3	18.4
Private	2.8	-31.5	-7.6	42.1	14.9
Public	-1.5	-26.9	-25.1	36.5	42.7
Gross domestic investment	15.9	-58.2	30.5	68.3	16.1
Of which					
Fixed capital formation	9.2	-38.9	15.5	39.1	20.8
Private	7.9	-42.0	27.7	35.3	16.3
Public	15.5	-24.7	-27.2	62.5	43.7
Balance of goods and nonfactor services					
Exports of goods and nonfactor services	-17.5	5.2	12.3	-5.0	7.9
Imports of goods and nonfactor services	8.5	-36.9	18.7	33.8	15.9
GDP at market prices	**-1.6**	**-28.3**	**-4.4**	**31.9**	**15.8**
	(In percent of GDP)				
Domestic expenditure	**106.9**	**93.4**	**93.9**	**104.7**	**106.6**
Consumption	81.6	78.7	73.8	79.1	80.9
Private	69.3	66.2	64.0	68.9	68.4
Public	12.3	12.5	9.8	10.1	12.5
Gross domestic investment	25.3	14.7	20.1	25.7	25.7
Of which					
Fixed capital formation	19.9	17.0	20.5	21.6	22.5
Private	16.3	13.2	17.6	18.1	18.1
Public	3.6	3.8	2.9	3.5	4.4
Balance of goods and nonfactor services	**-6.9**	**6.6**	**6.1**	**-4.7**	**-6.6**
Exports of goods and nonfactor services	21.5	31.5	37.1	26.7	24.9
Imports of goods and nonfactor services	28.4	25.0	31.0	31.4	31.5
GDP at market prices	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Central Bank of Ecuador.

Table 6. Ecuador: Savings and Investment

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Gross investment	**5,876**	**2,456**	**3,205**	**5,395**	**6,263**
Fixed capital formation	4,623	2,826	3,265	4,541	5,484
Change in stocks	1,253	-371	-60	854	780
Gross savings	**3,707**	**3,411**	**4,209**	**4,886**	**5,049**
Public sector	3,611	3,263	3,106	3,318	3,774
Private sector	96	148	1,103	1,567	1,275
Foreign savings	**2,169**	**-955**	**-1,004**	**509**	**1,214**
	(In percent of GDP)				
Gross investment	**25.3**	**14.7**	**20.1**	**25.7**	**25.7**
Fixed capital formation	19.9	17.0	20.5	21.6	22.5
Change in stocks	5.4	-2.2	-0.4	4.1	3.2
Gross savings	**15.9**	**20.5**	**26.4**	**23.2**	**20.7**
Public sector	15.5	19.6	19.5	15.8	15.5
Private sector	0.4	0.9	6.9	7.5	7.2
Foreign savings	**-9.3**	**5.7**	**6.3**	**-2.4**	**-5.0**

Sources: Central Bank of Ecuador; and Fund staff estimates.

Table 7. Ecuador: Sectoral Origin of Gross Domestic Product

	1998	1999	2000	2001	2002
(Annual percentage change at constant 2000 prices)					
Total GDP	**2.1**	**-6.3**	**2.8**	**5.1**	**3.0**
Agriculture	-5.0	13.0	4.3	0.4	3.7
Petroleum and other mining	-1.6	1.4	8.0	1.7	-3.5
Petroleum	-1.1	1.5	7.9	1.7	-3.7
Other mining	-21.0	-4.9	12.0	3.3	3.0
Manufacturing	5.5	-5.2	-6.8	2.9	2.6
Oil refining	-0.9	-26.8	-20.1	7.8	-2.7
Electricity, gas, and water	8.5	23.0	2.6	4.6	3.0
Construction	-0.2	-24.9	18.3	4.0	10.5
Commerce	0.7	-11.2	3.8	4.7	3.4
Transport and communications	9.4	-0.3	7.7	1.7	3.9
Financial services	-16.9	-47.3	2.2	37.6	3.2
Government services	6.0	-5.6	9.3	1.7	4.0
Other services 1/	11.9	-4.4	2.9	-0.7	1.7
Import taxes and duties (net)	2.7	-4.5	3.2	17.5	9.0
Memorandum item:					
GDP excluding petroleum	2.9	-8.1	1.5	6.0	5.1
(In percent of GDP at current prices)					
Total GDP	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Agriculture	7.5	9.1	9.2	8.8	8.8
Petroleum and other mining	18.9	20.5	21.5	20.8	19.5
Petroleum	18.6	20.1	21.1	20.4	19.0
Other mining	0.4	0.4	0.4	0.4	0.4
Manufacturing	14.9	15.0	13.6	13.3	13.2
Oil refining	-5.4	-7.3	-8.5	-7.5	-7.0
Electricity, gas, and water	0.8	1.1	1.1	1.1	1.1
Construction	7.7	6.1	7.1	7.0	7.5
Commerce	16.3	15.4	15.6	15.5	15.5
Transport and communications	9.7	10.3	10.8	10.4	10.5
Financial services	3.4	1.9	1.9	2.5	2.5
Government and other services 1/	7.1	7.3	7.6	7.4	7.4
Import taxes and duties (net)	9.9	10.1	10.1	11.3	11.9
Memorandum item:					
GDP excluding petroleum	81.4	79.9	78.9	79.6	81.0

Source: Central Bank of Ecuador.

1/ Includes real estate, business, community, social, and personal services.

Table 8. Ecuador: Sectoral Origin of Gross Domestic Product
at Constant 2000 Prices

(In millions of U.S. dollars)

	1998	1999	2000	2001	2002
Total GDP	**16,541**	**15,499**	**15,934**	**16,749**	**17,259**
Agriculture	1,244	1,405	1,466	1,471	1,526
Petroleum and other mining	3,133	3,177	3,430	3,489	3,366
Petroleum	3,069	3,115	3,361	3,418	3,293
Other mining	64	61	69	71	73
Manufacturing	2,458	2,329	2,170	2,233	2,290
Oil	-893	-1,132	-1,360	-1,254	-1,220
Electricity, gas, and water	134	165	169	177	182
Construction	1,268	952	1,127	1,172	1,295
Commerce	2,693	2,392	2,483	2,601	2,689
Transport and communications	1,601	1,597	1,720	1,749	1,816
Financial services	560	295	301	415	428
Government services	809	764	835	849	883
Other services 1/	118	113	116	115	117
Import taxes and duties (net)	1,632	1,558	1,608	1,890	2,061
Other	1,784	1,884	1,869	1,843	1,826
Memorandum item:					
GDP excluding petroleum	13,473	12,384	12,573	13,331	14,010

Source: Central Bank of Ecuador.

1/ Includes real estate, community, social, and personal services.

Table 9. Ecuador: Sectoral Origin of Gross Domestic Product at Current Prices

(In millions of U.S. dollars)

	1998	1999	2000	2001	2002
Total GDP	**23,255**	**16,674**	**15,934**	**21,024**	**24,347**
Agriculture	2,307	1,653	1,466	1,647	1,873
Petroleum and other mining	978	2,063	3,430	2,590	2,735
Petroleum	896	1,998	3,361	2,514	2,647
Other mining	82	65	69	75	88
Manufacturing	2,911	2,358	2,170	2,466	2,830
Oil	-151	-746	-1,360	-727	-799
Electricity, gas, and water	324	231	169	352	412
Construction	1,271	894	1,127	1,502	1,892
Commerce	3,329	2,376	2,483	2,893	3,324
Transport and communications	2,300	1,825	1,720	3,370	3,885
Financial services	724	245	301	584	636
Government services	1,524	1,165	835	1,133	1,414
Other services 1/	889	508	376	554	656
Import taxes and duties (net)	2,381	1,520	1,608	2,210	2,560
Other	4,471	2,582	1,609	2,449	2,929
Memorandum item:					
GDP excluding petroleum	22,360	14,676	12,573	18,510	21,700

Source: Central Bank of Ecuador.

1/ Includes real estate, business, community, social, and personal services.

Table 10. Ecuador: Value Added in Agriculture and Related Sectors

	1998	1999	2000	2001
	(Annual percentage change at 1975 prices)			
Total	**-1.4**	**-1.3**	**-5.3**	**3.9**
Agricultural crops	-4.0	2.2	1.0	-2.0
Banana, coffee, and cocoa (for export)	-9.4	3.3	0.7	-9.0
Other (for domestic consumption)	-1.5	1.8	0.3	7.0
Livestock	1.7	-1.7	3.8	4.1
Forestry	0.2	-2.0	4.0	8.0
Fishing	0.4	-10.0	-43.9	9.9
	(Shares at constant prices)			
Total	**100.0**	**100.0**	**100.0**	**100.0**
Agricultural crops	46.4	48.1	51.0	50.1
Banana, coffee, and cocoa (for export)	14.2	14.8	15.8	13.8
Other (for domestic consumption)	32.3	33.3	35.2	36.3
Livestock	30.1	30.0	32.9	32.9
Forestry	6.2	6.2	6.8	7.1
Fishing	17.2	15.7	9.3	9.9

Source: Central Bank of Ecuador.

Table 11. Ecuador: Production of Selected Agricultural Crops

	1998	1999	2000	2001	2002
	(In thousands of metric tons)				
Products for domestic consumption					
Rice	1,043	1,290	1,354	828	775
Potatoes	534	563	593	777	544
Wheat	20	19	17	20	13
Barley	36	34	29	26	32
Maize	71	84	98	75	74
Products for industrial use					
Hard maize	273	407	515	501	255
Soybeans	10	77	102	78	98
African palm	1,503	952	1,542	1,406	1,392
Sugarcane	5,301	5,563	6,120	4,905	4,807
Cotton	3	6	5	7	2
Export crops					
Banana	4,563	6,382	4,099	4,099	4,122
Coffee	48	133	21	70	55
Cocoa	35	95	50	90	90
	(Percentage change)				
Products for domestic consumption					
Rice	-2.7	23.7	5.0	-38.9	-6.4
Potatoes	-11.3	5.3	5.4	31.0	-30.0
Wheat	-0.5	-3.9	-9.0	12.7	-33.8
Barley	2.5	-6.0	-14.4	-8.7	19.8
Maize	-0.8	18.2	16.2	-24.1	-1.1
Products for industrial use					
Hard maize	-51.0	49.3	26.4	-2.7	-49.1
Soybeans	8.6	650.6	33.3	-24.0	25.3
African palm	10.7	-36.7	61.9	-8.8	-1.0
Sugarcane	110.1	4.9	10.0	-19.9	-2.0
Cotton	-80.0	93.4	-7.2	25.0	-76.0
Export crops					
Banana	-39.1	39.9	-35.8	0.0	0.6
Coffee	-44.8	175.9	-84.4	236.5	-21.4
Cocoa	-58.0	170.5	-47.3	80.4	0.0

Source: Central Bank of Ecuador.

Table 12. Ecuador: Producer Prices, Period Average

	1998	1999	2000	2001
	(Index numbers: 1992 = 100)			
Rice	439	548	1,090	1,303
Wheat	356	892	1,249	2,097
Maize	395	656	905	1,250
Barley	403	870	1,066	1,931
Soybeans	317	581	...	...
Cotton	449	709	1,813	1,683
	(Relative prices: 1992 = 100) 1/			
Rice	87	72	93	81
Wheat	71	117	107	130
Maize	79	86	77	78
Barley	80	114	91	120
Soybeans	63	76	...	...
Cotton	90	93	155	105
Memorandum items:				
Weighted relative prices: 1992 = 100 2/	84.8	76.9	...	...
Annual rate of change (in percent)	3.3	-9.4	...	...

Source: Central Bank of Ecuador.

