October 1999

IMF Staff Country Report No. 99/117

Dominican Republic: Selected Issues

This Selected Issues report on the Dominican Republic was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with this member country. As such, the views expressed in this document are those of the staff team and do not necessarily reflect the views of the Government of the Dominican Republic or the Executive Board of the IMF.

Copies of this report are available to the public from

International Monetary Fund • Publication Services 700 19th Street, N.W. • Washington, D.C. 20431

Telephone: (202) 623-7430 • Telefax: (202) 623-7201

Telex (RCA): 248331 IMF UR E-mail: publications@imf.org Internet: http://www.imf.org

Price: \$15.00 a copy

International Monetary Fund Washington, D.C.

INTERNATIONAL MONETARY FUND

DOMINICAN REPUBLIC

Selected Issues

Prepared by a staff team consisting of P. Young (Head), D. Dunn, A. Giustiniani, F. Nadal-De Simone, E. Tanner (all WHD), and J. McHugh (PDR)

Approved by Western Hemisphere Department

July 21, 1999

		Contents	Page
Basi	c Data		5
I.	Overvie	sw	8
II.	Stabiliza	ation and Structural Reforms	8
	A .		
	В.	The Lost Decade: 1981-90	9
	C.		
	D.	The New Government: 1996–99	14
	E.	The Challenges Ahead	15
Ш.	Trade R	Reform in the Dominican Republic	24
	A.	Introduction	24
	В.	The Trade Regime Prior to the 1990 Reform	25
	C.		26
	D.		
	E.	Trade Agreements	
	F	Conclusion	21

IV.	A Revie	w of Fiscal Policy During the 1990s and Present Policy Considerations	40
	A .	Introduction	
	В.	Contribution of Fiscal Policy to Macroeconomic Stability During the 1990s	41
	C.	Tax Reform and Administration	44
	D.	Proposals for Reform	47
		Tax and tariff reform, tax simplification, and restructuring fuel taxes	47
		The budget process, discretionary spending, and modernization of the state	47
		Regularizing domestic arrears	
	•	Redirecting spending toward priority areas	49
	E.	Conclusion	50
V.	Money	Demand in a Small Open Economy: The Case of the Dominican Republic	56
	Å.	Introduction	56
	В.	The Model and the Estimation Technique	58
	C.	Unit Roots, Cointegration, and Long-Run Elasticities	60
		Unit root and cointegration tests	
		The long-run elasticities of the model	
	D.	Conclusions and Policy Implications	62
VI.		ge Market Pressure, Monetary Policy, and Interest Rates: Recent Evidence	
		the Dominican Republic	
	A .		
	В.		
	C.	EMP and Monetary Policy: A Vector Autoregression Approach	
	D .		
	E.	Summary and Policy Implications	82
Box			
II.	1.	The Capitalization of the Dominican Electricity Corporation	16
Tabl		Iain Macroeconomic Indicators	19
		ending Structural Reforms	,
Ш.		ariff Structure (excluding selective consumption tax)	
		ariff Structure (including selective consumption tax)	
		nitial Import Level Before Contingent Tariff Applies	
		chedule of Contingent Tariffs	
	5. C	aribbean and Central America—Tariff Rates Selected Countries	38
		aribbean and Central America—Trade Restrictiveness Selected Countries	
IV.		ummary of the Consolidated Public Sector	
~ T .		ummary Operations of the Central Government	
	~		

	3. Tax Revenue by Source	54
V.	1. Unit Root Tests at 5 Percent Level	66
	2. The Johansen-Juselius Maximum Likelihood Test for Cointegration	67
	3. The Phillips-Loretan Nonlinear Dynamic Least Squares Estimator	68
VI.	•	
	2. Summary of Estimates, Vector Autoregression System Equation (6)	87
Figu	ures	
П.		
	Selected Periods	23
IV.		
	Sector, and Inflation	
V.	1. Residuals from Model 1-M1	70
	2. Residuals from Model 1-M2	70
	3. Residuals from Model 2-M1	
	4. Residuals from Model 2–M2	
VI.		
	2. Response of EMP to Shocks	
	3. Response of Interest Rate Differential (Δφ) to Shocks	90
	4. Response of Credit Grow (δ) to Shocks	
Ann	nav	
V.	Unit Roots and Cointegration	72
٧.	Cint Roots and Contegration	
App	pendices	
I.	Major Fiscal Measures, April 1997-February 1999	92
II.	Major Changes in Financial Sector Policies, April 1997-February 1999	
III.		
IV.	· · · · · · · · · · · · · · · · · · ·	
Stat	atistical Appendix Tables	
	Macroeconomic Flows	101
2.	GDP by Sector at Current Prices	
3.	GDP by Sector at Constant Prices	
4.	Gross Domestic Expenditure at Current Prices	
5.	Gross Domestic Expenditure at Constant Prices.	
6.	Savings and Investment.	
0. 7.	Output of Selected Products.	
7. 8.	Free-Trade Zones	
9.	Production and Sales of Electricity	
10.	· · · · · · · · · · · · · · · · · · ·	
11	3	111

12.	Selected Price and Wage Indices	112
13.	Consumer Price Index	
14.	Average Selling Price of Electricity.	114
15 .	Retail Prices of Selected Petroleum Products	115
16.	Trends in Minimum Monthly Wages	116
17 .	Employment by Sector of Economic Activity	117
18 .	Summary Operations of the Consolidated Public Sector	
19.	Operations of the General Government	120
20.	Summary Operations of the Central Government	123
21.	Central Government Revenue	
22.	Central Government Expenditure	125
23 .	Central Government Transfers	126
24.	Consolidated Operations of the Public Enterprises	127
25 .	Operations of the Public Enterprises	
26 .	Private Sector Claims on the Financial System	
27.	Consolidated Accounts of the Financial System	131
28.	Summary Accounts of the Banking System	132
29 .	Summary Account of the Nonbank Financial Institutions	136
30.	Stock of Domestic Credit of the Financial System, by Origin,	
	Destination, and Financing	138
31.	Changes in Domestic Credit of the Financial System, by Origin,	•
	Destination, and Financing	139
32.	Stock of Commercial Bank Credit to the Private Sector by Economic Activity	140
33.	Nominal Interest Rates of Commercial Banks	141
34 .	Reserve Requirements of Financial Institutions	142
35.	Liabilities and Reserves of Commercial and Multiservice Banks	143
36 .	Financial Indicators.	144
37 .	Summary Balance of Payments	145
38 .	Balance of Payments	146
39 .	Exports by Principal Commodity Groups	147
40 .	Exports by Destination	149
41.	Imports, f.o.b.	150
42.	Imports of Petroleum and Derivatives	151
43.	External Public Sector Debt and Official Reserve Liabilities	152
44.	Outstanding External Public Sector Debt by Creditor	153
45 .	Past-Due Payments on External Public Sector Debt Service	
46.	Net International Reserves	155
47 .	Exchange Rates	156
48	Effective Exchange Rates and Related Series	157

Dominican Republic: Basic Data

I. Social and Demographic Indicators

Area (thousand sq. Km.)	48,730	Health (most recent estimates)	1,765
		Population per physician	
Population (1998)		Population per hospital bed	506
Total (million)	. 8.2	Access to safe water	
Rate of growth (percent a year)	2.3	(percent of population)	7 9
Density (per sq. km.)	168		
GDP per capita (US\$)	1,945	Education (most recent estimates)	
GDI per cupita (GDV)	-,,-	Enrollment rates (in percent)	
Population characteristics (most recent estimates)		Primary education	95
Life expectancy at birth (years)	70	Secondary education	51
Infant mortality (per thousand live births)	40	Illiteracy rate	
indication (per atoussissive on any		(percent of population age 15+)	20
Nutrition (most recent estimates)		- -	
Calorie intake			
(per capita /day)	2,359		
Protein intake	·		
(grams per capita/day)	48		

II. Economic Indicators

	1993	1994	1995	1996	1997	Prel. 1998
				otherwise indi	cated)	
Origin of GDP		(in percent or	GDF, unless	Other wise mus	caccay	
Agriculture, fishing, mining	14.8	15.1	15.4	15.5	14.9	13.6
Manufacturing	18.8	18.5	17.6	17.0	17.0	16.6
Construction	9.2	9.4	9.5	10.0	10.9	12.1
Wholesale and retail trade	12.0	11.7	12.1	12.3	12.4	12.9
Hotels and restaurants	5.2	5.7	6.4	6.6	7.1	7.0
Fransport	6.8	6.7	6.8	6.8	6.8	6.9
Communications	2.8	3.1	3.5	3.8	4.2	4.7
Housing	5.5	5.4	5.2	4.9	4.7	4.5
Government services	8.9	8.8	8.4	8.3	7.9	7.8
Other 1/	15.9	15.5	15.1	14.6	14.2	14.0
Ratios to GDP						
Exports of goods and nonfactor services	30.2	31.6	31.0	30.7	31.4	30.6
Imports of goods and nonfactor services	37.7	37.0	34.3	35.5	36.2	39.5
Current account of the balance of payments	-5.5	-2.6	-1.5	-1.6	-1.1	-2.2
Government revenue	17.0	15.9	16.6	16.3	17.7	17.8
Government expenditure 2/	18.9	18.6	16.5	17.1	17.1	18.9
Public sector current account balance 3/	8.0	6.3	6.5	4.7	3.6	3.2
Public sector overall balance 3/	-0.9	-4.1	-1.0	-1.8	-2.1	-2.5
Gross national savings	21.1	21.1	20.2	19.5	21.0	23.6
Gross domestic investment	26.5	23.8	21.7	21.1	22.0	25.8
Money and quasi-money 4/	21.2	22.1	21.4	22.5	23.3	25.3
External debt (end of period)	46.8	36.6	32.9	28.3	23.3	22.3
External public debt-service ratio 5/ Of which	31.7	14.2	11.9	9.9	8.0	8.3
Interest payments	9.1	5.6	6.1	5.3	4.0	3.5
	(Aı	nnual percent	age change, u	nless otherwis	e indicated)	
Real GDP	3.0	4.3	4.8	7.3	8.2	7 .3
Real GDP per capita	0.7	2.0	2.4	4.8	5.7	4.3
GDP at current prices	8.1	12.9	18.0	13.1	17.2	12.
Domestic expenditure (at current prices)	4.0	10.8	15.6	14.8	17.1	16.
Investment	27.0	1.2	7.5	10.2	22.3	31.
Consumption	-1.8	13.9	18.0	16.0	15.8	12.
GDP deflator	4.9	8.2	12.6	5.4	8.3	4.
Consumer prices (annual average)	5.3	8.3	12.5	5.4	8.3	4.
Consumer prices (end of period)	2.8	14.3	9.2	3.9	8.4	7.
Government revenue	5.9	5.9	22.7	11.2	27.1	13.
Government expenditure 2/	11.3	11.3	4.5	17.6	17.2	24.
Money and quasi-money	28.4	9.0	19.3	18.8	23.3	21.
Money	25.8	2.3	17.1	26.5	22.1	7.
Quasi-money	30.7	14.4	20.9	13.3	24.3	32.