1/ Producer price index deflated by the consumer price index.
2/ Weighted by output volume.

Table 13. Ecuador: Value Added in the Manufacturing Sector 1/

	1998	1999	2000	2001
	(Annual percentage in constant prices)			
Total	**0.4**	**-7.2**	**5.2**	**5.5**
Food, beverages, and tobacco	2.8	-1.2	1.1	4.1
Textiles, clothing, and leather	-2.6	-7.9	6.5	0.1
Lumber and wood products	-1.3	-1.2	5.0	9.1
Paper, printing, and publishing	-0.9	-0.9	-0.4	0.5
Chemical products and plastic	2.5	-14.0	6.8	9.8
Nonmetallic mineral and basic metallic products	-0.6	-4.1	17.7	4.7
Metallic products, machinery, and other manufacturing	1.2	-27.2	1.0	1.2
	(Shares at constant prices)			
Total	**100.0**	**100.0**	**100.0**	**100.0**
Food, beverages, and tobacco	32.8	34.9	33.5	33.1
Textiles, clothing, and leather	20.1	20.0	20.2	19.2
Lumber and wood products	5.1	5.4	5.4	5.6
Paper, printing, and publishing	8.7	9.3	8.8	8.4
Chemical products and plastic	7.3	6.8	6.9	7.2
Nonmetallic mineral and basic metallic products	13.1	13.5	15.1	15.0
Metallic products, machinery, and other manufacturing	13.0	10.2	10.1	11.6

Source: Central Bank of Ecuador.

1/ Excludes petroleum refining.

Table 14. Ecuador: Oil Production and Trade

	1998	1999	2000	2001	2002
	(In millions of barrels)				
Crude					
Production	137.1	136.3	146.4	148.7	143.1
Crude used by domestic refineries	51.9	47.9	58.5	57.2	55.4
Change in inventories	-0.6	3.7	1.7	1.7	3.4
Exports	85.8	84.7	86.2	89.9	84.3
Refined petroleum products					
Production	50.8	47.5	56.1	57.8	55.4
Imports	15.3	12.9	9.0	11.9	14.6
Domestic consumption	49.0	43.9	47.8	51.0	53.2
Change in inventories	3.9	2.9	1.5	4.4	3.1
Exports	13.2	13.6	15.8	14.3	13.6
	(In percent)				
Memorandum items:					
Shares of petroleum in:					
Nominal GDP 1/	4.0	13.6	26.7	13.6	12.2
Total exports 2/	22.0	33.2	49.6	40.6	41.0
Revenues of nonfinancial public sector 3/	22.6	30.3	35.5	27.2	21.5

Sources: Central Bank of Ecuador; Ministry of Energy; and Fund staff estimates.

1/ Includes refining activities.

2/ Includes exports of crude and derivatives.

3/ Total petroleum revenue including domestic derivatives sales to central government, PetroEcuador, other public agencies of general government, and other public enterprises.

Table 15. Ecuador: Retail Prices of Petroleum Derivatives

	End of period				
	1998	1999	2000	2001	Oct. 2002
	(In U.S. cents per gallon)				
Ecuadoran prices					
Gasoline					
92 octane	122	93	104	110	110
80 octane	89	91	70	85	85
Diesel	77	40	52	66	66
Latin American average price 1/					
Gasoline					
Premium	207	219	257	277	159
Regular	229	239	257	249	199
Diesel	121	131	146	158	119
	(Ecuadoran price in percent of Latin American average price)				
Gasoline					
Premium	58.9	42.2	40.4	39.7	69.3
Regular	38.9	37.9	27.2	34.2	42.7
Diesel	63.2	30.6	35.6	41.8	55.3
	(In U.S. cents per gallon)				
Memorandum item:					
World price, 87 octane 2/	...	71	77	57	89

Sources: Central Bank of Ecuador; Ministry of Energy; *Energy Détente*; and Bloomberg.

1/ Simple average of retail prices in Argentina, Brazil, Costa Rica, Mexico, Peru, Uruguay, and Venezuela. 1997 data are not available for Venezuela and were estimated.

2/ Exxon Curacao refinery price.

Table 16. Ecuador: Summary of Consolidated Nonfinancial Public Sector Operations 1/

(In percent of GDP)

	1998	1999	2000	2001	2002
Total revenue	**19.1**	**22.5**	**27.6**	**24.7**	**25.9**
Petroleum	**3.9**	**6.2**	**9.2**	**6.4**	**5.7**
Exports	1.1	4.5	8.1	4.5	4.0
Domestic sales	2.8	1.8	1.1	1.9	1.7
Nonpetroleum	**15.1**	**15.6**	**17.5**	**17.8**	**19.3**
Tax revenue	8.5	9.3	11.7	12.3	12.5
Of which	0.0	0.0	0.0		
VAT	3.5	3.5	5.7	2.7	2.7
Income, profits and FTT taxes 2/	1.5	2.9	3.1	6.9	6.9
International trade taxes	2.7	2.2	2.1	0.7	1.0
Specific consumption taxes	0.0	0.4	0.5	1.8	1.8
Other taxes	1.9	0.4	0.0	0.2	0.2
Social security contributions	1.9	1.4	1.3	2.2	3.1
Other nontax revenues	4.7	5.0	4.4	3.2	3.7
Operating surplus of public enterprises	**0.1**	**0.7**	**0.9**	**0.5**	**0.9**
Of which					
PetroEcuador	0.1	0.4	0.5	0.5	0.8
Total expenditure	**24.1**	**27.1**	**26.5**	**25.2**	**25.1**
Current expenditure	**17.4**	**20.2**	**19.5**	**16.8**	**18.7**
Wages	7.2	6.0	4.7	6.5	8.2
Interest accruals	4.2	8.1	6.6	4.7	3.5
Severance payments	0.4	0.1	0.1	0.0	0.0
Purchases of goods and services	2.5	2.4	2.6	2.8	3.6
Other	3.5	3.3	5.5	2.9	3.5
Capital expenditure	**5.2**	**6.0**	**5.5**	**6.7**	**6.4**
Fixed capital formation	4.9	5.7	5.2	5.5	5.7
Central government	0.2	0.2	0.2	0.7	-0.3
Rest of general government	1.5	1.5	1.8	1.8	2.2
Public enterprises	0.8	1.5	0.7	0.7	1.0
Other	0.1	0.1	0.1	0.5	1.0
Discrepancy	0.0	0.0	0.0	-0.8	0.2
Overall surplus or deficit (-)	**-5.0**	**-4.6**	**1.0**	**-0.5**	**1.0**
Memorandum items:					
Public sector savings	-0.2	0.9	6.8	8.0	7.2
Primary surplus	-0.9	3.4	7.7	4.3	4.5

Source: Ministry of Finance.

1/ Consolidated nonfinancial public sector, including the central government, the social security institute, major public enterprises, local governments, and universities; and the quasi-fiscal operations of the central bank. Not included are the two public telecommunication companies and most electricity companies.

2/ A Financial Transactions Tax (FTT) was levied in 1999 and 2000.

Table 17. Ecuador: Central Government Operations

(In percent of GDP)

	1998	1999	2000	2001	2002
I. Consolidated Central Government Operations 1/					
Total revenue	**13.8**	**16.1**	**20.4**	**18.3**	**18.8**
Petroleum	3.8	6.0	8.8	6.1	5.6
Nonpetroleum	10.0	10.1	11.6	12.2	13.2
Total expenditure	**17.9**	**19.9**	**20.2**	**19.4**	**19.5**
Current	13.4	15.8	16.1	12.5	14.5
Capital	4.5	4.1	4.1	6.8	5.0
Overall surplus or deficit (-)	**-4.1**	**-3.8**	**0.1**	**-1.1**	**-0.8**
II. Central Administration					
Total revenue	**13.7**	**16.0**	**19.3**	**18.6**	**18.6**
Petroleum	3.8	6.0	7.7	6.0	5.1
Nonpetroleum	9.9	10.0	11.6	12.6	13.5
Total expenditure	**17.9**	**19.8**	**20.2**	**19.2**	**19.3**
Current	13.4	15.7	16.0	12.3	14.2
Capital	4.5	4.1	4.1	6.8	5.0
Overall surplus or deficit (-)	**-4.2**	**-3.8**	**-0.8**	**-0.6**	**-0.7**
III. Local Government Development Fund (FODESEC)					
Total revenue	**0.8**	**0.2**	**0.1**	**0.3**	**21.7**
Petroleum	0.0	0.1	0.0	0.0	0
Nonpetroleum	0.8	0.2	0.1	0.3	21.7
Expenditure	**0.7**	**0.2**	**0.1**	**0.2**	**7.9**
Overall surplus or deficit (-)	**0.1**	**0.0**	**0.0**	**0.1**	**13.8**

Sources: Tables 27-30.

1/ Central government operations include the consolidated operation of central administration, FODESEC, and the Oil Revenue Stabilization Fund.

Table 18. Ecuador: Central Administration

(In percent of GDP)

	1998	1999	2000	2001	2002
Total revenue	**13.7**	**16.0**	**19.3**	**18.6**	**18.6**
Petroleum revenue	3.8	6.0	7.7	6.0	5.1
Nonpetroleum revenue	9.9	10.0	11.6	12.6	13.5
Tax revenue	8.5	8.8	10.9	11.0	11.1
Taxes on income and profits	1.4	2.6	2.8	2.8	2.8
Taxes on property	0.1	0.4	0.1	0.1	0.2
Taxes on goods and services	4.1	3.7	5.7	7.9	8.0
VAT	3.5	3.3	5.2	7.0	7.0
Selective excise taxes	0.5	0.4	0.5	0.9	1.1
Taxes on international trade	2.7	2.2	2.1	1.7	1.7
Import duties	2.5	2.0	2.0	1.7	1.7
Export duties	0.1	0.1	0.1		
Exchange profit taxes	0.1	0.1	0.0	0.0	0.0
Other taxes	0.2	0.0	0.1	0.1	0.0
Nontax revenue	0.8	0.8	0.7	0.7	1.4
Transfers	0.7	0.4	0.0	1.0	1.0
Total expenditure	**17.9**	**19.8**	**20.2**	**19.2**	**19.3**
Current expenditure	13.4	15.7	16.0	12.3	14.2
Wages and salaries	6.4	5.5	4.4	5.2	6.9
Purchases of goods and services	0.8	0.7	1.1	0.6	1.3
Interest payments	4.0	7.9	6.3	4.5	3.4
Current transfers	1.9	0.4	0.8	0.7	1.2
Other current expenditure	0.3	1.2	3.4	1.4	1.4
Capital expenditure	4.5	4.1	4.1	6.8	5.0
Fixed capital formation	2.6	2.7	2.7	3.1	2.5
Capital transfers	1.9	1.4	1.5	2.7	2.5
Other	0.0	0.0	0.0	0.4	0.3
Overall surplus of deficit (-)	**-4.2**	**-3.8**	**-0.8**	**-0.6**	**-0.7**

Sources: Ministry of Finance; Central Bank of Ecuador; and Fund staff estimates.