Dominican Republic: Basic Data

	1993	1994	1995	1996	1997	Prel. 1998
		(A	nnual percenta	age change)		
Domestic credit (net) 6/	10.6	30.2	14.4	19.8	21.4	21.0
Net credit to the public sector 6/	-6.2	13.2	0.4	1.3	2.0	3.7
Credit to the private sector 6/	12.9	8.2	12.1	16.3	18.3	13.5
Merchandise exports (f.o.b. in US\$)	9.8	14.0	15.1	7.5	15.2	4.1
Merchandise imports (f.o.b. in US\$)	-2.3	7.0	5.8	13.2	17.1	16.8
Effective exchange rates						
Nominal effective exchange rate, end of period (depreciation	10.3	1.0	-1.6	1.8	-1.7	-10.8
Average (depreciation -)	9.6	7.4	-4.3	2.0	-2.6	-2.4
Real effective exchange rate, end of period (depreciation -) Average (depreciation -)	2.1 4.2	6.2 3.9	4.2 2.8	2.6 4.2	4.3 2.8	-5,4 0.3
Average (depreciation -)	4.2	3.9	2.8	4.2	2.0	0.3
Interest rates (period average)	20.0	20.0	20.0	24.0	01.2	26.6
Lending 7/ Saving 8/	29.9	28.0	30.8	24.8	21.3	26.0 17.0
Saving 8/	15.0	13.6	15.8	13.8	13.3	17.0
Public sector finances	ř	(In m	nillions of Dor	ninican pesos))	
Government revenue	20,705	21,928	26,897	29,909	37,999	43,082
Government expenditure 2/	23,002	25,613	26,755	31,452	36,855	45,787
Public sector current account balance 3/	9,784	8,601	10,597	8,562	7,653	7,77
Public sector overall balance 3/	-1,051	-5,660	-1,671	-3,354	-4,570	-6,11
		(Iı	n millions of U	J.S. dollars)		
Balance of payments 9/	1000	•		•	0.10#	2.20
Merchandise exports (f.o.b.)	1,352	1,541	1,773	1,907	2,197	2,28
Merchandise imports (f.o.b.) Tourism receipts	-2,795	-2,992	-3,164	-3,581	-4,192 2,000	-4,89°
Interest on public sector external debt	1,224 -270	1,429 -222	1,571 -231	1,781 -220	2,099 -199	2,14: -18:
Other services, income, and transfers (net)	-43	-39	-132	-220 -99	-69	30
Current account	-533	-283	-183	-213	-163	-35
Official capital (net) 10/	-534	-231	-11	-73	-92	-2:
Private capital, including errors and omissions (net)	607	-93	294	272	347	43
Overall balance	-460	-607	100	-14	93	6
Change in net international reserves (increase -)	-132	470	-137	-39	-110	-10
Net change in arrears 11/	-351	-971	31	24	-192	-3
Debt relief and exceptional financing	942	1,108	5	30	209	7
International reserve position						
Gross official reserves	646	259	390	375	415	51
Net official reserves	438	-32	105	145	254	35
Rest of the banking system (net)	117	78	131	78	49	-9
Gross reserves in months of imports Stock of external debt (end of period) 12/	2 4,562	1 3,946	1 3,999	1 3,807	1 3,509	3,54
IMF Data (as of June 30, 1999) Article VIII status	,,,,,	3,2 13	0,202	2,22.	0,000	-,
Intervention currency and rate (official rate) Ouota						RD\$15.8
Fund holdings of Dominican pesos						.90 millio .60 millio
As percent of quota						118
Total Fund credit (in percent of quota)						18:
Credit tranche purchases (including SBA)						18.
Other credits						0
Special Drawing Rights Department					~~~	
Cumulative SDR allocation			*			.59 millio
Holdings of SDRs					SDR).24 millio

^{1/} Includes electricity, water production, and financial services.

- 5/In percent of exports of goods and services, plus net private transfers.
 6/Of the banking system. Changes in relation to the the stock of M2 at the beginning of the period.
 7/Interest rate on commercial bank loans with maturities of 91-180 days.

- 8/ Interest rate on certificates of deposit with maturity of 90 days.
 9/ All balance of payments data are based on the 5th edition of the Balance of Payments Manual and reflect recent revisions.
- 10/ Excludes net changes in official international reserves, including net Fund purchases.
- 11/ Includes net payment of past-due obligations paid within the grace period.
- 12/ Refers to the medium- and long-term debt of the public sector, including Fund credit.

^{2/} Includes interest due on the central bank's medium- and long-term external debt.

^{3/} Includes the quasi-fiscal operations of the central bank. The overall balance is after foreign grants and includes the overall balance of nonconsolidated public enterprises.

4/ The numerator is the average of the stock of currency in circulation and deposit liabilities of the banking system (M2)

at the beginning and end of the year.

I. OVERVIEW

- 1. This report presents a set of chapters which examine various topics of current interest in the Dominican Republic. Chapter 1 provides a brief overview of the authorities' structural reform efforts in the 1990s. It is clear from this chapter that much has already been accomplished, and this is a fundamental reason behind the extended period of growth observed in the 1990s. However, a comprehensive reform agenda (much of which is currently being considered by congress) still lies ahead, including further trade liberalization and modernization of the state.
- 2. Chapter 2 provides a history of **trade reforms**, which form an integral part of the structural reform agenda. It is shown that the restrictiveness of the trade regime has been diminishing and once congress approves several regional trade agreements, and the proposed tariff reform, the Dominican Republic will be making further progress in harmonizing its trade policies with those of its neighbors.
- 3. Chapter 3 provides a review of fiscal policy during the 1990s. The underlying theme of this chapter is that the maintenance of fiscal discipline over a number of years has been a key factor explaining the remarkable turnaround in the performance of the Dominican economy during the 1990s. The chapter discusses the major tax reforms and improvements in administration that were implemented during the 1990s, as well as developments in expenditure policy. It concludes with a survey of fiscal policy proposals being considered by the authorities, which are aimed at reinforcing the gains already achieved.
- 4. Chapters 4 and 5 deal with two topics of interest to monetary policy. Chapter 4 estimates a money demand function. Real money balances are found to be cointegrated with real GDP and interest rates. In the short run, changes in opportunity cost variables (including either domestic interest rates or the differential between domestic and U.S. interest rates) also help explain changes in real money balances. The strength of this relationship holds up over time when money is defined as M2. However, it dissipates over time when money is measured as M1 (i.e., the long-run coefficient is not statistically significant). In chapter 5, monetary and exchange rate policy (including reserve movements) are combined in a model of exchange market pressure (EMP), defined as the sum of exchange rate depreciation (defined in local currency terms) and the outflow of official reserves. Consistent with a stable money demand, a reduction in domestic credit results in a decline in EMP. Thus, contractionary monetary policy can be effective in raising official reserves.

II. STABILIZATION AND STRUCTURAL REFORMS¹

Abstract

Since 1992, the Dominican Republic has experienced an extended period of robust economic growth, declining unemployment, modest inflation, and, for the most part, a manageable external position. The achievement of a satisfactory degree of financial discipline and the structural reforms implemented in the early 1990s underlie these positive results. This chapter offers an overview of the stabilization and reform efforts undertaken by the authorities in the 1990s and highlights some of the challenges that still lay ahead.

A. Introduction

- 5. Since 1992, the Dominican Republic has experienced an extended period of robust economic growth, declining unemployment rates, modest consumer price inflation, and, a generally manageable external position. Indeed, during 1996–98, the Dominican Republic ranked among the world's fastest growing economies, with particularly strong performances in the telecommunications, construction, free-trade-zone, and tourism sectors.
- 6. This picture contrasts dramatically with the country's economic performance during the 1980s. In those years, the combination of severe monetary and fiscal imbalances, pervasive price controls, financial sector rigidities, multiple currency practices, and an extremely restrictive trade regime resulted in acute economic distortions and an inability to manage adverse shocks to the economy. External deficits soared, the peso was sharply devalued several times, and the government incurred external arrears. Moreover, economic activity stagnated.
- 7. The turnaround was accomplished through an impressive and wide-ranging stabilization and structural adjustment effort initiated during 1990–92. This program, although individual elements were met with varying degrees of success, permanently changed the economy's growth path. Domestic imbalances were addressed through measures aimed at strengthening public finances, improving monetary control, and reducing distortions in financial markets. A large number of restrictions that plagued the exchange and trade regime were removed, thus fostering the integration of the Dominican Republic into the world economy.

¹ This chapter was prepared by A. Giustiniani.

-9-

8. Despite the fragile political situation that emerged from the 1994 and 1996 presidential elections, the Dominican authorities succeeded in maintaining a broadly stable macroeconomic framework, although the pace of structural reform slowed somewhat. More recently, momentum appears to have picked up again, with the ongoing reform of several public enterprises. In order to safeguard the benefits of previous reforms, the government has elaborated and sent to congress several other important reforms aimed at modernizing the structure of the state, strengthening governance, enhancing the effectiveness of monetary and fiscal policies, removing the last impediments to a full-fledged unification of the foreign exchange market, and deepening financial market and trade liberalization.

B. The Lost Decade: 1981-90

- 9. As was the case for most of Latin America, the 1980s was a period of economic turmoil for the Dominican Republic. Economic rigidities and policy inconsistencies prolonged the country's difficulties. Large fiscal deficits contributed to excessive monetary expansion and inflationary pressures, which in turn exacerbated the distortions created by extensive price controls. An overvalued domestic currency and multiple exchange rates, combined with extensive foreign exchange surrender requirements and high trade barriers, stifled export growth and foreign investment, while protecting inefficient domestic industries. Caps on interest rates and controls on credit allocation contributed to financial disintermediation and a general weakening of the financial system. Moreover, the central bank was steadily losing official reserves, and payments arrears on the public sector's external debt service obligations were accumulating. Attempts to implement stabilization programs were short lived, especially, because of lack of fiscal discipline.²
- 10. A number of structural weaknesses contributed to the severe fiscal imbalances. The consolidated public sector deficit³ averaged about 5 percent of GDP between 1981 and 1990 (Table 1). Several factors contributed to this weak fiscal performance. First, the level of government revenues was low and volatile because of the strong dependence on international trade taxes and weak tax administration.⁴ Second, public spending was highly discretionary and inflated by sizeable losses of public enterprises, large increases in wages and employment,

² The intensity of the imbalances prompted recourse to IMF assistance in 1983 and 1985.

³ This measure of the fiscal deficit includes the central bank's quasi-fiscal operational losses. These losses arise, inter alia, from operations associated with the intermediation of foreign loans to finance priority activities, the servicing of debt on behalf of the government, the financing of certain public enterprises, and payments to institutions being liquidated.

⁴ In 1981–90, taxes on international trade and transactions averaged 5 percent of GDP, representing more than one-third of central government revenues. In 1991–98, they amounted to less than 4 percent of GDP, equivalent to less than one-fourth of total revenues.

and excessive public investment programs. Finally, the implementation of corrective measures frequently lacked effectiveness and continuity.⁵

- 11. Large and persistent fiscal deficits represented a significant burden for monetary policy. While at the beginning of the decade more than half of the public deficit was financed by foreign loans, episodes of default on external and domestic government debt led to a progressive drying up of these sources of financing. This resulted in an increasing monetization of the overall public deficit, which in turn fueled inflationary and exchange rate pressures. The inflation tax, which averaged about ½ percent of GDP in 1981–83, surged to an average of over 3 percent of GDP for the rest of the decade.
- 12. Financial repression hampered the formation of savings and its productive allocation. With the aim of preserving financial equilibrium, although pursuing conflicting policy objectives, the government tried to maintain a tight control over the financial sector. Ceilings imposed on lending rates, high and differentiated reserve requirements, extensive financial restrictions, and the allocation of credit according to political priorities created a highly inefficient and distorted financial system that adversely affected the formation of domestic savings. At the same time, these restrictions led to the emergence of an active informal financial market, complicating control of monetary aggregates.
- 13. The limited degree of openness perpetuated domestic distortions. A system of multiple currency practices, foreign exchange restrictions, surrender requirements, import prohibitions, high import duties with discretionary exemptions, and export controls contributed to perpetuate distortions in domestic markets and undermined the development of the export sector. Inconsistency between exchange rate policy and the stance of financial policies generated overvaluations of the peso that ended with sizable devaluations in 1984, 1988, and in 1990.
- As a result of these rigidities, economic performance was poor. Over the whole period, economic activity expanded at a slow pace (Figure 1) and output per capita was stagnant. Consumer price inflation, which in the early 1980s was below 10 percent, increased rapidly, reaching almost 80 percent during 1990. External current account deficits averaged 4 percent of GDP. Since inflows of foreign direct investment were hindered by the uncertain economic environment, external imbalances brought about a rapid accumulation of external debt. Despite some debt relief from official bilateral creditors in the mid-1980s, persistent

⁵ For example, the effectiveness of introducing a value added tax in 1983 was curtailed by administrative resolutions which limited the tax base.