Table 19. Ecuador: Nonfinancial Public Sector Financing

(In millions of U.S. dollars)

	1998	1999	2000	2001	Prel. 2002
Gross financing needs	**591**	**1,614**	**2,606**	**1,981**	**2,233**
Nonfinancial public sector deficit		773	0	96	0
Deposit build-up (+)	-2	-251	670	33	20
Amortization	...	556	905	1,117	1,113
External	593	556	606	731	710
Domestic	...	0	299	386	403
Additional debt reduction		0	0	0	0
Accounts payable carried in	...	0	0	79	68
Gross arrears clearance	...	0	865	304	832
External	...	0	772	116	446
Domestic	...	0	93	188	386
Other financing requirements 1/	...	535	166	352	200
Gross identified financing	**591**	**1,522**	**1,652**	**1,648**	**1,983**
Nonfinancial public sector surplus	-1,214	0	165	0	246
Bond issues	...	262	266	333	138
External	...	0	0	3	0
Domestic	...	262	266	330	138
Loan disbursements	...	380	796	584	412
External - Project loans	...	380	796	584	328
Domestic	...	0	0	0	84
Accounts payable carried out	...	0	0	68	78
Gross arrears accumulation	...	880	425	663	798
External	...	330	0	98	436
Domestic	...	550	425	565	362
Other	1,805	0	0	0	312
Gap = exceptional financing	**0**	**92**	**954**	**333**	**250**
Rescheduling/debt relief	...	92	815	28	74
IDB	...	0	139	61	0
WB	...	0	0	71	0
CAF	...	0	0	173	81
IMF	0	0	0	0	96
Unidentified	0	0	0	0	0

Sources: Ministry of Finance; Central Bank of Ecuador; and Fund staff estimates and projections.

1/ Includes financial assistance to public banks.

Table 20. Ecuador: Financing of the Central Government

(In millions of U.S. dollars)

	2001	Prel. 2002
Financing requirement	**2,028**	**2,696**
CG deficit/surplus (+/-)	222	185
Amortization	1,117	1,383
Domestic	386	755
Private sector	386	384
NFPS	0	371
External	731	628
Accounts payable carried in	54	97
Gross arrears clearance	304	832
Domestic	188	386
Interest	56	178
Noninterest	132	208
External	116	446
Banking sector assistance	330	200
Identified financing	**1,631**	**2,465**
Change in CG deposits	239	64
Cuenta unica	311	-32
Other BCE accounts	18	63
Accounts with commercial banks	-89	34
Bond and CETES issues	333	617
Domestic	333	617
Private sector	333	138
NFPS	0	479
Loans	585	317
External	585	233
Domestic	0	84
Accounts payable carried out	47	43
Accumulation of arrears	506	1,113
External	97	436
Domestic	409	676
Interest	74	115
Noninterest (residual)	334	561
FEIREP		
Other (including privatization receipts)	-78	312
Financing gap	**397**	**251**
Exceptional financing	**397**	**251**
Paris Club rescheduling	28	0
Rescheduling	64	74
IDB	61	0
World Bank	71	0
CAF	173	81
IMF	0	96
Residual financing needs	**0**	**0**

Sources: Central Bank of Ecuador; Ministry of Economy and Finance; and Fund staff estimates.

Table 21. Ecuador: Central Government Revenues 1/

(In millions of U.S. dollars)

	Total Revenue	Petroleum Revenue	Non petroleum Revenue	Tax revenue										Nontax Revenue	Transfers
				Total	Income and Profits	Property	VAT	Selective Excise Taxes	Taxes on International Trade						
									Total	Import Duties	Export Duties	Exchange Profits Taxes	Other Taxes		
1997	3,435	1,201	2,234	1,843	399	42	776	148	451	418	12	21	27	265	125
1998	3,201	880	2,320	1,982	351	14	824	123	618	587	13	17	51	176	163
1999	2,617	979	1,638	1,439	433	62	528	67	349	321	12	16	1	130	69
2000	3,250	1,396	1,854	1,747	458	14	836	75	341	321	17	4	23	107	0
2001	3,846	1,280	2,566	2,369	475	23	1,340	137	373	354	18	0	21	158	58
2002	4,572	1,363	3,209	2,750	531	49	1,529	221	419	414	5	0	1	338	122
2001															
January	288	91	197	183	32	1	95	13	34	32	2	0	9	13	1
February	295	128	166	153	19	0	91	13	24	23	1	0	7	13	0
March	314	143	171	159	30	0	94	9	22	20	2	0	4	12	0
April	423	106	317	304	159	1	97	16	30	28	2	0	1	13	0
May	324	129	195	180	32	3	108	9	30	28	1	0	-1	13	2
June	328	130	198	189	24	4	123	6	32	30	2	0	0	10	0
July	304	72	232	220	49	4	126	11	30	28	2	0	0	12	0
August	389	142	246	199	18	4	134	10	33	31	2	0	0	11	36
September	310	94	216	206	45	2	117	12	30	29	2	0	0	9	0
October	304	101	203	187	21	2	115	14	36	34	2	0	0	9	6
November	308	95	213	190	22	1	120	13	34	33	1	0	0	10	13
December	260	48	212	198	25	1	120	13	39	38	1	0	0	33	0
2002															
January	372	104	268	238	36	2	146	19	35	33	2	0	0	27	3
February	323	96	227	196	26	3	119	17	31	29	2	0	0	31	0
March	317	84	233	205	36	5	114	18	32	30	2	0	0	28	0
April	511	87	425	340	142	6	136	18	37	37	0	0	0	25	59
May	364	129	236	209	29	6	125	19	30	30	0	0	0	26	1
June	347	102	245	212	25	5	131	15	36	36	0	0	0	32	0
July	372	104	268	241	58	9	124	15	34	34	0		0	26	1
August	354	121	233	215	25	3	130	21	36	36	0		0	-3	21
September	414	144	270	239	54	3	123	20	39	39	0		0	30	1
October	414	144	270	222	31	2	132	20	38	38	0	0	0	30	18
November	348	109	239	203	28	2	121	21	32	32	0	0	0	26	10
December	438	140	298	228	40	3	129	19	38	38	0	0	0	61	8

Sources: Ministry of Finance; and Central Bank of Ecuador.

Table 22. Ecuador: Central Government Expenditures 1/

(In millions of U.S. dollars)

		Current Expenditure						Capital Expenditure					
	Total Expenditure	Total	Wages and Salaries	Purchases of Goods and Services	Interest Payments	Current Transfers	Other Current Expenditure	Total	Fixed Capital Formation	Capital Transfers	Other	Capitalization of liquidity fund	Overall Surplus or Deficit (-)
1997	3,712	2,936	1,364	208	936	419	9	776	477	299	0	0	-277
1998	4,152	3,115	1,498	195	934	424	64	1,037	597	440	0	0	-952
1999	3,231	2,560	885	120	1,279	79	197	671	439	232	0	0	-614
2000	3,227	2,568	703	169	1,009	145	542	659	425	234	0	0	23
2001	4,068	2,630	1,088	122	938	183	300	1,438	645	562	86	146	-222
2002	4,757	3,531	1,673	318	823	366	351	1,226	611	618	74	-76	-185
2001													
January	344	208	65	10	69	14	50	136	20	44	2	70	-56
February	371	227	76	10	110	14	18	144	24	41	3	76	-77
March	304	176	91	14	38	15	18	128	79	42	7	0	10
April	264	182	85	18	42	15	22	82	38	42	2	0	158
May	452	332	94	20	181	13	24	120	59	42	19	0	-128
June	330	190	98	8	46	20	19	140	60	75	5	0	-2
July	260	173	74	9	48	17	26	87	36	48	3	0	44
August	347	256	70	8	132	16	30	91	42	45	4	0	42
September	279	163	79	8	42	14	20	116	68	41	7	0	32
October	280	161	90	10	28	7	26	119	59	51	9	0	24
November	366	244	85	4	119	14	22	122	64	47	11	0	-57
December	471	317	181	3	83	24	27	154	96	44	14	0	-211
2002													
January	301	234	106	26	59	23	21	67	22	45	0	0	71
February	357	358	115	26	114	18	86	-1	29	45	2	-76	-35
March	321	218	107	31	36	28	16	103	49	50	4	0	-4
April	393	279	144	30	48	34	24	114	44	61	8	0	118
May	502	329	142	29	106	26	26	173	88	74	11	0	-138
June	368	247	135	27	38	28	19	121	66	51	4	0	-21
July	356	275	146	26	43	35	26	81	33	42	6	0	16
August	445	350	130	32	128	28	32	95	45	48	3	0	-90
September	379	266	142	31	33	29	32	113	56	43	13	0	35
October	324	214	126	20	27	23	19	110	42	56	12	0	89
November	461	328	152	20	112	24	20	134	79	49	6	0	-114
December	550	433	228	25	79	70	31	117	59	52	6	0	-112

Sources: Ministry of Finance; and Central Bank of Ecuador.

1/ The central government includes the central administration and FODESEC.

Table 23. Ecuador: Summary of Central Administration Operations (Budget)

(In millions of U.S. dollars)

				Tax Revenue											
									Taxes on International Trade						
	Total Revenue	Petroleum Revenue	Total Non-petroleum	Total	Income, Profits, and FT	Property	VAT	Selective Excise Taxes	Total	Import Duties	Exit Tax	Exchange Profits Taxes	Other Taxes	Nontax Revenue	Transfers
1997	3,383	1,197	2,186	1,831	353	42	776	148	449	416	12	21	36	229	125
1998	3,185	880	2,304	1,965	336	14	824	123	617	586	13	17	51	176	163
1999	2,599	979	1,621	1,422	416	62	528	67	349	320	12	16	1	130	69
2000	3,083	1,230	1,853	1,739	448	14	836	75	341	320	17	4	23	107	7
2001	3,913	1,256	2,657	2,311	584	23	1,340	137	373	354	18	0	21	139	207
2002	4,526	1,247	3,279	2,691	670	49	1,529	221	418	413	5	0	1	338	250
2001															
January	317	91	226	179	39	1	95	13	34	32	2	0	9	13	34
February	340	127	213	151	23	0	91	13	24	23	1	0	7	13	49
March	308	141	167	156	34	0	94	9	22	20	2	0	4	12	-1
April	419	106	314	289	184	1	97	16	30	28	2	0	1	13	11
May	326	127	199	177	42	3	108	9	30	28	1	0	-1	13	10
June	323	125	198	186	29	4	123	6	32	30	2	0	0	10	3
July	304	71	233	211	66	4	126	11	30	28	2	0	0	12	11
August	382	138	244	196	26	4	134	10	33	31	2	0	0	11	38
September	307	88	218	201	54	2	117	12	30	29	2	0	0	9	7
October	300	98	202	184	28	2	115	14	36	34	2	0	0	9	9
November	321	95	226	187	29	1	120	13	34	33	1	0	0	10	29
December	266	48	217	195	31	1	120	13	39	38	1	0	0	14	9
2002															
January	381	104	278	234	45	2	146	19	35	33	2	0	0	27	17
February	322	96	226	194	30	3	119	17	31	29	2	0	0	31	2
March	312	83	229	201	48	5	114	18	32	30	2	0	0	28	0
April	495	80	415	326	163	6	136	18	37	37	0	0	0	25	63
May	355	117	238	202	44	6	125	19	30	30	0	0	0	26	10
June	336	92	244	209	35	5	131	15	36	36	0	0	0	32	3
July	360	100	260	233	79	9	124	15	34	34	0	0	0	26	1
August	356	117	240	212	36	3	130	21	36	36	0	0	0	-3	31
September	385	122	263	232	72	3	123	20	39	39	0	0	0	30	1
October	386	118	269	217	39	2	132	20	38	38	0	0	0	30	22
November	367	89	278	200	37	2	121	21	32	32	0	0	0	26	53
December	471	130	341	232	43	3	129	19	38	38	0	0	0	61	47

Table 23. Ecuador: Summary of Central Administration Operations (Budget)

(In millions of U.S. dollars)

	Total Expenditure	Current Expenditure						Capital Expenditure				Capitalization of liquidity fund	Overall Surplus or Deficit (-)
		Total	Wages and Salaries	Purchases Goods Services	Interest Payments	Current Transfers	Other Current Expenditure 3/	Total	Fixed Capital Formation	Capital Transfers	Other		
1997	3,670	2,894	1,364	208	936	377	9	776	477	299	0		-287
1998	4,159	3,122	1,498	195	934	431	64	1,037	597	440	0		-975
1999	3,214	2,543	885	120	1,279	62	197	671	439	232	0		-614
2000	3,216	2,557	703	169	1,009	134	542	659	425	234	0		-133
2001	4,033	2,595	1,088	122	938	147	300	1,438	645	562	86	146	-120
2002	4,694	3,468	1,673	318	823	303	351	1,226	611	618	74	-76	-167
2001													
January	340	204	65	10	69	10	50	136	20	44	2	70	-23
February	368	224	76	10	110	11	18	144	24	41	3	76	-28
March	301	173	91	14	38	12	18	128	79	42	7	0	8
April	261	179	85	18	42	12	22	82	38	42	2	0	158
May	449	329	94	20	181	10	24	120	59	42	19	0	-123
June	327	187	98	8	46	16	19	140	60	75	5	0	-3
July	257	170	74	9	48	13	26	87	36	48	3	0	47
August	345	254	70	8	132	14	30	91	42	45	4	0	38
September	276	160	79	8	42	11	20	116	68	41	7	0	31
October	277	159	90	10	28	4	26	119	59	51	9	0	23
November	363	241	85	4	119	11	22	122	64	47	11	0	-42
December	470	316	181	3	83	23	27	154	96	44	14	0	-204
2002													
January	296	229	106	26	59	18	21	67	22	45	0	0	85
February	353	354	115	26	114	13	86	-1	29	45	2	-76	-31
March	316	213	107	31	36	23	16	103	49	50	4	0	-4
April	381	267	144	30	48	22	24	114	44	61	8	0	115
May	495	322	142	29	106	19	26	173	88	74	11	0	-140
June	365	244	135	27	38	25	19	121	66	51	4	0	-29
July	348	267	146	26	43	27	26	81	33	42	6	0	12
August	442	346	130	32	128	25	32	95	45	48	3	0	-85
September	372	259	142	31	33	22	32	113	56	43	13	0	13
October	321	211	126	20	27	20	19	110	42	56	12	0	65
November	458	325	152	20	112	21	20	134	79	49	6	0	-91
December	548	431	228	25	79	68	31	117	59	52	6	0	-77

Sources: Ministry of Finance; and Central Bank of Ecuador.

Table 24. Ecuador: Operations of the Local Government Development Fund (FODESEC)

(In millions of U.S. dollars)

	Total Revenue	Taxes on Income	On Nonpetroleum Income	Taxes on International Trade	Transfers	Total Expenditure	Transfers to Local Governments	Overall Surplus or Deficit (-)
1998	195	15	15	1	179	172	172	23
1999	30	17	17	1	12	30	30	0
2000	16	11	11	0	5	16	16	1
2001	62	58	0	0	4	39	39	23
2002	69	58	0	0	10	73	73	-5
2001								
January	4	4	0	0	0	4	4	0
February	2	2	0	0	0	3	3	-1
March	3	3	0	0	0	3	3	-1
April	15	15	0	0	0	3	3	11
May	5	4	0	0	1	4	4	1
June	3	3	0	0	0	4	4	0
July	10	10	0	0	0	4	4	6
August	4	4	0	0	0	3	3	1
September	5	5	0	0	1	3	3	2
October	4	3	0	0	0	3	3	1
November	3	3	0	0	0	3	3	1
December	4	3	0	0	1	2	2	2
2002								
January	5	4	0	0	1	6	6	0
February	4	3	0	0	1	6	6	-2
March	5	4	0	0	1	6	6	-1
April	15	14	0	0	1	13	13	2
May	8	7	0	0	1	8	8	0
June	5	4	0	0	1	4	4	1
July	9	8	0	0	1	9	9	0
August	5	4	0	0	1	4	4	1
September	8	7	0	0	1	8	8	0
October	5	5	0	0	1	4	4	2
November	4	4	0	0	1	4	4	1
December	-3	-4	0	0	1	3	3	-6

Sources: Ministry of Finance; and Central Bank of Ecuador.

Table 25. Ecuador: Operations of the State Bank 1/

(In millions of U.S. dollars)

	1998	1999	2000	2001	2002
Total revenue	**72**	**93**	**45**	**33**	**34**
Petroleum revenue	0	0	0	0	0
Nonpetroleum revenue	72	93	45	33	34
Total expenditure	**33**	**28**	**27**	**16**	**17**
Wages and salaries	5	2	1	2	4
Other expenditure	28	26	25	14	13
Overall surplus or deficit (-)	**39**	**64**	**17**	**17**	**17**

Sources: State Bank; Central Bank of Ecuador; and Fund staff estimates.

1/ Formerly the Development Bank of Ecuador (BEDE).

Table 26. Ecuador: Operations of the Social Security System (IESS)

(In millions of U.S. dollars)

	1998	1999	2000	2001	2002
Total revenue	**518**	**269**	**265**	**528**	**981**
Social security contributions	480	242	228	469	782
Other current revenue	6	11	12	59	199
Total expenditure	**552**	**313**	**181**	**252**	**546**
Current expenditure	**544**	**300**	**187**	**243**	**386**
Wages and salaries	127	66	37	50	24
Purchases of goods and services	75	40	29	33	12
Interest payments	14	9	2	4	0
Current transfers	327	186	120	156	350
To IESS			3	4	2
To public sector	0	0	0	1	2
To private sector	316	180	116	151	346
Capital expenditure	**9**	**13**	**-6**	**9**	**160**
Fixed capital formation	8	2	4	9	1
Net lending	1	11	-10	0	158
Overall surplus or deficit (-)	**-34**	**-44**	**84**	**276**	**435**

Sources: Social Security Institute; Ministry of Finance; Central Bank of Ecuador; and Fund staff estimates.

Table 27. Ecuador: Operations of PetroEcuador

(In millions of U.S. dollars)

	1998	1999	2000	2001	2002
Operating revenues	**415**	**301**	**363**	**480**	**669**
Operating expenditures	**390**	**243**	**283**	**384**	**480**
Wages and salaries	127	66	33	68	82
Social security contributions	7	5	4	6	11
Other goods and services	307	193	246	311	388
Operating surplus or deficit (-)	**26**	**58**	**80**	**96**	**188**
Nonoperating revenues	**64**	**41**	**55**	**41**	**57**
Government transfers	0	0	0	0	0
Other	64	41	55	41	57
Nonoperating expenditures	**83**	**88**	**68**	**69**	**91**
Interest payments	18	18	16	19	10
Transfers to public sector	38	37	10	0	0
Other	27	34	42	50	80
Capital expenditure	**55**	**27**	**48**	**95**	**191**
Overall surplus or deficit (-)	**-48**	**-16**	**19**	**-27**	**-36**

Sources: PetroEcuador; Ministry of Finance; Central Bank of Ecuador; and Fund staff estimates.

Table 28. Ecuador: Distribution of Petroleum Revenue in Nonfinancial Public Sector 1/

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Total petroleum revenue recorded in NFPS	**1,321**	**1,335**	**1,825**	**1,832**	**2,062**
Treasury	881	981	1,396	1,280	1,363
Rest of general government	25	54	65	72	30
PetroEcuador	415	301	363	480	669
	(In percent of GDP)				
Total petroleum revenue	**5.7**	**8.0**	**11.5**	**8.7**	**8.5**
Treasury	3.8	5.9	8.8	6.1	5.6
Rest of general government	0.1	0.3	0.4	0.3	0.1
PetroEcuador	1.8	1.8	2.3	2.3	2.7
	(In percent of total)				
Total petroleum revenue	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Treasury	66.7	73.4	76.5	69.9	66.1
Rest of general government	1.9	4.1	3.6	3.9	1.5
PetroEcuador	31.5	22.5	19.9	26.2	32.4

Sources: Ministry of Finance; and Fund staff estimates.

1/ Excludes value-added tax collections on petroleum derivative sales.

Table 29. Ecuador: Summary Accounts of the Banking System Under Dollarization

(In millions of U.S. dollars; unless otherwise noted)

	1999	2000	2001				2002			
			Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
I. Central Bank										
Net foreign assets	**872**	**1,180**	**954**	**1,204**	**1,161**	**1,074**	**1,033**	**1,173**	**1,174**	**1,008**
Net domestic assets	**254**	**-919**	**-747**	**-1,025**	**-997**	**-785**	**-793**	**-911**	**-950**	**-704**
Net credit to the nonfinancial public sector	979	346	489	245	101	277	130	-70	-130	77
Holdings of AGD bonds	1,315	222	14	14	14	13	12	11	21	1
Other credits	164	1,203	1,392	1,390	1,258	1,265	1,120	1,092	1,108	1,103
Deposits and other liabilities	-500	-1,079	-917	-1,158	-1,171	-1,001	-1,003	-1,173	-1,259	-1,027
Net credit to the banking system	412	170	166	151	286	282	388	407	350	356
Other assets net	-1,138	-1,435	-1,402	-1,422	-1,384	-1,345	-1,310	-1,248	-1,169	-1,137
Central bank fully-backed liabilities	**1,126**	**261**	**207**	**179**	**163**	**289**	**240**	**262**	**225**	**304**
Currency issue old 1/	578	12	10	9	0	0	0	0	0	0
Currency issue new 2/	...	23	27	26	26	27	30	34	37	40
Bankers deposits	192	226	170	144	137	261	210	228	188	264
Sucre-denominated CBE bonds	356	0	0	0	0	0	0	0	0	0
II. Banking System										
Net foreign assets	**-224**	**137**	**317**	**279**	**353**	**506**	**490**	**507**	**675**	**721**
Net domestic assets	**3,497**	**3,770**	**3,982**	**4,390**	**4,257**	**4,363**	**4,702**	**4,756**	**5,101**	**5,018**
Net central bank credit	149	225	66	59	19	124	103	141	142	193
Net credit to nonfinancial public sector	312	214	168	452	403	268	399	401	264	172
Net credit to the private sector 3/	2,765	2,623	2,691	2,752	2,986	3,066	3,165	3,349	3,416	3,489
Other domestic assets	271	720	1,056	1,126	849	904	1,034	865	1,279	1,165
Liabilities to the private sector	**3,273**	**3,907**	**4,299**	**4,668**	**4,610**	**4,869**	**5,192**	**5,263**	**5,776**	**5,739**
Of which										
Deposits 4/	2,878	3,608	3,991	4068.7	4245.4	4475.4	4796.6	4872	5334	5286
III. Consolidated Banking System										
Net foreign assets	**648**	**1,316**	**1,271**	**1,483**	**1,514**	**1,580**	**1,523**	**1,681**	**1,850**	**1,729**
Net domestic assets	**2,986**	**2,626**	**3,065**	**2,935**	**3,137**	**3,316**	**3,699**	**3,616**	**3,963**	**4,049**
Net credit to the nonfinancial public sector 3/	1,291	560	658	698	504	545	529	331	133	248
Net credit to the private sector 3/	2,765	2,623	2,691	2,752	2,986	3,066	3,165	3,349	3,416	3,489
Other net domestic assets	-1,071	-558	-284	-514	-353	-295	5	-63	413	313
Liabilities to the private sector	**3,634**	**3,942**	**4,336**	**4,418**	**4,650**	**4,896**	**5,222**	**5,297**	**5,813**	**5,778**
M2 4/	3,240	3,643	4,028	4,104	4,286	4,503	4,826	4,906	5,371	5,326
M1	933	984	1,213	1,269	1,269	1,388	1,574	1,644	1,706	1,813
Quasimoney 4/	2,307	2,659	2,815	2,835	3,017	3,115	3,252	3,262	3,665	3,513
Other liabilities	395	299	308	315	364	393	395	391	442	452
(Annual percentage change)										
Memorandum items:										
M2 5/	19.2	12.4	29.0	22.7	26.2	23.6	19.8	19.5	25.7	18.3
M1	88.6	5.4	17.6	34.2	48.7	41.1	29.8	29.6	36.0	30.6
Net credit to private sector 5/	-29.7	-5.1	12.4	17.6	28.3	16.9	17.6	21.7	14.4	13.8

Sources: Central Bank of Ecuador; and Fund staff estimates.