⁶ For more details see the chapter on "Trade Reform in the Dominican Republic."

large balance-of-payments deficits were financed through a rundown of official reserves and a buildup of payments arrears.⁷

C. The Initial Phase of the Reform Effort: 1991-95

- 15. In 1990, the economic situation deteriorated markedly owing to a pre-electoral loosening of financial policies, a sharp deterioration of the terms of trade, and a prolonged drought. Economic activity weakened, inflation accelerated, the balance of payments deficit widened, pressures on the exchange rate intensified, and external arrears increased, including to the IMF, the World Bank and the IDB. Under these circumstances, the government of President Balaguer, upon receiving a new mandate in August 1990, embarked on a comprehensive economic program—known as the New Economic Program—that included price liberalization, fiscal consolidation, devaluation of the exchange rate, and decontrol of interest rates. Significant progress was made in normalizing relations with external creditors. Although the reforms implemented in the early 1990s were substantial, several important distortions and policy weaknesses remained.
- 16. Fiscal consolidation lay at the heart of the New Economic Program. During 1990, the prices of a wide range of public sector goods and services were corrected to better reflect opportunity costs. In particular, the significant correction in prices of petroleum products led to a remarkable increase in fuel tax revenues. The use of a market-determined exchange rate to calculate import duties boosted custom receipts. A tax reform, approved in 1992, modified the income tax, converted all excise taxes from specific to ad valorem, broadened the VAT tax, and raised its rate from 6 to 8 percent. On the expenditure side, food subsidies were largely removed in 1990, and current and capital outlays were restrained during the early 1990s, mainly through strict application of a daily cash management system, particularly for special funds managed by the presidency. These measures shifted the public sector primary balance from a deficit of about 1 percent of GDP in 1990 to a surplus of close to 4 percent of GDP in 1991. Despite some recovery of government expenditures in the following years,

⁷ At the end of 1990, the Dominican Republic's outstanding public external debt was about US\$4.5 billion (some 72 percent of GDP), of which about US\$1.5 billion was overdue.

⁸ During 1989–90, while oil prices were increasing, prices of ferronickel, the country's main export item, were declining. This, in turn, negatively affected government revenues.

⁹ The government's stabilization and reform efforts were supported by an IMF Stand-By Arrangement, approved in August 1991 and extended in July 1993.

¹⁰ Initially, import duties continued to be calculated at an exchange rate somewhat more appreciated than the market rate. In mid-1991, the authorities started to use the market exchange rate for this purpose.

¹¹ In the 1991–93 period, the primary balance averaged a surplus of about 3 percent of GDP. It fell off again into deficit (2.1 percent of GDP) in 1994.

especially capital expenditures, which suffered the brunt of the earlier adjustment, the consolidated public sector deficit averaged only 1 percent of GDP over the 1991–95 period. 12

- 17. In order to curb inflation, monetary conditions were tightened and monetary policy was made more effective. Lending and deposit rates were liberalized and they soared to high positive levels in real terms. Reserve requirements, freezes on excess reserves, and credit ceilings continued to be the main instruments for the conduct of monetary policy. However, the central bank started moving toward a more market-oriented management of domestic liquidity through the issue of its own certificates, with the aim of increasing reliance on open market operations.
- 18. Major reforms to the banking system were implemented to strengthen the financial system and eliminate distortions in credit markets. In late 1991, the structure of reserve requirements for commercial banks was unified at 20 percent for all deposits and selective portfolio requirements were abolished. Furthermore, beginning in 1993, significant progress was made in developing banking supervision and prudential regulations. To this end, the Superintendency of Banks was restructured and modernized, norms on capital requirements were reviewed along the lines of the Basel agreement; rules on provisioning were clarified to ensure their enforcement; and limits on lending were established to minimize concentration risk. At the same time, a draft Monetary and Financial Code (MFC) was presented to congress with the aim of reforming the statute of the central bank, strengthening banking supervision, and promoting competition in the financial system. Enforcement of the new prudential regulations brought to light the weaknesses of the financial system. Episodes of financial insolvency led the central bank to intervene in support of troubled institutions. A process of consolidation of the banking system was started through mergers and liquidations.

¹² This figure partially underestimates the actual consolidated public sector deficit because data on the central bank's quasi-fiscal losses are not available for the 1990–93 period.

While the basic reserve requirement has been unchanged since 1991, the authorities have continued to impose temporary reserve requirements in moments of particular tension in the money and exchange rate markets. Dollar deposits are only subject to reserve requirements when they exceed three times capital.

¹⁴ The original draft of the MFC aimed at strengthening central bank independence, but subsequent drafts weakened this particular aspect of the reform. However, by setting into law the various reforms that had been accomplished through decrees and resolutions by the Monetary Board, the MFC would encourage additional foreign entry in the banking system.

¹⁵ Given the absence of institutional arrangements to protect small depositors, the central bank typically took over the assets and liabilities of financial institutions being liquidated. Initially, only small deposits were paid in cash while large deposits were exchanged for central bank certificates with a one-year maturity. Since September 1994, all deposits of liquidated banks

- Significant measures were adopted to enhance the outward orientation of the 19. Dominican economy. 16 With the tax reform of September 1990, a process of gradual opening to external competition had started. The level, numbers, and dispersion of tariff rates were reduced; the scope of exemptions narrowed; and all import quotas and licensing agreements were eliminated, except in the case of certain agricultural products. In January 1991, the multiple exchange rate practice was discontinued, and the "unified" official rate was set in relation to the commercial banks' exchange rate. Although the central bank continued to intervene in the foreign exchange market, a spread between the two rates still emerged on numerous occasions. A surrender requirement of foreign exchange to the central bank remained in effect for certain transactions, but the scope of this requirement was reduced and an increasing number of transactions was conducted through the interbank market. A new Foreign Investment Law, approved in November 1995, opened up key sectors to foreign investment, including the banking sector, extended to foreign investors the guarantees granted to domestic investors, and eliminated all restrictions on profit remittances and capital repatriation.
- 20. The response to the stabilization program was positive. Economic growth resumed, driven especially by those sectors that were more open to competition, such as tourism and tourism-related activities, construction, nonsugar manufacturing, and telecommunications. In 1991–95, the average rate of GDP growth accelerated to over 4 percent, while inflation slowed sharply. Between end-1990 and end-1991, the 12-month change in consumer prices fell from 80 to 8 percent. Since then, inflation has remained in single-digit territory, except in the 1994 election year. External imbalances were generally contained, except in 1992–93. In light of the improving economic situation, the Dominican Republic began to attract sizable amounts of foreign direct investment, which became a steady source of financing of current account deficits. Further relief of the external liquidity constraint was also provided by various rescheduling and refinancing agreements that the Dominican Republic reached with its official and private creditors. This contributed to a steady and significant decline of the public

have been converted into certificates with maturities ranging from six months to four years, depending on the size of the deposit. The certificates bear an interest rate of 10 percent per annum.

¹⁶ For more details see the chapter on "Trade Reform in the Dominican Republic."

¹⁷ In those two years the current account deficit widened to 6½ and 5½ percent of GDP, respectively, partially reflecting a sharp increase in imports, associated with the rapid expansion of the economy in 1992 (8 percent) and a decline in some traditional exports.

¹⁸ Agreements on debt restructuring were achieved with Paris Club creditors in November 1991 and with commercial banks in February 1994. Bilateral agreements were also signed with a number of countries, including Mexico and Venezuela.

- 14 -

external debt, which, between 1990 and 1995, was more than halved from 72 to 33 percent of GDP.

21. Economic instability resumed in the run-up to the 1994 presidential election. Fiscal and monetary policies were relaxed, inflation rose, official foreign exchange reserves declined, and the spread between the official and the market exchange rate widened. The results of the presidential election were controversial. Ultimately, the political parties reached an agreement to shorten the presidential mandate and to hold a new election in 1996. During this interim period, the government resumed its efforts at stabilization. Although it lacked sufficient political support to implement a wide-ranging stabilization and reform program, the government avoided reversals of earlier reforms and was generally successful at containing economic imbalances.

D. The New Government: 1996-1999

- 22. Despite political difficulties, the new administration of President Fernández has provided additional impetus to the process of stabilization and reform. Reviving economic growth is considered a prerequisite to poverty reduction. To this end, trade liberalization, privatization, and public sector modernization, including improvements in the supply of social services, have been integral components of the new administration's program. This ambitious reform agenda has run into resistance from the opposition in congress. However, indications have recently emerged that political difficulties are easing. ¹⁹
- 23. A significant acceleration of the pace of economic growth, in the context of low inflation, has characterized this last period. Since 1996, the Dominican Republic has ranked among the world's fastest growing economies. The effects of past reforms and the sizable inflow of foreign direct investment are among the main factors that have contributed to this result. Unlike past episodes, this period of robust expansion has not been accompanied by a rekindling of inflationary pressures. Even in the months following Hurricane Georges, 12-month inflation remained in single digits.
- 24. A high degree of fiscal and monetary discipline underlies these positive achievements. Despite an increase in government noninterest current spending, the consolidated fiscal deficit has remained relatively modest because of the rise in tax revenues stemming from a generalized improvement in tax enforcement and administration. Broad money growth has been contained and positive real interest rates have been maintained, although at times the central bank had to rely on direct instruments of monetary control, especially when exchange rate pressures emerged. Strengthening prudential regulations and banking supervision have remained a top priority of the monetary authorities, but the absence of a sufficient political consensus has further postponed the approval of the MFC.

¹⁹ As evidenced by the successful private capitalization of the state-owned electricity company, and congressional approval of several multilateral loans.

- 25. The process of public enterprise reform has gathered momentum recently. The Public Enterprise Reform General Law, approved in June 1997, authorized increasing private sector participation in some productive sectors still dominated by state-owned enterprises such as the electricity and sugar sectors (Box 1 in accompanying staff report SM/99/185). The process of reform of state-owned companies entered into its executive stage in early 1999 with the sale of the state-owned flour mill (Molinos Dominicanos). This was followed in April and May 1999 by the private capitalization of the distribution and generation units of the state-owned electricity company (Box 1). The state-owned sugar company (Consejo Estatal del Azúcar—CEA) expects to complete the leasing of its sugar mills to the private sector by September 1999.
- On the trade liberalization front, the results were mixed. While an ambitious trade reform bill was rejected by congress in 1996, further steps were made in reducing the restrictiveness of the trade regime. During 1998, a number of nontariff barriers were removed and free trade agreements were signed with the Central American Common Market (CACM) and the Caribbean Community (CARICOM). However, the draft tariff reform legislation is still being reviewed by congress.²¹

E. The Challenges Ahead

27. There is a need to press ahead with the reform agenda, which is broad and well articulated. In order to sustain a rapid pace of economic growth and development, the benefits of the previous reforms need to be supported with fresh efforts: from further financial sector deepening to enhancing competition in the markets for goods and services; from fostering trade integration to modernizing the structure of the state. The current administration has placed these reforms high on its agenda for debate, demonstrating the government's willingness to carry them out. 22 As shown in Table 2, important draft legislation is still being considered by congress. However, recently the three major political parties—the ruling Dominican Liberation Party (PLD), the Dominican Revolutionary Party (PRD, which controls congress), and the Reformist Social Christian Party (PRSC)—expressed their intention to work together for approving the pending reforms considered essential for the social and economic development of the country.

²⁰ This Law, also, established the Commission for the Reform of Public Enterprises (*Comission de Reforma de la Empresa Pública*—CREP), which is responsible for managing the process of reform and transformation of state-owned enterprises.

²¹ For more details see the chapter on "Trade Reform in the Dominican Republic."

²² On this issue, see in particular Annex C of the World Bank's 1999 Country Assistance Strategy paper.

Box 1. The Capitalization of the Dominican Electricity Corporation

The problem

The Dominican Electricity Corporation (CDE) has been plagued by unreliable service and poor bill collection. In 1995-98, energy losses (technical and fraud) amounted to over 40 percent of total production. Government transfers averaged about 1 percent of GDP. The intermittent electricity supply has been a constraint on economic growth, as local enterprises have had to depend on more expensive self-generated electricity.

The solution

In order to solve these problems, the government invited the private sector to participate in a capitalization process, whereby the highest bidder would receive half ownership (equal to the value of the bid) and full management control. The CDE was first divided into three distribution units and two generation units, with the remainder (hydroelectric generation and transmission) remaining under state ownership. In April 1998, 19 out of 21 interested companies were selected to participate in the bidding process, subject to transparent rules. CDE net worth was assessed by an internationally recognized auditing firm, and minimum bids were established. Final bids were accepted in April 1999 (distribution) and May 1999 (generation).

Results

- The winning bids were almost 25 percent higher, on average, than the minimum bids. Some US\$643 million (4 percent of GDP) in fresh capital was raised.
- However, the net injection was only about US\$400 million, as a portion of the investment was allocated to reduce outstanding liabilities of the former CDE.
- Tariff rates are to remain constant in real terms for the next four years, although a precise indexation mechanism has yet to be determined.
- Net budget savings (transfers less payment of electricity bill) are estimated at about RD\$600 million per year (0.2 percent of GDP).

The CDE Capitalization (In millions of U.S. dollars)

	Electricity Distribution			Electricity Generation		
• ··· · · · · · · · · · · · · · · · · ·	North	So	outh	East	Haina	Itaba
Minimum price	49.1	1	.09.7	105.8	143.6	113.0
Settlement price	21	1.9 ¹		109.3	144.5	177.8

Sources: National Planning Office; and Commission for Reform of Public Enterprises.

¹ The winning bid was for the purchase of both North and South distribution companies.

- 28. Further financial deepening is key to promoting domestic saving and channeling it toward the most productive investments. To this end, the Monetary and Financial Code and the Stock Market Law would strengthen the institutional setting, promote competition and enhance transparency in financial and securities markets. Additional stimulus to the process of financial deepening would be provided by a reform of the social security system, which, besides improving the quality and effectiveness of social services, should aim at promoting private sector involvement through the development of privately managed pension funds. In addition, increasing reliance on indirect monetary instruments by the central bank and a full-fledged unification of the exchange rate regime are critical prerequisites to the development of a sound financial and exchange system.
- 29. More competitive markets are crucial to fostering economic growth and development. The proposed Market Order Code aims at removing impediments to competition in domestic markets for goods and services through establishing antitrust and unfair competition measures. Trade liberalization is crucial to creating a more competitive and dynamic economy.
- 30. Reforming the state and improving governance are also central to sustaining economic growth, because they impinge upon all the other aspects of the reform process. The achievement of these goals calls for improving accountability and transparency in public resource management, reducing opportunities for corruption, and reforming the civil service.

List of References

International Monetary Fund, Dominican Republic—Staff Report, various issues.

Leone, Alfredo Mario, 1997, "Stabilization, Structural Reforms and Challenges Ahead," mimeo.

World Bank, 1999, "Dominican Republic: Country Assistance Strategy," R99-119, June 14.

Table 1. Dominican Republic: Main Macroeconomic Indicators

	1981-85	1986-90	1991-95	1996-98
(Annual pero	centage changes, av	verages)		
Real GDP	1.9	2.8	4.2	7.6
Real GDP per capita	- 0.3	0.5	1.9	5.1
Consumer prices (during the period)	17.2	37.0	7.8	6.7
Money and quasi-money (M2)	16.2	41.6	22.4	19.7
(In perce	nt of GDP, average	es) 1/		
Consolidated public sector balance 2/	-5.0	-5.2	-1.0	-2.2
Consolidated public sector primary balance	- 3.3	-2.0	1.5	0.2
Inflation tax 3/	1.5	3.6	0.7	0.6
External current account balance	-5 .1	-3.4	-3.4	-1 .6
Net direct investment	0.6	1.5	2.3	2.7
External debt (end-period)	64.7	72.2	33.2	23.7
External debt service	7.5	9.2	4.2	2.5

Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Average ratios in each subperiods are calculated as the ratio between the sum of the relevant variable and the sum of GDP over the given period.

^{2/} Includes quasi-fiscal losses of the central bank. Since this information is not available for the 1990-93 period, central bank's losses are assumed to be zero for those years.

^{3/} The inflation tax is calculated as CPI inflation during the year times the stock of base money at the end of the previous year.

Table 2. Dominican Republic: Pending Structural Reforms

Draft Law	Description	Status
Financial sector		
Monetary and financial code	Strengthens central bank independence and banking supervision, Promotes competition and reduces segmentation in the financial system.	Approved by the senate on April 7, 1999 and currently under study by the Chamber of Deputies.
Stock market	Strengthens the organization and enhances the transparency of the securities market. Establishes norms concerning the issue and the public offer of tradeable instruments and the creation of a Security Commission.	Under study by both houses.
Public finances		
Public works and services	Establishes more transparent norms for procurement.	Approved by the senate on March 18, 1999 and under study by the Commission on Public Works and Finance of the Chamber of Deputies.
Bond issue	Allows the issue of RD\$5 billion in bonds, with a 10-year maturity and a 5 percent interest rate, to settle outstanding arrears to the private sector.	Approved by the senate on March 23, 1999 and transmitted to the Chamber of Deputies on April 7, 1999, but not discussed yet.
Public accounting	Aims at rationalizing the activities of programming, management, and distribution of public services through the creation of a General Department of Public Accounting. Divides the function of internal auditing (Controloria) from that of record keeping and administration and provides a system of balance sheet accounting.	Approved by the Chamber of Deputies on April 3, 1999 but not discussed in the senate yet.

Table 2. Dominican Republic: Pending Structural Reforms

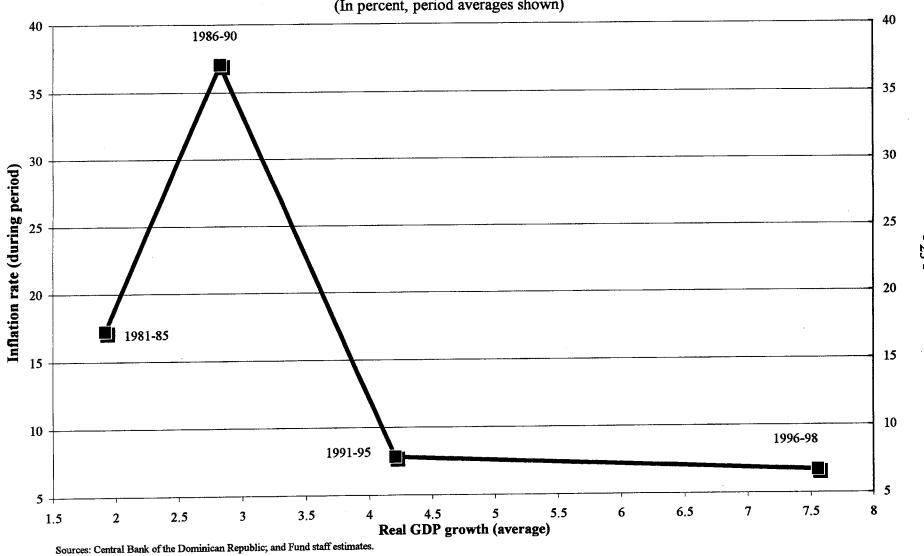
Draft Law	Description	Status
Social security	Reorganizes the social security system through the separation of functions among regulation, supervision, financing, risk management, and supply of service.	A new project was presented to the senate and is now under study by an ad hoc commission. In the Chamber of Deputies, the draft law presented by the administration lapsed, but it was presented again.
Markets for goods and s	ervices	
Market order code	Contains several measures promoting competition in markets for goods and services and protection of consumer rights and intellectual property. Envisages the establishment of a specialized authority.	Under study by the senate.
External sector		
General customs	Reforms the custom system so as to make it more transparent and efficient.	Approved by the senate on July 21, 1998, but not transmitted to the Chamber of Deputies yet
Tariff reform	Reduces the number of tariff rates in two stages: (a) in 1999 from nine to five (20-14-8-3-0); and (b) in 2000, to four (15-10-5-0). The cost in terms of reduced revenues should be compensated by an increase in the ITBIS rate (initially to 10 percent and then 12 percent) and in selective consumption taxes.	Under study by the senate.

Table 2. Dominican Republic: Pending Structural Reforms

Draft Law	Description	Status
Export incentive	Aims at promoting the development of the export sector through the establishment of a system of drawbacks on custom duties and Levies.	Approved by the Senate on March 13, 1999 and currently under study by the Commission on Industry and Commerce of the Chamber of Deputies.

Source: Information provided by the Dominican authorities.

Figure 1. Dominican Republic:
Scatter Diagram of Real GDP Growth Rates and Inflation Rates for Selected Periods
(In percent, period averages shown)



III. TRADE REFORM IN THE DOMINICAN REPUBLIC²³

Abstract

This chapter assesses the trade reforms undertaken by the Dominican Authorities during the 1990s. It argues that while significant progress has been made toward creating a more liberal trade regime, in particular, through the abolition of nontariff barriers, tariff rates remain relatively high when compared with regional trading partners. However, this comparative lack of openness has been largely offset by an extensive network of free-trade zones, which have become the primary source of the strong export performance during the last ten years. Once congress approves several regional trade agreements, and the proposed tariff reform, the Dominican Republic will be making further progress in harmonizing its trade policies with those of its neighbors.

A. Introduction

- During the early 1990s, the Dominican Republic undertook a number of important reforms toward liberalizing its trade regime. The most significant reforms took place as part of the *New Economic Program* (September 1990), when the old protectionist regime, which shielded domestic producers with high tariffs and cumbersome nontariff barriers, was largely dismantled. These reforms were consolidated in 1991–92, when the authorities simplified the exchange rate system and introduced a series of tax reforms, which eliminated several important trade-based taxes, including all export taxes.
- 32. In tandem with these tax and tariff reforms, the Dominican Republic has also actively sought to improve trade relations with its neighbors through a series of multilateral and bilateral trade arrangements. This has included, inter alia, membership in the World Trade Organization (WTO), the Association of Caribbean States (ACS), the Central American Free Trade Agreement (CAFTA), and the Caribbean Community (CARICOM).²⁴
- This chapter examines the trade reforms undertaken by the Dominican authorities during the 1990s. It argues that while the Dominican Republic has made significant progress

²³ This chapter was prepared by Jimmy McHugh.

²⁴ Ratification of the CAFTA and CARICOM is still pending in congress.

- 25 -

toward liberalizing its trade and exchange system, further reform is necessary to harmonize its trade policies with those of its neighbors. Such reform is being considered by congress at the time of this writing. The openness of the trade regime is effectively increased by an extensive network of free-trade zones. These zones continue to expand in size and number, while the enterprises within them have become the primary source of export growth during the 1990s.

B. The Trade Regime Prior to the 1990 Reform

- Like many countries in Central and South America, the Dominican Republic had developed by the mid-1980s, a restrictive trade system, with high import tariffs, import exemptions, prohibited export lists, export taxes, exchange restrictions, and multiple exchange rate arrangements. This system sought to develop import-substituting manufacturing industries. In addition, periodic balance of payments crises prompted the authorities to introduce further measures, which increased both the overall restrictiveness and the administrative complexity of the system.
- 35. Beyond creating vast economic inefficiencies, the system invited rent-seeking activities and in some cases, outright corruption. The complexity of the system ensured that serious monitoring of customs administration was impossible. The array of exemptions and overvalued multiple exchange rates made misclassification and wrongful valuation of imports and exports commonplace. Groups or individuals with special interests pursued personal advantages from restrictive licensing and nontariff barriers.
- 36. The trade system also created a strong antiexport bias. This bias was most serious within the traditional agricultural sector, where export taxes were levied on important export products such as sugar, bananas, coffee, and cocoa. In addition, all exports were subject to a foreign exchange commission of $1\frac{1}{2}$ percent of revenues.
- The tariff system was particularly restrictive and lacked transparency. It included both specific and ad valorem tariffs, which operated in a cumulative manner. In some cases, nominal tariff rates in excess of 200 percent were imposed (WTO Trade Policy Review, 1996). The system was extremely complex to administer. In line with the import substituting objective, tariff exemptions played an important role, greatly increasing effective protection for domestic industries. Firms that were registered as import substituting could obtain tariff exemptions for their imports of raw materials and intermediate inputs. Individual enterprises often obtained total or partial exemptions arising from special contracts with the government. The government also passed a series of laws and decrees which provided further specific exemptions on an ad hoc basis.