1/ Reflects the projected redemption of sucre bills for U.S. dollars.

2/ Reflects the issue of new coins after dollarization.

3/ The figures have been revised to include credit net of loan provisions rather than all provisions as presented in ESB/00/64.

4/ Reflects the effects of unfreezing time deposits and the payment of the deposit guarantee in closed banks with government bonds.

5/ The figures corresponding to 1999 are based on end-of-period exchange rate for valuing dollar denominated components.

Table 30. Ecuador: Summary of the Accounting Systems of the Central Bank of Ecuador

(In millions of U.S. dollars)

	1999	2000	2001	2002
I. Exchange System Account	**0.0**	**0.0**	**0.0**	**0.0**
FDIR1 1/	577.9	35.2	27.2	39.6
Currency Issue old	-577.9	-11.7	0.0	0.0
Currency Issue new	...	-23.5	-27.2	-39.6
II. Financial Reserve System Account	**0.0**	**0.0**	**0.0**	**0.0**
FDIR2 1/	548.5	226.0	261.4	264.1
Reserve requirements and other bank deposits	-192.3	-225.9	-261.4	-264.1
Central bank sucre-bonds	-356.1	-0.1	-0.1	-0.1
III. Operations System Account	**0.0**	**0.0**	**0.0**	**0.0**
FDIR3 1/	-254.2	918.5	785.2	704.2
Repurchase-operations 2/	60.3	0.0	50.2	3.1
Auction of US$-denominated CBE paper		-6.1	-54.6	-8.6
Government bonds	1,017.0	537.1	544.3	559.2
Non financial public sector deposits	-499.8	-1,079.0	-1,001.4	-1,027.1
Of which				
Central government deposits	-384.5	-770.2	-442.0	-411.3
Medium and long term debt of				
the central bank (FLAR)	-303.7	-218.1	-117.4	-16.7
Oustanding purchases from the IMF 3/	0.0	-143.3	-189.8	-204.7
Private sector deposits	-19.5	-9.1	-16.6	-9.5
IV. Residual Accounts	**0.0**	**0.0**	**0.0**	**0.0**
Other domestic and foreign assets	1,336.7	1,736.2	1,727.3	1,718.3
Other domestic and foreign liabilities	1,379.7	1,736.2	1,727.4	1,718.3
Gold valuation differences 4/	43.0	0.0	0.0	0.0

Sources: Central Bank of Ecaudor; and Fund staff estimates and projections.

1/ In the authorities' accounts FDIR is defined as the sum of monetary gold, deposits in foreign banks and other financial intermediaries, freely convertible bills and coins, investments in time deposits and fixed income instruments, holdings of SDRs, reserves position at the IMF and in ALADI, minus short-term liabilities including gold swaps operations, and foreign loans with a maturity of up to one year. This concept should be interpreted as short-term net foreign assets.

2/ Data for December 1999 correspond to repos extended in sucres.

3/ Starting in March 2002 the authorities figures exclude US$91 million transferred to the ministry of finance.

4/ Gold holdings included in FDIR are valued at current world market prices; the difference between the central bank's valuation (US$400 per troy ounce) and the market price is reported in this line. From end-March 2000 onwards the BCE values all its monetary holdings at international prices.

Table 31. Ecuador: Short-Term Foreign Assets and Liabilities of the Central Bank

(In millions of U.S. dollars)

	1999	2000	2001				2002			
			Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
I. Assets	**1,059.8**	**1,198.6**	**1,063.4**	**1,271.4**	**1,211.3**	**1,159.5**	**1,125.1**	**1,314.8**	**1,265.2**	**1,076.6**
Gold holdings	245.4	232.7	220.0	227.8	247.9	233.8	254.9	269.2	273.4	293.3
Monetary gold	120.1	114.1	107.9	111.6	121.6	114.7	125.1	132.1	134.3	144.0
Gold held abroad	165.6	114.1	107.9	111.6	121.6	114.7	125.1	132.1	134.3	144.0
Excess valuation over market prices	-45.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nonmonetary gold	125.3	118.6	112.2	116.1	126.3	119.1	129.8	137.1	139.2	149.3
Deposits in foreign banks and other financial institutions	198.2	109.4	85.6	115.6	41.9	232.0	116.4	215.6	119.9	49.7
Banks	322.0	106.9	134.6	117.2	144.9	340.3	198.7	165.0	140.9	78.9
Other financial institutions	0.0	0.6	4.0	4.2	4.4	4.5	3.8	3.9	4.1	2.6
Checks and other transfers in transit	0.8	6.2	1.1	35.9	1.3	1.4	14.7	86.9	1.4	2.0
Overdrafts	-2.3	-3.1	-52.9	-40.4	-77.5	-82.9	-69.6	-9.0	-1.3	-8.5
Brady collateral	-121.9	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
Other collaterals	-0.3	0.0	0.0	0.0	-30.0	-30.0	-30.0	-30.0	-24.0	-24.0
Bills and coins	10.1	115.4	246.4	159.7	147.6	79.4	83.4	43.0	102.4	82.0
Investments	591.6	738.3	495.3	757.6	764.1	595.2	656.4	765.2	745.8	631.6
Investments	657.4	738.3	495.3	757.6	764.1	595.2	656.4	765.2	745.8	631.6
Brady collateral	-65.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDRs	0.8	0.4	0.9	3.6	1.5	2.6	1.0	1.5	1.8	2.0
Reserve position with the IMF	23.6	22.3	21.7	21.4	22.1	21.5	21.4	22.8	22.7	23.2
Net position with ALADI	-9.9	-19.8	-6.7	-14.2	-13.9	-5.0	-8.3	-2.5	-0.7	-5.2
II. Liabilities	**187.7**	**18.9**	**109.4**	**63.8**	**47.3**	**83.1**	**89.9**	**138.9**	**88.1**	**67.6**
Other short term foreign liabilities	2.1	1.5	1.5	1.5	1.5	1.5	0.7	0.7	0.7	0.7
Swap related liabilities	185.7	17.5	107.9	62.3	45.8	81.7	89.2	138.2	87.5	66.9
Monetary gold	109.5	17.5	33.4	35.2	36.8	50.9	35.1	75.8	63.6	45.1
Nonmonetary gold	76.2	0.0	74.5	27.2	9.1	30.7	54.1	62.4	23.9	21.8
III. Net Foreign Assets	**872.1**	**1,179.7**	**954.0**	**1,207.6**	**1,164.0**	**1,076.4**	**1,035.2**	**1,175.9**	**1,177.0**	**1,009.0**

Source: Central Bank of Ecuador.

Table 32. Ecuador: Summary Accounts of the Financial System

(In millions of U.S. dollars)

	1999	2000	2001				2002			
			Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
I. Central Bank										
Net foreign assets	**872**	**1,180**	**954**	**1,204**	**1,161**	**1,074**	**1,033**	**1,173**	**1,174**	**1,008**
Net domestic assets	254	-919	-747	-1,025	-997	-785	-793	-911	-950	-704
Net credit to the nonfinancial public sector	979	346	489	245	101	277	130	-70	-130	77
Holdings of AGD bonds	1,315	222	14	14	14	13	12	11	21	1
Other credits	164	1,203	1,392	1,390	1,258	1,265	1,120	1,092	1,108	1,103
Deposits and other liabilities	-500	-1,079	-917	-1,158	-1,171	-1,001	-1,003	-1,173	-1,259	-1,027
Net credit to the banking system	412	170	166	151	286	282	388	407	350	356
Of which: repo operations	59	0	0	0	10	50	0	1	1	3
US$-CBE paper	0	-6	-10	-19	-17	-55	-24	-7	-13	-9
Other assets net	-1,138	-1,435	-1,402	-1,422	-1,384	-1,345	-1,310	-1,248	-1,169	-1,137
Of which: US$-CBE paper	0	0	0	0	0	0	0	0	0	0
purchases from the IMF 1/	0	-143	-144	-189	-195	-190	-188	-201	-200	-205
Central bank fully-backed liabilities	1,126	261	207	179	163	289	240	262	225	304
Currency issue old 2/	578	12	10	9	0	0	0	0	0	0
Currency issue new 3/	...	23	27	26	26	27	30	34	37	40
Bankers deposits	192	226	170	144	137	261	210	228	188	264
Sucre-denominated CBE bonds	356	0	0	0	0	0	0	0	0	0
II. Consolidated Banking System										
Net foreign assets	**648**	**1,316**	**1,271**	**1,483**	**1,514**	**1,580**	**1,523**	**1,681**	**1,850**	**1,729**
Net domestic assets	2,986	2,626	3,065	2,935	3,137	3,316	3,699	3,616	3,963	4,049
Net credit to the nonfinancial public sector 3/	1,291	560	658	698	504	545	529	331	133	248
Net credit to the private sector 4/	2,765	2,623	2,691	2,752	2,986	3,066	3,165	3,349	3,416	3,489
Other net domestic assets	-1,071	-558	-284	-514	-353	-295	5	-63	413	313
Liabilities to the private sector	3,634	3,942	4,336	4,418	4,650	4,896	5,222	5,297	5,813	5,778
M2 4/	3,240	3,643	4,028	4,104	4,286	4,503	4,826	4,906	5,371	5,326
M1	933	984	1,213	1,269	1,269	1,388	1,574	1,644	1,706	1,813
Quasi-money 5/	2,307	2,659	2,815	2,835	3,017	3,115	3,252	3,262	3,665	3,513
Other liabilities	395	299	308	315	364	393	395	391	442	452
III. Other Financial Institutions										
Net foreign assets	**-366**	**-291**	**-277**	**-256**	**-247**	**-235**	**57**	**53**	**43**	**61**
Net domestic assets	773	698	693	697	682	688	406	422	612	620
Net credit to nonfinancial public sector	210	156	144	109	110	80	111	101	93	45
Net credit to the private sector 4/	949	674	683	711	722	758	740	760	928	844
Other domestic assets	-386	-132	-135	-124	-151	-150	-446	-439	-409	-269
Liabilities to the private sector	407	407	416	441	434	453	462	475	655	681
Of which: deposits 5/	192	235	268	301	294	311	342	377	518	549
IV. Consolidated Financial System										
Net foreign assets	**282**	**1,025**	**994**	**1,227**	**1,266**	**1,345**	**1,580**	**1,733**	**1,893**	**1,790**
Net domestic assets	3,759	3,324	3,757	3,632	3,818	4,004	4,104	4,039	4,575	4,670
Net credit to nonfinancial public sector	1,502	716	802	807	614	625	640	432	227	293
Net credit to the private sector 4/	3,714	3,298	3,374	3,463	3,709	3,824	3,905	4,109	4,344	4,333
Other domestic assets	-1,457	-689	-419	-638	-504	-445	-441	-502	5	44
Liabilities to the private sector	4,041	4,349	4,752	4,859	5,085	5,349	5,684	5,772	6,468	6,459
Of which: deposits 5/	3,037	3,578	3,988	4,090	4,216	4,420	4,774	4,892	5,447	5,422

Sources: Central Bank of Ecuador; and Fund staff estimates and projections.