²⁵ The World Bank Country Study, "Dominican Republic: Economic Prospects and Policies to Renew Growth," (1985) provides an extensive survey of the trade regime and the impediments it placed upon economic growth.

- 38. Import prohibitions and other nontariff barriers were widespread. As part of a series of measures introduced to resolve the balance of payments crisis of 1979, the authorities introduced a list of prohibited imports covering more than 150 types of consumer goods such as certain garments, furniture, and light industrial goods. In 1982, the list was expanded to cover a further 200 items.
- 39. Throughout the 1980s, the central bank maintained a multiple currency system, with several overvalued official rates. ²⁶ Inevitably, a parallel exchange market emerged. These exchange arrangements heightened the antiexport bias, since they not only imposed surrender requirements on traditional exporters, but also required manufacturing exporters to surrender a proportion of their receipts at disadvantageous official rates. In contrast, importers of tariff-exempt goods could exchange domestic currency at advantageous overvalued official exchange rates.
- 40. The authorities made several attempts to unify the exchange rate. Unfortunately, these efforts were short lived, as frequent balance of payments crises forced the authorities to use administrative measures to maintain the supply of foreign currency needed for official uses. The exchange system became extremely restrictive after a crisis in June 1987, when all commercial banks were required to surrender their foreign exchange to the central bank, which became the sole provider of foreign exchange.

C. Trade Reform in the 1990s

- 41. The comparatively poor export performance during the 1980s, coupled with persistent balance of payments problems prompted the authorities to reevaluate their import-substituting development strategy. As part of the *New Economic Program*, the Dominican authorities undertook a wide ranging reform of their trade system.²⁷ The tariff system was simplified by reducing the number of import taxes. Most import quotas, import licensing requirements, and import prohibitions were abolished. Agricultural export taxes were suspended. In an attempt to provide a more neutral tax regime, all tax incentives and ad hoc measures, except those specifically applying to the free-trade zones, were eliminated.
- 42. In January 1991, the authorities began the process of reforming the exchange system. While still formally maintaining a dual exchange rate system, a freely determined interbank rate was introduced.²⁸ The official rate was regularly devalued and the spread between the

²⁶ In addition to maintaining a multiple currency system, the Dominican Republic also maintained many other exchange restrictions, most notably a limitation on the level of permissible profit remittances.

²⁷ Initially, the tariff reform was conducted by means of presidential decrees (339-90 and 340-90). These decrees were subsequently ratified by congress in 1993 (Law No. 14-93).

²⁸ Since 1991, the authorities have maintained a dual currency system. In practice, the official rate is revalued fairly often, but on various occasions the spread between the official and

official and interbank exchange rates was reduced. In 1993, the central bank started to reduce the number of exports which were subject to surrender requirements.

- The initial trade liberalization was further consolidated during the tax reform of 1992. The import surcharge was reduced from 15 percent to 10 percent and a program for its eventual abolition by 1995 was announced. By 1993 most export restrictions, such as export licensing, minimum export prices for agricultural products, and all export taxes were abolished. Furthermore, the export administration system was greatly simplified when most special registration and documentation requirements were eliminated. However, for statistical purposes, certain minor registration and documentation requirements are still maintained. Customs administration has also benefited from the recent automation of customs documentation, which reduced the discretion available to customs officers.
- 44. The current tariff structure has ten tariff bands, ranging from zero percent to 35 percent, levied on all imports on an ad valorem basis (Table 1). The simple average tariff is 17.7 percent, while the most common rate is 10 percent, affecting around 28 percent of all tariff lines. For certain "luxury goods" a further consumption tax (*Impuesto Selectivo al Consumo*) of between 5 percent and 80 percent is also levied, which when included raises the simple average tariff to 18.6 percent (Table 2). The value of this tax is based upon the C.I.F. price, and the amount of prior taxes and duties. In addition, a general 8 percent value-added tax, known as ITBIS (*Impuesto a las Transferencias de Bienes y Servicios*), is levied on all goods.
- 45. However, the present system still maintains a number of exemptions from import tariffs. The most notable exceptions are for those products used in the agricultural sector, for example insecticides, herbicides, and pesticides. Certain goods which are regarded as socially important, such as medicines, also benefit from exemptions. The Dominican Republic also maintains a number of export prohibitions. Exports of fresh milk and meat are prohibited in order to guarantee supplies for the domestic market, while exports of unprocessed wood, charcoal, and certain animal species are forbidden on environmental grounds.
- The system still offers important effective tariff protection to many domestically produced goods. According to the WTO, significant tariff escalation exists, especially amongst the more processed products. The WTO argues that tariff escalation is particularly pronounced for textiles and leather products.
- 47. While many formal nontariff barriers have been abolished, importers may still face serious administrative trade barriers. For example, some importers complain that customs valuations are discretionary, while arbitrary customs clearance procedures can delay the

interbank rate has become significant. Under the monetary and financial code, which is under consideration in the National Congress, the exchange rates shall be fully unified, though the elimination of all surrender requirements.

importation of merchandise.²⁹ According to the U.S. Commerce Department report, import permits which are required for certain agricultural items, are sometimes delayed or withheld.

- 48 While the majority of formal nontariff barriers were abolished as part of the trade reforms introduced in the early 1990s, until recently certain quotas were maintained on eight important basic consumption goods—beans, chicken, corn, garlic, milk, onions, rice, and sugar. During the Uruguay Round, the Dominican Republic agreed to eliminate all nontariff barriers and introduce a maximum tariff bound of 40 percent. However, it also sought a waiver on its WTO obligations with respect to these eight products, which would have allowed the Dominican Republic to introduce tariff rates above the agreed bounds and maintain nontariff quotas. The issue was unresolved during the Uruguay Round, and subsequently the authorities sought to amend their WTO schedule of concessions (through the procedures outlined in Article XVIII of the WTO Agreement). In early 1999, the WTO accepted a proposal from the authorities, which permitted the Dominican Republic to set a two-tier tariff structure for each of the eight products. The authorities propose to charge tariff rates ranging from 5 to 25 percent, on imports below a specified volume, while maintaining a maximum tariff bound of 40 percent. Imports in excess of the specified limits (Table 3) would be subjected to higher tariff rates, known as contingent tariffs, ranging from 60 percent to 137 percent in 1999 (Table 4). The authorities have also announced a schedule under which these contingent tariffs will be reduced slightly to between 40 percent and 99 percent by 2005.
- 49. The Dominican Republic still maintains surrender requirements for selected exports of goods and services. Exporters of traditional agricultural products are subject to a 100 percent surrender requirement. Foreign exchange proceeds from the provision of certain services such as telecommunications, credit card transactions, and remittances from insurance claims are also subject to surrender requirements. However, these requirements would be abolished when the new Monetary and Financial Code is passed by congress.
- 50. Compared with its regional neighbors, the Dominican Republic maintains a relatively restrictive trade regime, despite the significant progress made during the early 1990s. Table 5 provides a comparison of tariff rates for countries of comparable size in the Caribbean and Central America. Tariff rates in the Dominican Republic are amongst the highest in the region. Despite recent progress in reducing its Trade Restrictiveness Index (TRI), the Dominican Republic still has a higher index than other countries in the region (Table 6). The main reason

²⁹ See U.S. Commerce Department report, "Dominican Republic: Foreign Trade Barriers," (1999).

³⁰ For further information on the construction of this index see "Trade Liberalization in IMF-Supported Programs," (1998). Care should be taken when interpreting this index in the case of the Dominican Republic because it only refers to tariffs paid on imports to the domestic economy, and thus excludes the tariff system which applies to products imported into the free-trade zones.

for the relatively higher TRI is the high level of tariffs in the Dominican Republic compared with other countries in the region. Once the proposed tariff reform is approved (see below), the TRI is likely to decline further.

- Recently, the Dominican authorities have taken further steps toward liberalizing the trade regime. In March 1998, a number of nontariff barriers, which were created by either presidential or administrative decree, were abolished. Legislation has been submitted to congress, that provides a timetable for further significant tariff reductions and a simplification of the tariff structure. Under the proposed legislation, tariffs would be liberalized in two stages, starting in 1999, and concluding in 2000. The number of tariff rates would be reduced to four, while the new rates would range from zero to 15 percent. More specifically, the tariff structure would be: zero for raw materials not produced domestically and all capital goods, 5 percent for domestically produced raw materials and intermediate goods not produced domestically, 10 percent for domestically produced intermediate goods, and 15 percent for final consumption goods.
- 52. The diffuse nature of trade policy making was regarded as a major weakness of the trade regime, tending to slow the pace of trade reform (see WTO Trade Policy Review, 1996). While the Ministry of Foreign Affairs has the responsibility for negotiating and concluding international treaties and agreements, the Ministry of Industry and Trade determined trade policy. However, the National Sugar Institute has direct responsibility for all issues relating to sugar, including trade issues, while the Ministry of Agriculture has undertaken various technical responsibilities related to agricultural exports. Matters were further complicated by the existence of a number of special commissions and interministerial committees—for example, the Foreign Trade Commission, the National Free-Trade Zones Council, the National Council for Development, and the Tariff Study Commission.
- More recently, the authorities have tried to resolve these coordination difficulties with respect to new trade agreements. In line with a WTO recommendation, the National Trade Negotiation Commission was created in 1997. It has the ultimate responsibility for negotiating all new trade arrangements. However, technical discussions will still remain the responsibility of the relevant ministry or government body. At various times, the authorities have considered creating a new ministry which would be responsible for all trade policy issues, but this idea has not, as yet, been acted upon.

D. Free-Trade Zones

54. Over the last 30 years, the Dominican Republic has developed an extensive system of industrial free-trade zones. The rapid growth of the free-trade zones, in terms of employment, export value, and the number of firms locating in such areas has been remarkable. By 1998, there were more than 35 industrial parks, containing over 500 enterprises, employing approximately 250,000 employees, and accounting for 8½ percent of total employment. In 1998, net export receipts generated from the free-trade zones were US\$1.4 billion, and accounted for 61 percent of all exports. Since 1994, net export receipts (in U.S. dollars) from

the free-trade zones have grown, on average, by 18 percent per year (Statistical Appendix Table 37).

The rapid growth of the free-trade zones can be explained by three factors. First, the regulations governing the free-trade areas are generally regarded by both domestic and foreign investors as stable and transparent, in contrast to the legal framework governing other exports. Second, the tax incentives offered to enterprises locating to these areas are considered attractive. Finally, the geographical advantage of being close to the United States, coupled with the preferential trade arrangements such as the Caribbean Basin Initiative (CBI) and the U.S. textiles agreement, has facilitated export growth. However, this has led to a comparative lack of market diversity with the free-trade zones being heavily dependent upon U.S. export markets. However, this lack of diversity is partly compensated by other important sources of foreign exchange, such as tourism, which are dependent on other markets, namely Europe.