1/ Starting in March 2002 the authorities figures exclude US$91 million transferred to the ministry of finance.

2/ Reflects the projected redemption of sucre bills for U.S. dollars.

3/ Reflects the issue of new coins after dollarization.

4/ The figures have been revised to include credit net of loan provisions rather than all provisions as presented in ESB/00/64.

5/ Reflects the effects of unfreezing time deposits and the payment of the deposit guarantee in closed banks with government bonds.

Table 33. Ecuador: Private Sector Claims on Financial System

	1999	2000	2001 Mar.	2001 Jun.	2001 Sep.	2001 Dec.	2002 Mar.	2002 Jun.	2002 Sep.	2002 Dec.
				(In millions of U.S. dollars)						
Total financial system	**5,904**	**6,555**	**6,984**	**7,387**	**7,791**	**8,251**	**8,686**	**8,809**	**8,813**	**8,818**
Money	933	984	1,213	1,269	1,269	1,388	1,574	1,644	1,706	1,813
Quasi-money	2,499	2,894	3,083	3,136	3,311	3,425	3,594	3,639	4,183	4,061
Other	2,472	2,677	2,688	2,983	3,211	3,437	3,518	3,526	2,924	2,943
Banking system	**5,497**	**6,148**	**6,568**	**6,946**	**7,357**	**7,798**	**8,224**	**8,334**	**8,157**	**8,137**
M2	3,240	3,643	4,028	4,104	4,286	4,503	4,826	4,906	5,371	5,326
M1	933	984	1,213	1,269	1,269	1,388	1,574	1,644	1,706	1,813
Old currency in circulation	362	12	10	9	0	0	0	0	0	0
New currency in circulation	0	23	27	26	41	27	30	34	37	40
Demand deposits	571	948	1,176	1,233	1,229	1,361	1,545	1,610	1,669	1,773
Quasi-money	2,307	2,659	2,815	2,835	3,017	3,115	3,252	3,262	3,665	3,513
Other deposits	395	299	308	315	364	393	395	391	442	452
Private capital and reserves	1,863	2,205	2,232	2,528	2,706	2,902	3,003	3,037	2,345	2,358
Other financial intermediaries	**407**	**407**	**416**	**441**	**434**	**453**	**462**	**475**	**655**	**681**
Quasi-money	192	235	268	301	294	311	342	377	518	549
Other	214	172	148	140	140	142	120	98	137	132
				(In percent of GDP)						
Total financial system	**42.9**	**48.2**	**47.5**	**46.8**	**46.1**	**45.9**	**46.7**	**45.8**	**44.3**	**43.0**
Money and quasi-money	24.9	28.5	29.2	27.9	27.1	26.8	27.8	27.4	29.6	28.6
Money	6.8	7.2	8.3	8.0	7.5	7.7	8.5	8.5	8.6	8.8
Quasi-money	18.1	21.3	21.0	19.9	19.6	19.1	19.3	18.9	21.0	19.8
Other	18.0	19.7	18.3	18.9	19.0	19.1	18.9	18.3	14.7	14.3
Banking system	**39.9**	**45.2**	**44.7**	**44.0**	**43.6**	**43.4**	**44.2**	**43.3**	**41.0**	**39.7**
Money and quasi-money	23.5	26.8	27.4	26.0	25.4	25.0	25.9	25.5	27.0	26.0
Money	6.8	7.2	8.3	8.0	7.5	7.7	8.5	8.5	8.6	8.8
Quasi-money	16.8	19.5	19.1	17.9	17.9	17.3	17.5	16.9	18.4	17.1
Other	16.4	18.4	17.3	18.0	18.2	18.3	18.3	17.8	14.0	13.7
Nonbank financial intermediaries	**3.0**	**3.0**	**2.8**	**2.8**	**2.6**	**2.5**	**2.5**	**2.5**	**3.3**	**3.3**
Quasi-money	1.4	1.7	1.8	1.9	1.7	1.7	1.8	2.0	2.6	2.7
Other	1.6	1.3	1.0	0.9	0.8	0.8	0.6	0.5	0.7	0.6

Sources: Central Bank of Ecuador; and Fund staff estimates.

Table 34. Ecuador: Selected Interest Rates

(In percent per annum)

	2000	2001				2002			
		Mar.	Jun.	Sept.	Dec.	Mar.	Jun.	Sep.	Dec.
I. Central Bank									
Lending rates									
Repos	8.90	7.95	4.23	4.80	6.79	5.29	3.30	3.47	3.30
Liquidity fund	19.14	19.57	19.33	18.77	19.32	17.93	18.10	16.87	17.44
II. Commercial Banks and Nonbank Financial Institutions									
Interbank rate (end-of-period)	**4.40**	**3.55**	**3.00**	**2.60**	**2.80**	**1.35**	**1.20**	**1.11**	**1.13**
Loans									
Reference rate from central bank	15.14	14.87	14.70	14.57	15.11	15.42	13.93	13.52	12.77
Corporate loans	15.48	15.68	15.37	13.76	14.55	13.78	14.06	12.83	13.11
Personal loans	16.71	16.56	17.49	18.23	17.76	17.01	16.81	16.95	17.50
Deposits									
Savings deposits	4.43	3.64	3.52	3.52	3.03	2.78	2.36	2.30	2.25
Time deposits									
30-89 days									
Certificates of deposit									
30-83 days	8.53	7.16	6.51	6.44	5.91	5.48	5.31	5.39	5.63
84-91 days	8.47	7.14	6.51	6.86	5.48	5.14	4.87	4.99	5.09
92-175 days	9.44	8.65	8.19	7.42	7.30	6.99	6.30	6.41	6.59
176-360 days	8.78	8.22	7.55	8.22	6.89	6.22	6.23	6.74	6.61
361 days or more	7.82	8.58	8.09	7.82	7.03	9.25	8.43	8.13	8.3

Source: Central Bank of Ecuador.

Table 35. Ecuador: Commercial Banks' Outstanding Credit to the Private Sector and Nonperforming Loans 1/

(In millions of U.S. dollars)

			2001				2002			
	1999	2000	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
Credit to private sector	3,982	4,271	4,319	4,371	4,686	4,907	4,975	5,169	4,407	4,482
Nonperforming loans	1,449	1,708	1,733	1,729	1,840	1,893	1,872	1,785	1,062	1,039
Capital and reserves	1,863	2,205	2,232	2,528	2,706	2,902	3,003	3,037	2,345	2,358
Reserves against nonperforming loans	1,217	1,648	1,628	1,619	1,700	1,841	1,810	1,821	1,845	1,847
Memorandum items:										
Nonperforming loans as percent of credit	36.4	40.0	40.1	39.5	39.3	38.6	37.6	34.5	24.1	23.2
Nonperforming loans as percent of capital and reserves	77.7	77.4	77.6	68.4	68.0	65.2	62.4	58.8	45.3	44.1
Reserves against nonperforming loans as percent of nonperforming loans	84.0	96.5	93.9	93.7	92.4	97.2	96.7	102.0	173.7	177.8

Sources: Central Bank of Ecuador; Superintendency of Banks; and Fund staff estimates.

1/ Includes open and close banks as presented in Table 29.

Table 36. Ecuador: Banking Soundness Indicators 1/

	1999	2000	2001	2002
I. Profitability Ratios				
(In percent of total assets and contingencies)				
Operating revenue	70.4	22.1	9.9	11.6
Private banks	60.1	22.5	9.7	11.2
Public banks	86.2	21.4	11.4	15.3
Operating expenses	66.7	21.0	9.0	11.0
Private banks	56.4	20.5	8.2	9.8
Public banks	82.4	21.9	16.3	20.9
Net operating margin	3.7	1.1	0.9	0.7
Private banks	3.7	2.0	1.5	1.4
Public banks	3.8	-0.5	-4.8	-5.5
Profits	-3.7	-2.2	-0.4	1.2
Private banks	0.6	0.7	1.1	1.3
Public banks	-10.3	-7.6	-14.6	0.3
Profits (percent of equity) 2/	-34.3	-25.2	-5.2	15.0
Private banks	9.8	10.4	15.5	17.6
Public banks	-57.0	-63.9	-68.1	2.1
II. Asset Quality Ratios				
Nonperforming loans/total loans (percent)	28.7	34.7	13.4	8.4
Private banks	14.3	12.2	7.4	6.0
Public banks	40.4	60.6	53.3	32.3
Loan provisions/total loans (percent)	23.8	28.9	15.5	11.0
Private banks	13.1	14.4	9.5	7.7
Public banks	32.4	45.5	55.5	43.9
Uncovered nonperforming loans/total loans (percent)	4.9	5.9	-2.1	-2.6
Private banks	1.1	-2.2	-2.1	-1.7
Public banks	8.0	15.1	-2.2	-11.6
Loan provisions/past-due loans (percent)	82.9	83.1	115.5	131.4
Private banks	92.1	118.0	127.9	129.0
Public banks	80.2	75.0	104.1	136.0
III. Liquidity Ratios				
Total loans/total deposits (percent)	134.8	94.4	76.1	70.7
Private banks	93.6	75.2	71.3	69.7
Public banks	209.3	133.4	139.1	82.2
Total liquid assets/total deposits (percent)	76.5	42.2	35.3	34.7
Private banks	76.9	45.4	33.8	31.0
Public banks	75.9	35.8	54.9	77.6
IV. Capital Adequacy Ratios 2/				
Capital/(assets plus contingencies) (percent)	7.1	6.5	8.1	9.3
Private banks	6.7	7.8	8.2	8.7
Public banks	7.7	4.3	6.9	13.9
Capital/risk-adjusted asssets (percent)	14.7	13.1	13.5	14.7
Private banks	14.9	16.1	13.7	13.5
Public banks	14.5	8.1	11.8	28.5
Deposits/capital = leverage (percent)	494.4	767.2	722.4	630.1
Memorandum items:				
Private banks' share of total assets (percent)	60.4	64.7	90.2	89.9
Public banks share of total assets (percent)	39.6	35.3	9.8	10.1

Sources: Superintendency of Banks; and Central Bank of Ecuador.

1/ For open banks.

2/ Capital in balance sheet at the end of the year net of profits.