E. Trade Agreements

- 56. As part of the outward reorientation of trade policy, the Dominican Republic has actively sought closer trading relations with the rest of the world. In March 1995, the Dominican Republic became a member of the WTO. In order to comply with the requirements of WTO accession, the Dominican Republic passed important legislation on foreign investment and telecommunications. At present, the congress is also considering further legislation protecting intellectual property rights which it is expected to pass in early 1999.
- 57. During the 1990s, the Dominican Republic has also joined a number of regional organizations. In 1999, it joined the CAFTA. It was a founding member of the Association of Caribbean States (ACS), a body launched in January 1995 and comprised of 24 member countries. The ACS has the objective of promoting trade liberalization, and regional economic integration within the Caribbean basis. It has also recently joined the Caribbean Community (CARICOM). The main objectives of CARICOM are the economic integration of its members by the establishment of a common market, the coordination and regulation of commercial and economic relations, and the creation of a common policy with respect to other regional trade

Enterprises which choose to locate within the free-trade zones are exempt from corporate income tax, construction taxes, fees relating to the registration of loan agreements, charges related to transfers of real estate, and VAT (ITBIS). Furthermore, they are exempt from virtually all standard import duties, including duties on materials and equipment used in the establishment and operation of the company. For a full description of the tax incentives offered to enterprises locating in free-trade zones see "Legal Guide to the Free Zones of the Dominican Republic," (Pellerano and Herrera, 1998).

³² At present, the Dominican Republic is seeking parity vis-à-vis Mexico and Canada for its textiles exports.

initiatives. The Dominican Republic has also supported the proposed Free Trade Area of the Americas (FTAA). However, the authorities are keen to strengthen CARICOM and use the organization to improve the region's negotiating position, once final discussions on the creation of FTAA start.

58. The Dominican Republic enjoys important preferential access to export markets in the United States. The most important arrangement is the Caribbean Basin Initiative (CBI), which was introduced in 1984 to promote trade relations and foreign investment between the Caribbean basin and the United States. The initiative provides duty-free access for most products, except textiles, petroleum, footwear, canned tuna, and certain watches. The Dominican Republic accounts for about 25 percent of all imports entering the United States under the CBI. The Dominican Republic also benefits from the U.S. generalized system of preferences, which gives duty-free access to a wide range of products. The Dominican Republic has also negotiated a bilateral textile agreement with the United States that gives guaranteed access to Dominican textile products. The Dominican Republic became a beneficiary of the Lomé Convention in 1990, which provides for duty-free access to the European Union.³³ However, the Dominican Republic was not an original signatory to the convention, and in order to gain membership, it had to unilaterally revoke certain preferential provisions of the convention relating to important export products such as sugar, bananas, and rum.

F. Conclusion

- 59. During the early 1990s, the Dominican Republic made significant progress toward liberalizing its trade system. Much of the old trade system, which tried to foster domestic import substituting industries, has now been dismantled. Most significantly, tariff rates have been simplified and reduced, most nontariff barriers have been eliminated, and export taxes have been abolished. Much of the administrative complexity, which characterized the old system, has now disappeared.
- 60. The present trade system could best be described as dualistic. Several restrictive elements of the pre-1990 system remain in effect. Exporters of traditional agricultural products are still subject to foreign exchange surrender requirements,³⁴ and tariffs on imports are relatively high and disperse by regional standards. There is also some evidence that administrative measures are still used on occasion to delay and even prevent the importation of goods. However, parallel to this restrictive system, there is an extensive collection of highly liberalized free-trade zones, where the most dynamic export-orientated enterprises are

³³ For further details on trade relations between the Dominican Republic and the European Union, see "Libro Verde sobre la Relaciones entre la Union Europea y los Países ACP en los albores del Siglo XXI."

³⁴ Export receipts are surrendered at the official exchange rate.

located.³⁵ Not surprisingly, the significant export growth from these zones has far outpaced the lackluster performance from traditional export sectors.

61. The authorities recognize the need for a further round of trade liberalization. The legislative process for significant reductions in tariffs is now underway, while the nontariff barriers placed on traditional agricultural products are now in the process of being converted into two-tier tariffs. The final approval of the Monetary and Financial Code would unify the exchange rate and remove all outstanding surrender requirements.

³⁵ The tourism industry, which has generated impressive growth in receipts in the services account, also operates within a highly liberal framework.

List of References

- European Commission, 1997, "Libro Verde sobre las Relaciones Entre la Union Europea y los Países ACP en los Albores del Siglo XXI", Official Publications Office of the European Communities (Luxembourg).
- International Monetary Fund, 1998, "Trade Liberalization in IMF-Supported Programs," (Washington, DC).
- Pellerano, and Herrera, 1998, "Legal Guide to the Free Zones of the Dominican Republic," State Secretariat of Industry and Commerce (Santo Domingo).
- United States Commerce Department, 1999, "Dominican Republic: Foreign Trade Barriers," (Washington, DC).
- World Bank, 1985, "Dominican Republic: Economic Prospects and Policies to Renew Growth," World Bank Group (Washington, DC).
- World Trade Organization, 1996, Dominican Republic: Trade Policy Review (Geneva).

Table 1. Dominican Republic: Tariff Structure 1/

(Excluding selective consumption tax)

	Tariff	Tariff Lines 2/	
	Number	In percent of	
Tariff Bands	of Lines	Total Lines	
0	. 8	0	
1.5	19	0	
3	345	6	
5	648	10	
10	1,749	28	
15	561	9	
20	586	9	
25	827	13	
30	970	15	
35	558	9	
Total	6,271	100	
Memorandum item:			
Simple average tariff	17.7		

Sources: Dominican authorities; and Fund staff estimates.

^{1/} Does not include the contingent tariffs applied to beans, chicken, garlic, milk, onions, rice, corn, and sugar.

^{2/} At the eight-digit HS level.

Table 2. Dominican Republic: Tariff Structure 1/

(Including selective consumption tax)

	Tariff Lines 2/	
	Number	In percent of
Tariff Bands	of Lines	Total Lines
2	0	0
3	364	6
5	648	10
10	1,749	28
15	560	9
20	573	9
25	826	13
30	814	13
35	563	9
40	4	0
45	34	1
50	28	0
55	10	0
60	49	1
65	1	0
80	6	0
90	27	0
110	7	0
Total	6,263	100
Memorandum item:		
Simple average tariff	18.6	

Sources: Dominican authorities; and Fund staff estimates.

^{1/} Does not include the contingent tariffs applied to beans, chicken, garlic, milk, onions, rice, corn, and sugar.

^{2/} At the eight-digit HS level.

Table 3. Dominican Republic: Initial Import Level Before Contingent Tariff Applies

(In metric tons)

Product	1999	2000	2001	2002	2003	2004	2005
Rice	11,898	12,410	12,943	13,450	14,028	14,632	15,261
Garlic	3,600	3,750	3,900	4,050	4,200	4,350	4,500
Sugar	24,000	25,000	26,000	27,000	28,000	29,000	30,000
Chicken	8,500	9,000	9,500	10,000	10,500	11,000	11,500
Onions	3,000	3,125	3,250	3,375	3,500	3,625	3,750
Beans	14,400	15,000	15,600	16,200	18,800	17,400	18,000
Milk	33,600	35,000	36,400	37,800	39,200	40,600	42,000
Corn	858,200	897,000	935,800	974,600	1,013,400	1,052,200	1,091,000

Source: Data provided by the Dominican authorities.

Table 4. Dominican Republic: Schedule of Contingent Tariffs 1/

(In percent)

	Basic				···			
Product	Tariff	1999	2000	2001	2002	2003	2004	2005
Rice	20	114	112	109	107	104	102	99
Garlic	25	111	109	107	105	103	101	99
Sugar	20	94	93	91	90	88	87	85
Chicken	25	137	131	124	118	112	105	99
Onions	25	97	97	97	97	97	97	97
Beans	25	84	79	74	70	65	61	56
Milk	20	84	79	74	70	65	60	56
Corn	5	60	57	54	50	47	53	40

Source: Data provided by the Dominican authorities.

^{1/} Tariffs only apply when imports exceed a prespecified amount.

Table 5. Dominican Republic: Caribbean and Central America-Tariff Rates Selected Countries

	Simple Average	Minimum	Maximum	Trade Weighted Average	Standard Deviation	Description of Bands
Belize	9.2		25.0	8.6	13.3	
Costa Rica	11.2	1.0	270.0		10.6	···
Dominican Republic 1/	17.7	0.0	35.0	***	10.2	10, ranging from 0 to 35
El Salvador	10.2	1.0	30.0	8.5	7.6	
Guatemala	10.0	1.0	19.0	•••		4 bands 1, 9, 14, and 19
Haiti	10.0		15.0	•••	•••	4 bands 0, 5 10, and 15
Honduras	10.6	1.0	25.0	•••	6.9	· · · · · · · · · · · · · · · · · · ·
Jamaica	9.6		40.0	•••	13.5	8, 5 percent intervals from 0 to 40
Trinidad and Tobago	9.1		40.0	16.7	11.6	

Sources: Dominican authorities; and Fund staff estimates.

1 1 1 1 1 NO

^{1/} Does not include the selective consumption tax or the contingent tariffs applied to beans, chicken, garlic, milk, onions, rice, corn, and sugar.

Table 6. Dominican Republic: Caribbean and Central America—Trade Restrictiveness Selected Countries

	Nontariff	Tariff	Overall Trade
	Barriers	Barriers	Restrictiveness
Belize	2	2	5
Costa Rica	2	2	.5
Dominican Republic	2	3	6
El Salvador	2	1	4
Guatemala	2	2	5
Haiti	1	2	2
Honduras	2	2	5
Jamaica	2	2	5
Trinidad and Tobago	2	1	4

Sources: Dominican authorities; and Fund staff estimates.

IV. A REVIEW OF FISCAL POLICY DURING THE 1990S AND PRESENT POLICY CONSIDERATIONS³⁶

Abstract

Fiscal adjustment and tax reform during the early 1990s were instrumental in achieving high real economic growth rates and moderate inflation for the remainder of the decade. However, by the middle of the decade the reform process slowed substantially. In recent years, important gains in tax administration helped to keep the overall public sector deficit in check, while a greater reliance on broad-based domestic taxes was gradually being achieved. The authorities have proposed or are considering a number of fiscal policy reforms that would extend the progress made in recent years and would enhance the transparency and efficiency of public sector operations. It is expected that over the medium term the savings achieved from this reform agenda would allow an increase in government spending in priority areas, such as health, education, and basic infrastructure.

A. Introduction

- 62. The New Economic Program adopted in late 1990 established fiscal discipline, through a comprehensive tax reform and expenditure controls, and paved the way for an extended period of strong economic growth and macroeconomic stability. Moreover, the New Economic Program reduced economic distortions and initiated a shift in the tax base toward more stable, broad-based domestic taxes on income and consumption. Although there were some slippages during the mid-1990s, and a lack of political consensus slowed down the reform process, fiscal discipline was generally maintained over the latter part of the decade. In particular, significant improvements in administration lifted tax collections to 15 percent of GDP by 1998, their highest level in more than 20 years.
- Although much has been achieved in recent years, the authorities recognize that additional improvements in fiscal policy are still needed. Steps presently under consideration include tax and tariff reform, tax simplification, and restructuring fuel taxes; modernizing public institutions, particularly with regard to budgetary procedures and public sector employment; and regularizing outstanding domestic arrears. It is expected that these steps will enhance public sector savings and will generate resources for increased spending on priority areas, including health, education, and basic infrastructure.

³⁶ This chapter was prepared by David Dunn.

64. This chapter reviews the contribution of fiscal policy to the stabilization of the Dominican economy. It describes the major tax reforms and improvements in administration achieved during the 1990s, as well as developments on the spending side. The chapter concludes with a summary of fiscal policy proposals presently being considered by the authorities that would contribute to a consolidation of the gains achieved in recent years.