Table 37. Ecuador: Summary Balance of Payments

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Current account	**-2,170**	**955**	**1,004**	**-509**	**-1,214**
Trade account	-995	1,665	1,458	-302	-974
Exports, f.o.b.	4,203	4,451	4,927	4,678	4,953
Petroleum	923	1,480	2,443	1,900	2,033
Other	3,280	2,972	2,484	2,778	2,921
Of which: primary products	2,410	2,163	1,670	1,709	1,904
Import, f.o.b.	-5,198	-2,786	-3,469	-4,981	-5,928
Services account	-1,950	-1,811	-1,814	-1,867	-1,830
Services credit	890	861	1,030	1,048	1,142
Services debit	-2,840	-2,672	-2,844	-2,915	-2,972
Interest payments	-1,063	-1,134	-1,205	-999	-1,032
Other	-1,777	-1,538	-1,639	-1,916	-1,939
Transfers (net)	776	1,101	1,360	1,660	1,590
Capital account	**1,401**	**-1,800**	**-800**	**349**	**980**
Direct investment	831	636	720	1,330	1,216
Official disbursements	1,091	788	1,312	895	506
Official amortizations	-660	-578	-772	-918	-815
Other	139	-2,647	-2,060	-958	74
Overall balance	**-768**	**-845**	**203**	**-160**	**-234**
Financing	768	846	-203	160	234
Net foreign assets at the BCE (end-of-period)	395	423	-157	152	177
Arrears (decrease -)	174	331	-861	-9	-16
Rescheduling	199	92	815	95	73
Other 1/	0	0	0	-78	0
Net external financing	0	0	0	0	0
	(In percent of GDP)				
Current account	**-9.3**	**5.7**	**6.3**	**-2.4**	**-5.0**
Trade account	-4.3	10.0	9.1	-1.4	-4.0
Exports, f.o.b.	18.1	26.7	30.9	22.3	20.4
Petroleum	4.0	8.9	15.3	9.0	8.4
Other	14.1	17.8	15.6	13.2	12.0
Import, f.o.b.	-22.4	-16.7	-21.8	-23.7	-24.4
Services account	-8.4	-10.9	-11.4	-8.9	-7.5
Services credit	3.8	5.2	6.5	5.0	4.7
Services debit	-12.2	-16.0	-17.8	-13.9	-12.2
Interest payments	-4.6	-6.8	-7.6	-4.8	-4.2
Other	-7.6	-9.2	-10.3	-9.1	-8.0
Transfers (net)	3.3	6.6	8.5	7.9	6.5
Capital account	**6.0**	**-10.8**	**-5.0**	**1.7**	**4.0**
Direct investment	3.6	3.8	4.5	6.3	5.0
Official disbursements	4.7	4.7	8.2	4.3	2.1
Official amortizations	-2.8	-3.5	-4.8	-4.4	-3.4
Other	0.6	-15.9	-12.9	-4.6	0.3
Overall balance	**-3.3**	**-5.1**	**1.3**	**-0.8**	**-1.0**
Memorandum items:					
Net foreign assets at the BCE (end-of-period)					
In millions of U.S. dollars	1,698	872	1,036	884	707
In months of imports of goods and nonfactor services	3.3	2.9	2.8	1.8	1.2

Sources: Central Bank.

1/ Includes discount on US$130 million global bond placed in 2001.

Table 38. Ecuador: Composition of Exports

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Total exports, f.o.b.	**4,203**	**4,451**	**4,927**	**4,678**	**4,953**
Oil	**923**	**1,480**	**2,443**	**1,900**	**2,033**
Crude oil	789	1,312	2,144	1,722	1,812
Derivatives	134	167	299	178	221
Unprocessed non-oil products	**2,410**	**2,163**	**1,670**	**1,709**	**1,904**
Banana	1,070	954	821	865	981
Coffee	72	57	22	15	7
Cocoa	19	64	38	55	85
Shrimp	22	28	285	281	262
Tuna and other fish species	88	72	71	87	81
Cut flowers	162	180	195	235	283
Other	977	721	238	171	205
Processed non-oil products	**870**	**808**	**814**	**1,069**	**1,014**
Coffee	33	21	35	29	28
Cocoa	28	42	39	32	36
Fish products	268	275	275	294	349
Metals	130	90	87	188	81
Textiles	52	52	63	69	55
Other	358	415	315	458	465
	(Volumes)				
Crude oil (in thousands of barrels)	85,796	84,653	88,141	90,157	84,347
Derivatives (in thousands of barrels)	13,237	13,650	15,800	11,715	13,515
Bananas (in thousands of metric tons)	3,988	4,056	4,100	4,670	4,516
Coffee, unprocessed (in thousands of metric tons)	40	40	21	33	17
Cocoa, unprocessed (in thousands of metric tons)	12	64	50	63	62
Shrimp (in thousands of metric tons)	117	94	36	59	59
	(Unit value in U.S. dollars)				
Crude oil (per barrel)	9.2	15.5	24.6	19.1	21.5
Derivatives (per barrel)	10.1	12.3	18.2	15.2	16.5
Bananas (per metric tons)	268.3	235.3	219.2	185.2	217.2
Coffee, unprocessed (per metric tons)	1,782.9	1,409.1	1114.0	452.9	417.9
Cocoa, unprocessed (per metric tons)	1,537.2	1,005.2	655.5	863.6	1,376.7
Shrimp (per metric tons)	7,456.3	6,456.6	5,591.7	5,377.3	4,448.9
	(In percent of GDP)				
Total exports, f.o.b.	**18.1**	**26.7**	**30.9**	**22.3**	**20.4**
Oil	4.0	8.9	15.3	9.0	8.4
Unprocessed non-oil products	10.4	13.0	10.5	8.1	7.8
Processed non-oil products	3.7	4.8	5.1	5.1	4.2

Sources: Central Bank of Ecuador.

Table 39. Ecuador: Composition of Imports

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Total imports, f.o.b.	**5,198**	**2,786**	**3,469**	**4,981**	**5,928**
Consumer goods	**1,080**	**572**	**798**	**1,322**	**1,665**
Nondurables	660	412	507	712	896
Durables	420	160	291	609	769
Raw materials	**1,991**	**1,191**	**1,477**	**1,795**	**2,086**
Agricultural	247	180	205	228	236
Industrial	1,572	935	1,185	1,408	1534
Construction	171	76	86	159	316
Capital goods	**1,766**	**772**	**888**	**1,567**	**1,895**
Agricultural	51	18	27	39	28.6
Industrial	1,108	521	592	887	1149
Transportation equipment	607	233	270	641	717
Lubricants, fuel, and other	**274**	**201**	**256**	**250**	**230**
Military imports	**88**	**49**	**50**	**47**	**52**
	(In percent of GDP)				
Total imports, f.o.b.	**22.4**	**16.7**	**21.8**	**23.7**	**24.4**
Consumer goods	**4.6**	**3.4**	**5.0**	**6.3**	**6.8**
Nondurables	2.8	2.5	3.2	3.4	3.7
Durables	1.8	1.0	1.8	2.9	3.2
Raw materials	**8.6**	**7.1**	**9.3**	**8.5**	**8.6**
Agricultural	1.1	1.1	1.3	1.1	1.0
Industrial	6.8	5.6	7.4	6.7	6.3
Construction	0.7	0.5	0.5	0.8	1.3
Capital goods	**7.6**	**4.6**	**5.6**	**7.5**	**7.8**
Agricultural	0.2	0.1	0.2	0.2	0.1
Industrial	4.8	3.1	3.7	4.2	4.7
Transportation equipment	2.6	1.4	1.7	3.0	2.9
Lubricants, fuel, and other	**1.2**	**1.2**	**1.6**	**1.2**	**0.9**
Military imports	**0.4**	**0.3**	**0.3**	**0.2**	**0.2**

Sources: Central Bank of Ecuador.

Table 40. Ecuador: Direction of Trade

(In percent of total value)

	Exports					Imports				
	1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Western Hemisphere	**66.0**	**66.0**	**64.8**	**71.0**	**68.1**	**67.2**	**71.0**	**73.4**	**68.3**	**68.4**
United States	39.0	38.4	33.2	37.9	39.9	30.2	30.6	28.8	25.0	23.0
Andean Group	13.0	10.8	11.5	17.5	15.6	17.8	20.6	21.4	22.3	22.0
Colombia	6.7	5.1	5.1	6.4	6.9	11.0	12.6	11.7	15.0	14.0
Venezuela	1.4	1.5	1.5	3.7	1.2	4.8	6.1	7.9	5.2	5.5
Peru and Bolivia	4.9	4.2	4.9	7.3	7.5	2.1	1.9	1.8	2.0	2.5
Mexico	1.1	1.2	1.2	1.1	0.5	2.8	3.2	3.1	3.3	3.0
Argentina	1.8	1.7	1.8	1.8	0.3	2.4	2.4	1.5	1.7	2.6
Brazil	0.8	0.4	0.4	0.3	0.2	3.5	3.1	4.0	3.5	6.3
Chile	3.3	4.4	7.4	2.2	1.4	3.7	4.1	6.9	5.1	4.7
Other	5.1	6.5	9.4	10.2	10.2	37.9	41.5	7.6	7.4	6.8
Europe	**24.6**	**21.0**	**16.7**	**17.8**	**20.2**	**17.3**	**17.3**	**15.3**	**15.2**	**15.7**
European Union (EU)	20.8	18.4	12.8	13.5	15.4	15.0	14.6	12.3	12.5	13.8
France	2.2	1.7	0.4	0.7	0.8	0.9	1.3	1.2	0.8	0.9
Germany	3.1	2.8	2.7	3.4	1.0	4.2	4.3	3.7	3.4	2.8
Italy	6.1	4.7	3.8	3.8	5.7	3.2	1.9	1.5	2.1	2.2
Spain	3.3	2.8	1.1	1.4	1.2	2.0	2.6	1.5	1.9	2.0
United Kingdom	1.4	1.3	0.8	0.8	1.0	1.2	1.0	1.0	0.9	1.0
Other	4.5	5.2	4.0	3.4	5.7	2.5	2.7	3.5	3.4	4.9
Non-EU countries	3.9	2.6	3.9	4.3	4.8	2.3	2.7	3.0	2.7	1.9
Asia	**8.2**	**11.1**	**14.8**	**9.8**	**9.0**	**14.1**	**10.7**	**8.8**	**14.9**	**15.0**
Japan	3.0	2.5	1.9	2.3	1.9	8.6	4.8	4.4	6.1	6.1
Korea	2.3	4.8	10.4	5.3	5.0	1.7	1.2	1.2	2.5	2.0
Others	3.0	3.7	2.6	2.2	2.1	3.8	4.7	3.2	6.3	6.9
Africa, Oceania, and others	**1.2**	**2.0**	**3.7**	**1.4**	**2.7**	**1.3**	**1.1**	**2.5**	**1.6**	**0.8**

Source: Central Bank of Ecuador.

Table 41. Ecuador: Export and Import Indices 1/

(1990 = 100)

	1998	1999	2000	2001	2002
I. Exports Indices					
Total					
Value	154	163	193	184	194
Volume	177	178	171	177	175
Unit value	85	90	105	96	103
Oil					
Value	65	104	172	134	143
Volume	140	139	146	148	136
Unit value	47	74	119	91	104
Non-oil					
Value	251	228	190	213	224
Volume	206	207	187	215	221
Unit value	119	107	99	96	98
II. Imports Indices					
Total					
Value	303	162	202	290	346
Volume	321	174	203	300	352
Unit value	94	93	100	97	98
III. Terms of Trade 2/					
Overall	90	97	105	100	105
Non-oil	126	115	100	99	101

Sources: Central Bank of Ecuador; and Fund staff estimates.

1/ In U.S. dollar terms.
2/ Defined as the ratio of the unit value of exports to that of imports.

Table 42. Ecuador: Services Account of the Balance of Payments

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Services (net)	**-1,950**	**-1,811**	**-1,814**	**-1,867**	**-1,830**
Factor services (net)	-1,615	-1,722	-1,769	-1,772	-1,622
Interest	-985	-1,086	-1,205	-970	-1,018
Other	-630	-636	-564	-802	-604
Nonfactor services (net)	-335	-89	-45	-95	-208
Shipments and transportation	-344	-106	-114	-174	-275
Tourism	50	72	204	90	104
Government services	14	9	103	22	22
Other	-55	-64	-238	-33	-59
Total service credits	**890**	**861**	**1,030**	**1,048**	**1,142**
Factor services credits	86	49	45	29	14
Interest receipts	78	49	12	29	14
Other	8	0	33	0	0
Nonfactor services credits	804	812	985	1,019	1,128
Shipments and transportation	278	287	379	393	420
Tourism	291	343	402	430	497
Government services	47	49	56	62	64
Other	188	133	148	134	147
Total service debits	**2,840**	**2,672**	**2,844**	**2,915**	**2,972**
Factor services debits	1,701	1,771	1,814	1,801	1,636
Interest payments	1,063	1,135	1,205	999	1032
Other	638	636	609	802	604
Nonfactor services debits	1,139	901	1,030	1,114	1,336
Shipments and transportation	622	393	493	567	695
Tourism	241	271	299	340	393
Government services	33	40	44	40	42
Other	243	197	194	167	206
	(In percent of GDP)				
Services (net)	**-8.4**	**-10.9**	**-11.4**	**-8.9**	**-7.5**
Factor services (net)	-6.9	-10.3	-11.1	-8.4	-6.7
Nonfactor services (net)	-1.4	-0.5	-0.3	-0.5	-0.9
Total service credits	**3.8**	**5.2**	**6.5**	**5.0**	**4.7**
Factor services credits	0.4	0.3	0.3	0.1	0.1
Nonfactor services credits	3.5	4.9	6.2	4.8	4.6
Total service debits	**12.2**	**16.0**	**17.8**	**13.9**	**12.2**
Factor services debits	7.3	10.6	11.4	8.6	6.7
Nonfactor services debits	4.9	5.4	6.5	5.3	5.5

Source: Central Bank of Ecuador.

Table 43. Ecuador: Capital Account of the Balance of Payments

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Capital account	**1,401**	**-1,800**	**-800**	**349**	**980**
Foreign direct investment	**831**	**636**	**720**	**1,330**	**1,216**
Public sector (net)	**431**	**210**	**540**	**-23**	**-309**
Disbursements	1,091	788	1,312	895	506
Amortization	660	578	772	918	815
Private sector (net) 1/	**640**	**-621**	**600**	**410**	**227**
Disbursements	6,118	3,424	2,690	2,690	2785
Amortization	5,477	4,045	2,090	2,280	2558
Other 2/	**-502**	**-2,026**	**-2,660**	**-1,368**	**-154**
	(In percent of GDP)				
Capital account	**6.0**	**-10.8**	**-5.0**	**1.7**	**4.0**
Foreign direct investment	**3.6**	**3.8**	**4.5**	**6.3**	**5.0**
Public sector (net)	**1.9**	**1.3**	**3.4**	**-0.1**	**-1.3**
Disbursements	4.7	4.7	8.2	4.3	2.1
Amortization	2.8	3.5	4.8	4.4	3.4
Private sector (net) 1/	**2.8**	**-3.7**	**3.8**	**2.0**	**1.1**
Disbursements	26.3	20.5	16.9	12.8	11.5
Amortization	23.6	24.3	13.1	10.8	10.5
Other 2/	**-2.2**	**-12.1**	**-16.7**	**-6.5**	**-0.6**

Source: Central Bank of Ecuador and Fund staff estimates.

1/ Includes short-term revolving trade credits.
2/ Includes errors and omissions.

Table 44. Ecuador: External Debt

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Total debt	**16,221**	**16,353**	**14,126**	**14,500**	**14,676**
Private sector	3,159	2,539	2,229	3,038	3265
Public sector 1/	13,061	13,814	11,470	11,462	11,411
Nonfinancial public sector	12,346	12,580	10,533	10,701	10735
Financial public sector	715	1,234	937	761	676
Total public debt 1/	**13,061**	**13,814**	**11,470**	**11,462**	**11,411**
Multilaterals	3,905	4,025	4,119	4,274	4212
Bilaterals	2,282	2,617	2,640	2,632	2787
Commercial banks	6,806	7,004	4,463	4,438	4,353
Suppliers	68	167	248	118	59
	(Shares in percent of total)				
Total debt	**100.0**	**100.0**	**100.0**	**100.0**	**100**
Private sector	19.5	15.5	15.8	21.0	22.2
Public sector 1/	80.5	84.5	81.2	79.0	77.8
Nonfinancial public sector	76.1	76.9	91.8	93.4	94.1
Financial public sector	4.4	7.5	8.2	6.6	5.9
Total public debt 1/	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Multilaterals	29.9	29.1	35.9	37.3	36.9
Bilaterals	17.5	18.9	23.0	23.0	24.4
Commercial banks	52.1	50.7	38.9	38.7	38.1
Suppliers	0.5	1.2	2.2	1.0	0.5
	(In percent of GDP)				
Total debt	**69.8**	**98.1**	**86.0**	**69.0**	**60.3**
Private sector	13.6	15.2	14.0	14.5	13.4
Public sector 1/	56.2	82.8	72.0	54.5	46.9
Nonfinancial public sector	53.1	75.4	66.1	50.9	44.1
Financial public sector	3.1	7.4	5.9	3.6	2.8
Total public debt 1/	**56.2**	**82.8**	**72.0**	**54.5**	**46.9**
Multilaterals	16.8	24.1	25.9	20.3	17.3
Bilaterals	9.8	15.7	16.6	12.5	11.5
Commercial banks	29.3	42.0	28.0	21.1	17.9
Suppliers	0.3	1.0	1.6	0.6	0.2

Source: Central Bank of Ecuador and Fund staff estimates.

1/ Including arrears (see Table 47).

Table 45. Ecuador: External Debt Service

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Total debt service due	**1,723**	**1,712**	**1,977**	**1,917**	**1,847**
Principal 1/	660	578	772	918	815
Interest	1,063	1,134	1,205	999	1,032
Total debt service due	**1,790**	**1,780**	**1,977**	**1,917**	**1,847**
Private sector 1/	282	321	256	274	379
Public sector	1,507	1,459	1,721	1,643	1,468
	(In percent of GDP)				
Total debt service due	**7.4**	**10.3**	**12.4**	**9.1**	**7.6**
Principal 1/	2.8	3.5	4.8	4.4	3.4
Interest	4.6	6.8	7.6	4.8	4.2
Total debt service due	**7.7**	**10.7**	**12.4**	**9.1**	**7.6**
Private sector 1/	1.2	1.9	1.6	1.3	1.6
Public sector	6.5	8.7	10.8	7.8	6.0
	(In percent of exports of goods and nonfactor services)				
Total debt service due	**35.7**	**33.8**	**33.2**	**33.6**	**30.4**
Principal 1/	14.5	12.3	12.9	16.1	13.4
Interest	21.2	21.5	20.4	17.5	17.0
Total debt service due	**35.7**	**33.8**	**33.2**	**33.6**	**30.4**
Private sector 1/	5.6	6.1	4.1	4.8	6.2
Public sector	30.1	27.7	29.1	28.8	24.1

Source: Central Bank of Ecuador and staff estimates.

1/ Excludes private sector principal payments, most of which are short-term revolving credits.

Table 46. Ecuador: External Public Debt by Creditor

(In millions of U.S. dollars)

	Drawings	Cash Amortization	Principal Rescheduling	Interest Rescheduling	Change in Arrears 1/	Valuation Adjustments 2/	Debt Outstanding End-of-Year 3/
1998							
Total	**1,091**	**600**	**109**	**90**	**7**	**127**	**13,061**
Multilaterals 4/	860	381	109	0	0	57	3,905
Bilaterals and suppliers	195	136	0	0	7	72	2,350
Commercial banks	36	83	0	90	0	-2	6,806
1999							
Total	**788**	**509**	**0**	**76**	**488**	**-14**	**13,814**
Multilaterals 4/	468	347	0	0	317	-13	4,025
Bilaterals and suppliers	310	99	0	0	19	2	2,785
Commercial banks	11	63	0	76	152	-3	7,004
2000							
Total	**111**	**122**	**0**	**45**	**-671**	**-61**	**11,470**
Multilaterals 4/	41	99	0	4	-19	-27	4,119
Bilaterals and suppliers	28	16	0		-649	-33	2,888
Commercial banks	42	6	0	41	-3	-1	4,463
2001							
Total	**613**	**849**	**55**	**37**	**-9**	**0**	**11,462**
Multilaterals 4/	571	494	0	0	36	0	4,274
Bilaterals and suppliers	42	287	17	11	9	0	2,750
Commercial banks	0	68	38	26	-53	0	4,438
2002							
Total	**506**	**725**	**0**	**63**	**-16**	**212**	**11,411**
Multilaterals 4/	375	506	0	0	-18	101	4,212
Bilaterals and suppliers	100	166	0	0	58	111	2,846
Commercial banks	31	53	0	63	-56	0	4,353

Source: Central Bank of Ecuador and staff estimates.

1/ Includes late interest.
2/ Adjustments due to exchange rate fluctuations.
3/ Valued at end-of-year exchange rates.
4/ Including the Fund.

Table 47. Ecuador: External Payments Arrears

(Outstanding at end of period)

	1998	1999	2000	2001	2002
	(In millions of U.S. dollars)				
Total 1/	**543.2**	**860.1**	**187.0**	**178.5**	**162.6**
Multilateral	0.0	18.8	0.3	36.2	18.4
Bilateral	541.9	693.6	44.2	52.9	110.6
Commercial banks 2/	0.9	145.5	142.5	89.2	32.8
Suppliers	0.4	2.2	0.0	0.2	0.8
Principal	**364.7**	**480.2**	**12.5**	**53.7**	**85.5**
Multilateral	0.0	7.2	0.0	20.3	11.9
Bilateral	363.9	440.6	7.8	33.2	68.6
Commercial banks 2/	0.7	30.5	4.7	0.1	4.2
Suppliers	0.1	1.9	0.0	0.1	0.8
Interest 1/	**178.5**	**380.0**	**174.5**	**124.7**	**77.1**
Multilateral	0.0	11.6	0.3	15.9	6.5
Bilateral	178.0	253.0	36.4	19.7	42
Commercial banks 2/	0.2	115.1	137.8	89.1	28.6
Suppliers	0.3	0.4	0.0	0.1	0
	(In percent of GDP)				
Total arrears 1/	**2.3**	**5.2**	**1.2**	**0.8**	**0.7**

Sources: Central Bank of Ecuador; and Fund staff estimates.

1/ Includes late interest on arrears.
2/ Including Brady and Eurobonds.

Table 48. Ecuador: Trade-Weighted Effective Exchange Rates 1/

(1990 = 100)

	Nominal Effective Exchange Rate			Real Effective Exchange Rate		
	Index			Index		
	End-of-period	Period Average	Percentage Change 2/	End-of-period	Period Average	Percentage Change 2/
1997	40.0	43.0	-15.4	146.3	140.2	7.4
1998	26.0	33.0	-23.3	134.3	141.6	1.0
1999	10.6	16.8	-49.1	85.3	105.6	-25.4
2000	7.9	7.7	-53.9	118.8	95.7	-9.4
2001		8.1	4.6		134.5	44.3
January		7.8	4.7		121.6	81.8
February		7.9	5.5		124.1	85.4
March		8.0	5.6		127.4	63.2
April		8.1	6.3		128.5	51.2
May		8.2	4.7		130.0	41.6
June		8.2	7.6		133.0	39.2
July		8.3	7.4		135.7	36.5
August		8.1	4.0		136.5	30.9
September		8.1	2.4		140.0	27.2
October		8.2	2.1		143.2	25.2
November		8.2	2.4		146.9	25.2
December		8.2	3.0		147.0	23.8
2002						
January		8.2	4.1		144.6	18.9
February		8.4	5.9		147.5	18.9
March		8.3	4.2		147.2	15.6
April		8.3	2.6		145.8	13.4
May		8.2	0.8		145.7	12.0
June		8.2	-1.0		146.0	9.8
July		8.1	-2.4		146.1	7.7
August		8.2	1.1		152.1	11.4
September		8.2	1.2		153.9	9.9
October		8.3	1.5		156.8	9.5
November		8.2	0.0		156.4	6.4

Source: IMF, Information Notice System.

1/ Foreign currency units per sucre; a downward movement indicates a depreciation.
2/ Change from the same period in the previous year.