B. Contribution of Fiscal Policy to Macroeconomic Stability During the 1990s

- The monetization of fiscal deficits is a leading cause of high growth in monetary 65. aggregates and high inflation, which is a serious deterrent to economic growth. During the 1980s, the Dominican Republic had fallen into this trap. Overall public sector deficits remained high throughout the decade, averaging 5½ percent of GDP per year, including the quasi-fiscal losses of the central bank (BCRD). When external financing of these deficits largely dried up in the early part of the decade, the recourse to domestic financing, primarily from the state-owned commercial bank, Banco de Reservas, quickly led to an excessive monetary expansion.³⁷ In turn, this set off an acceleration in inflation, which contributed to exchange rate pressures, a loss of official international reserves, and an accumulation of external payments arrears. During 1984–90, annual inflation averaged over 35 percent, peaking at 80 percent during 1990, despite at least one short-lived attempt to stabilize the economy in 1985. Institutional and economic rigidities, such as prices controls, exacerbated the negative effect of these disruptions on the economy, as annual real GDP growth during this same period averaged less than 2 percent, including a nearly 6 percent plunge in real GDP in 1990.
- 66. In contrast to the previous decade, the generally disciplined fiscal policy position assumed during the 1990s, played a central role in creating a stable macroeconomic environment that was conducive to high economic growth rates. Domestic bank financing of the public sector was reduced, monetary expansion was lowered, and annual inflation rates were held to single digits for nearly the entire 1991–98 period (Figure 1). More specifically, the initial stabilization effort embedded in the *New Economic Program* shifted the overall public sector balance from a deficit of 5 percent of GDP in 1990 to surpluses in 1991 and 1992 (Table 1). This, along with other important structural adjustments included in the program, helped reverse the economic deterioration, with real GDP growing by 1 percent and inflation falling to just under 8 percent during 1991, followed by 8 percent real GDP growth and 5 percent inflation during 1992. Following this strong initial stabilization, aside

³⁷ The *Banco de Reservas* maintains roughly a 100 percent reserve on government deposits in the BCRD. Financing from this bank is equivalent to an expansion of net credit to the nonfinancial public sector by the central bank.

³⁸ See Chapter 1, "Stabilization and Structural Reforms."

from some slippages associated with the political crisis in 1994,³⁹ the overall public sector deficit remained under control. During the 1993–98 period, the deficit generally remained less than 2½ percent of GDP, annual real GDP growth averaged nearly 6 percent, and inflation (end-period basis) averaged about 7½ percent per year.

- The 1990–92 stabilization effort was achieved mainly through a strict cash management system and strengthened tax revenues. All fiscal operations, including the discretionary spending of the presidency, were placed under a strict cash management system. A swing of 3½ percentage points of GDP was achieved in the residual component of the public sector accounts, which encompasses off-budget revenues, unidentified discretionary spending, and the overall balance of the nonconsolidated public enterprises, from a deficit of 3 percent of GDP in 1990 to a surplus of ½ percent of GDP in 1991 and nearly 2 percent of GDP in 1992. Government tax revenues climbed by nearly 3½ percent of GDP between 1990 and 1992 (Table 2). Most importantly, increases of 200–300 percent in the state-controlled price of petroleum derivatives during late 1990, resulted in a sharp increase in annual revenues from the petroleum differential (fuel taxes), to about 2 percent of GDP in 1991-92 from near zero in 1990.40 Revenue from customs duties rose by about 1½ percent of GDP in 1992, as imports surged with the improvement in the economy and the liberalizing impact of the tariff reform. However, equally important was the switch to a market-based exchange rate for valuing customs duties, instead of the previously overvalued official rate. The increase in the value-added tax rate (impuesto sobre transacciones de bienes industriales y servicios, ITBIS) from 6 percent to 8 percent in 1992 also lifted revenue by about ½ percent of GDP.
- 68. The large increase in tax revenue and reduction in net off-budget spending allowed for some increases in budgetary spending without disrupting the stabilization effort. In particular, capital spending increased by about 1½ percent of GDP between 1990 and 1992. Reductions relative to GDP in the government wage bill and interest on external debt (mainly due to debt relief received from Venezuela, Mexico, and Paris Club members) ameliorated the impact of the increase in capital expenditure on total spending. Also, the operational balance of the public enterprises was brought to near zero by 1992, compared with operational losses of about ½ percent of GDP in 1990.
- 69. As noted above, there was a temporary deterioration in the fiscal accounts in 1994, as the overall public sector deficit jumped to 4 percent of GDP. Election year pressures weakened the cash management system, as government spending rose, particularly capital

³⁹ The outturn of the 1994 presidential election was disputed, which contributed to a major capital outflow and loss in official reserves. The main political parties resolved the issue by declaring then President Balaguer the winner for a shortened 2-year term. The constitution was also amended to disallow the reelection of the president for consecutive terms.

⁴⁰ These price increases coincided with rising world oil prices during the buildup to the Gulf War. Domestic fuel prices were left unchanged, even when world prices fell in early 1991.

spending, and a net off-budget deficit reemerged for the first time since 1990. Also, revenues fell, mainly due to administrative problems in the customs area.

- 70. The setback in 1994 was only temporary. However, due to a lack of political consensus, bringing the overall public sector deficit under control again had to be achieved initially through spending restraint and then through administrative measures. In 1995 the overall public sector deficit was again reduced sharply, to 1 percent of GDP, but this time through cuts in central government capital spending. Tax revenue remained weak, however, falling further to only 13 percent of GDP in 1996, the lowest level since the stabilization program began. Customs revenue collections continued to fall and a surge in international oil prices cut deeply into revenue from the petroleum differential. At end-1996, the authorities had also raised domestic fuel prices to strengthen revenues from the petroleum differential. During 1997-98, a concerted effort to improve tax administration through automation of customs, creation of large taxpayer units, tough penalties for late payment (following a brief amnesty period), and cross-checking devices enabled tax collections to climb to a new high of 15 percent of GDP by 1998, with no major changes to the tax law.
- 71. Since the spending cuts in 1995, central government current expenditures have climbed sharply relative to GDP rising to over 12 percent of GDP in 1998 from 9 percent of GDP in 1996. The roughly 50 percent increase in public sector wages effective March 1, 1997, and a steady increase in current transfers, mostly to the public sector, 41 were largely responsible for the rise in current spending. In 1998 some curbs on this spending growth were implemented, such as a freeze on public sector wages, but hurricane-related spending during the fourth quarter negated earlier efforts to reduce current spending during the year.
- 72. Growth in total government spending was moderated, however, by cutbacks in capital spending. Between 1996 and 1998, capital spending fell by about 2 percent of GDP from their earlier, excessive levels, as the outgoing government hurried to complete some major construction projects before leaving office in 1996.
- Another development in recent years, since the relaxation of the cash management system, has been the accumulation of domestic arrears, mainly to contractors and suppliers. The lack of transparency in the budget process, together with the loose coordination between the revenue and spending agencies of the government allowed a backlog of domestic arrears to accumulate, totaling $3\frac{1}{2}$ percent of GDP by end-1998.

⁴¹ In addition to the transfers to public enterprises, current government transfers largely reflect wage payments in the decentralized agencies of the general government.

C. Tax Reform and Administration

- 74. The tax reform of 1990–92 had to be comprehensive in order to correct a tax system of immense complexity that had lost much of its revenue-generating capacity due to the high inflation of the late 1980s and 1990. The reform encompassed taxes on international trade, personal and corporate income taxes, the value-added tax, and excise taxes. The tax reform was successful in gradually shifting the tax burden to the broad-based income and value-added taxes, and thus securing a more stable revenue base with growth potential. Separately, the petroleum differential was also increased dramatically through a correction to state-controlled prices during second half of 1990.
- 75. The tariff reform initiated in September 1990 addressed numerous problems in the existing system. As noted in Chapter 2, the tariff reform simplified customs duties by reducing the number of tariff rates from well over 100 to 8, ranging from 5 percent to 35 percent, and eliminating an array of specific import taxes. While this represented a sharp reduction in the maximum tariff rate (from over 100 percent), tariffs were still high by regional standards and the tariff structure allowed for a continuation of high rates of effective protection for domestic industries. Also, concomitant with the tariff reform, the authorities imposed new selective consumption taxes on various import items with rates of 5–80 percent. As a result, despite having taken a major step forward, the Dominican Republic still retained a relatively restrictive trade regime. The reform did, however, eliminate export taxes.
- 76. The new tax code issued in May 1992 (Law 11–92) modified domestic taxes in a profound way. For the personal income tax, it reduced marginal income tax rates substantially, with the maximum rate falling initially from 70 percent to 30 percent and then to 25 percent by 1995. The number of tax brackets was reduced from 16 to 3 with tax rates of 15 percent and 20 percent applied to the lower brackets. The level of minimum taxable income was raised (to about 3–4 times the minimum wage), effectively exempting 90 percent of wage earners from the income tax, thus greatly enhancing tax progressivity and simplifying administration. Tax brackets were also adjusted annually for inflation during the previous year and most tax deductions were eliminated.
- 77. The corporate income tax underwent similar reforms. The tax rate was lowered from 46 percent to 30 percent in 1992 and then to 25 percent by 1995, which not only reduced the disincentives to formalizing operations, but also harmonized the corporate income tax with the

⁴² The tariff reform was initially announced by decree in 1990 (Law 339-90) and finally set into law in September 1993. An exchange surcharge of 15 percent that was applied to about 40 percent of imports was gradually eliminated by June 1995.

⁴³ Since then, two additional tariff rates of zero and 3 percent have been introduced.

personal income tax.⁴⁴ The reform also introduced mechanisms to adjust the tax base for inflation, eliminated the double taxation of dividend income, and expanded tax coverage.

- 78. The new tax code also raised consumption taxes. In particular, the value-added tax rate was raised from 6 percent to 8 percent and various excise taxes were converted from specific to ad valorem taxes, after having lost much of their effectiveness due to the previously high rates of inflation. By international standards for value-added taxes, the 8 percent ITBIS tax rate is still quite low. Also, about half of the economy's value added is covered by exemptions, thus limiting revenues and complicating administration.
- 79. The tax reform has had success, though gradual, in shifting the tax burden to the more stable, broad-based domestic taxes with improved revenue growth potential. That is, the share of total tax revenue generated by the income and value-added taxes grew from about 33 percent in 1992 to 39 percent in 1998 (Table 3). As a share of total tax revenue, revenue from import duties fell sharply between 1992 and 1995, before leveling off at 29 percent. Revenue from the petroleum differential, in contrast, has averaged about 15 percent of total tax revenue, but its variation has been substantial, ranging from 12 percent to 17 percent of total tax revenue.
- 80. The structure of the petroleum differential has made it susceptible to large swings in revenue generating capacity. The tax is determined as the difference between the pump price of various fuels (gasoline, diesel, kerosene, aviation fuel, fuel oil, and propane gas), 46 which are controlled by the state, less their ex-refinery price and a distributor's margin. The exrefinery price varies directly with international oil prices and changes in the official exchange rate. 47 The pump prices, however, are seldom adjusted, so that a fall in world prices provides a boost to revenues, while an exchange rate depreciation or an increase in world prices reduces revenues. For example, fuel prices were left essentially unchanged between late 1990 and late 1996, at which time higher international oil prices and a devaluation of the peso cut deeply into revenues. Although a price adjustment mechanism was then incorporated into the differential's regulations, it has been used infrequently, and mostly for price decreases.
- 81. Following the 1994 presidential election and strong gains by the opposition in the legislature in the 1996 election, the tax reform process slowed as the political climate became

⁴⁴ The ten tax brackets that existed previously were also unified.

⁴⁵ Originally, the proposed ITBIS tax rate was 10 percent, but it was never implemented.

⁴⁶ The differential for propane is actually a subsidy (that is, it is negative).

⁴⁷ The public/private joint venture national refinery (Refidomsa) essentially has monopoly rights to import petroleum products. It obtains its foreign exchange for these imports at the official exchange rate.

more difficult. With only minor changes, the tax code has been left essentially unchanged since the mid-1990s.⁴⁸

- 82. Significant advances have been achieved in the area of tax administration in recent years. In 1997, an automated system for customs administration was implemented at the major air and sea ports. This system eliminated the discretion that had been available to customs officers administering import duties, which was a major source of revenue losses and potential corruption. Since 1996, customs revenues have increased by ½ percent of GDP. With regard to imports of large items, such as vehicles, machinery and equipment, and large consumer durables, customs administration has been building the capacity to cross-check information with income and value-added taxes to ensure consistency in taxpayers' declarations of these taxes.
- 83. To facilitate the coordination of domestic taxes, the administrative agency for income taxes was combined with the agency responsible for the value-added tax and other domestic taxes to form the Dirección General de Impuestos Internos (DGII) in 1996. The first priority of the DGII was to establish a large taxpayer unit for the capital district, which was accomplished in late 1997, with about 450 registered taxpayers. These taxpayers would be subject to a full tax audit at least once every three years. As of mid-1999, the DGII is on schedule with its goal to complete the first round of audits by end-2000. 49 The authorities have also made a strong effort in registering all taxpayers, big and small, with a unique identity code. As a result of these efforts, and development of the cross-checking system, tax collections (particularly from the ITBIS) from the small- and medium-sized firms have also been growing rapidly. To encourage voluntary compliance with the tax code and taxpayer registration, the government offered a temporary tax amnesty in 1997, which was followed by the enforcement of stiff penalties, such as a penalty interest rate of 25 percent per month for late payment. The authorities are considering another such amnesty in an effort to register a second wave of taxpayers. Tax administration is still hampered, however, by the existence of numerous small taxes and fees, which generate little or no revenue.

⁴⁸ In 1998, taxes on business licenses and assets of financial institutions (*patentes*) were eliminated and taxes on international telephone calls were reduced.

⁴⁹ By early 1999, the number of large taxpayers had increased to over 500 companies.

- 47 -

D. Proposals for Reform

Tax and tariff reform, tax simplification, and restructuring fuel taxes

- 84. The proposed tax and tariff reform now awaiting congressional approval would represent a large step toward opening up the Dominican economy. In many ways, this reform would be a continuation of the tax and tariff reform of the early 1990s. That is, the reform would lower the maximum tariff rate to 15 percent in two steps (over two years), while reducing the number of tariff rates to four. To compensate for the loss in tariff revenue, the reform would simultaneously raise the ITBIS rate, initially to 12 percent and then to 14 percent in the second step. This measure would add 2–3 percent of GDP to ITBIS revenues, thus increasing the share of the revenue generated by broad-based domestic taxes to over 50 percent of total tax revenues. The proposed tax and tariff reform would also raise selected excise taxes on beer, alcoholic beverages, and tobacco products.
- 85. The authorities are considering a major simplification of the tax code. At the present time, there are close to 300 individual revenue items in the accounts of the national treasury, many of which generate very little, if any, revenue. Most of these items could be eliminated or consolidated with a minimal loss of revenue, yielding savings in tax administration.
- 86. As a medium-term objective, the authorities are also considering a reform of the petroleum differential that would enable domestic fuel prices to adjust more automatically to input costs (that is, world oil prices and the exchange rate). Two options are a specific tax per unit of consumption, regularly adjusted for inflation, and an ad valorem tax. Either tax would prevent the periodic deterioration of revenue due to increases in world oil prices or depreciation of the peso.

The budget process, discretionary spending, and modernization of the state

- 87. The authorities also are considering a reform to the budget process, which presently lacks transparency and accountability. That is, the office of the presidency maintains discretionary spending accounts generally free from congressional oversight. Although the present administration has reduced the use of these accounts, mainly by gaining congressional approval of their budget proposals and meeting budget targets, discretional spending still accounts for about 20 percent of total government spending (down from about 50 percent under the previous administration).
- 88. Revenue is directed to these discretionary accounts through two main sources. First, in the budget process, a revenue target for the upcoming year is determined. Any revenue

⁵⁰ For a fuller account of this measure, see Chapter 2, "Trade Reform in the Dominican Republic."

collected during the course of the year in excess of this amount becomes available to the office of the presidency (known as account 1401). Second, the budget approved by congress sets maximum spending limits on each item. If spending is held below these limits, the unspent resources are also redirected to discretionary accounts. If congress fails to approve the administration's budget proposal, the revenue estimates and spending limits of the previously approved budget remain in effect, unadjusted for growth or inflation. These rules create extraordinary leverage for the administration in the approval of the budget, weakening the role of congressional oversight. If congress rejects the administration's proposal, it increases the discretionary funds available to the presidency as tax revenues grow.

- 89. Under the present institutional procedures for execution of the budget, slippages in the coordination and control of expenditures may occur, ⁵¹ giving rise to domestic arrears. That is, the main revenue collection agencies (customs and the DGII) report to the secretary of finance, ⁵² while the budget office (ONAPRE) reports to the technical secretary of the presidency. The controller's office, which is a separate branch of the administration, serves as an intermediary between the two. Thus, over the course of the year, ONAPRE notifies the online spending agencies of their spending limits. The agencies then proceed with their spending programs. However, there is no firm commitment by the government to cover these expenses until they are approved by the controller's office. Once a commitment has been approved, however, payment is made by the national treasury, depending upon available resources. As a result, domestic arrears have accumulated, when the coordination between the budget execution agencies has been relaxed. As these arrears have become a regular feature of government operations, procurement costs have risen and the government's creditworthiness has been damaged.
- 90. The authorities are considering a comprehensive proposal for the modernization of the state, which in addition to streamlining the public sector and enhancing the efficiency of government operations, would also address the problems in the budget process. Limits would be placed on discretionary accounts and the role of congress would be strengthened in both the development of the budget and in oversight responsibilities, while still allowing some degree of flexibility in the execution of the budget. Through the streamlining of the public sector, the modernization of the state would also aim to rationalize the size of the civil service. Over the years, numerous inefficiencies and duplications have developed in the responsibilities of government agencies, leading to an excessive expansion in public sector employment. While trimming the size of any civil service is a difficult proposition, it is anticipated that savings from this task would enable the public sector to offer more competitive wages to

⁵¹ During the stabilization effort of the early 1990s, the president himself assumed the role of coordinating revenue and spending operations.

⁵² A substantial share of revenue collections, including the petroleum differential and nontax revenues associated with the granting of mining rights, are delivered directly to the national treasury or the office of the presidency.

retain qualified staff, while still reducing the total wage bill, and permitting a reallocation of resources to priority areas.

Regularizing domestic arrears

- 91. The steps taken to regularize domestic arrears are divided along the lines of obligations accumulated by the present administration and those accumulated by previous governments. With regard to the latter, a proposal is with the congress that would convert the recognized obligations (totaling RD\$5 billion or just over 2 percent of 1998 GDP) into marketable government securities. It has been proposed that these securities have a 10-year maturity and a 5 percent interest rate, but their terms are still subject to negotiation between the administration and congress.
- 92. Toward the end of 1998, the outstanding claims on the present administration were formalized into certificates that assured claimants that they would be compensated by August 2000, the end of the president's term. These certificates totaled RD\$2.7 billion or just over 1 percent of GDP. It has been negotiated with representatives of the claimants that the government would settle the majority of the these claims through land-for-debt swaps, mostly involving lands provided by the state sugar company (CEA).⁵³ The government has also established monthly auctions to buy back in cash a relatively small amount of these certificates. Through the first several auctions, the government has obtained about a 50 percent discount on the face value of the certificates.

Redirecting spending toward priority areas

93. The authorities have acknowledged that while the primary approach toward improving social conditions and poverty alleviation is to sustain high real GDP growth rates for the economy, more government resources also need to be directed toward social services, including health and education, and basic infrastructure. During the first two years of the present administration, spending on health and education rose to just over 3½ percent of GDP in 1997, ompared with just over 3 percent of GDP in 1995. But these spending levels are still low by international standards. It is anticipated, that over the medium term, through savings obtained from the reduction in transfers to public enterprises, largely achieved through

⁵³ CEA, which owns about one-third of the land in the Dominican Republic, would provide land to the government in exchange for government transfers it has received in recent years to cover its operating losses.

⁵⁴ The most recent data available on central government spending by function.

the ongoing privatization process,⁵⁵ and a rationalization of the civil service, spending in these priority areas, as well as on basic infrastructure, could grow by 2–3 percent of GDP.

E. Conclusion

94. A remarkable fiscal adjustment and comprehensive tax reform during the early 1990s were instrumental in achieving high real GDP growth rates and moderate inflation for the remainder of the decade. However, largely due to the difficult political climate that prevailed during the mid-1990s, the pace of fiscal reform slowed. To date, the reform agenda for fiscal policy remains unfinished and a number of proposals are being considered that would enhance the tax base, including a shift toward greater reliance on broad-based domestic taxes, and an improvement in the efficiency and transparency of public sector operations. It is expected that over the medium term, the savings achieved from these reforms would allow an increase of 2–3 percentage points of GDP in government spending in priority areas, such as health, education and basic infrastructure.

⁵⁵ See Chapter 1, "Stabilization and Structural Reforms" for a more thorough discussion of this reform.

List of References

- Dauharje, Andrés, hijo, Jaime Aristy Escuder, et al., 1996, El Programa: Programa Macroeconómico de Mediano Plazo para la República Dominicana: 1996–2000, (Santo Domingo).
- Dirección General de Impuestos Internos, 1999, "Proyecto de Simplificación del Sistema Tributario," (preliminary).
- Foreign Tax Law Publishers, 1993, Tax Laws of the World—Dominican Republic, (Ormond Beach, Florida).
- Lizardo, Magdalena and Rolando Guzmán, 1999, "La Reforma Arancelaria: Elementos para su Racionalización," Oficina Nacional de Planificación, Working Paper.
- Oficina Nacional de Planificación, 1998, "La Economía Dominicana: Comportamiento Reciente y Perspectivas de Mediano Plazo," (unpublished).
- Oficina Nacional de Presupuesto, 1998, Informe de Ejecución Presupuestaria 1997, (Santo Domingo).
- Pellerano, Fenando, 1999, "Una Evaluación de la Situación Fiscal Dominicana," Secretaría de Finanzas, Working Paper.
- World Bank, 1999, Country Assistance Strategy Paper of the World Bank Group for the Dominican Republic (Washington, DC).

Table 1. Dominican Republic: Summary of the Consolidated Public Sector

(In percent of GDP)

	1980-89	1990	1991	1992	1993	1994	1995	1996	1997	Prel. 1998
Total revenue	13.7	13.1	14.7	16.4	17.0	15.9	16.6	16.3	17.8	17.8
Current revenue 1/	13.3	12.8	14.5	16.1	16.6	15.8	16.2	15.3	16.9	17.0
Capital revenue 1/	0.4	0.4	0.2	0.3	0.4	0.1	0.4	1.0	0.9	0.8
otal expenditure	16.3	15.1	15.7	16.8	18.9	18.6	16.5	16.9	17.2	18.9
urrent expenditure 1/	9.9	8.0	7.4	8.1	8.9	8.8	9.1	9.1	11.1	12.3
apital expenditure 1/	6.3	7.1	8.3	8.7	10.0	9.8	7.4	7.8	6.1	6.6
urrent account balance	2.4	4.1	6.9	7.9	7.7	6.5	6.9	5.3	4.2	3.8
General government	3.4	4.8	7.1	8.0	7.7	7.0	7.1	6.2	5.9	4.6
Public enterprises	-1.0	-0.6	-0.2	0.0	0.0	-0.5	- 0.3	- 0.9	-1.6	-0.9
entral bank losses	-1.1	0.0	0.0	0.0	0.0	-0.4	-0.4	-0.6	-0.7	-0.7
esidual balance 2/	-1.6	-3.1	0.6	1.8	0.7	-0.7	-0.5	0.2	-0.4	0.0
verall balance before grants	-6.2	-5.7	-0.5	1.4	-1.2	-4.3	-1.1	-1.9	-2.2	-2.7
rants	0.8	0.8	0.7	0.2	0.3	0.2	0.1	0.1	0.1	0.1
verall balance after grants	-5.5	-4.9	0.3	1.6	-0.9	-4.1	-1.0	-1.8	-2.1	-2.5
inancing	5.5	4.9	-0.3	-1.6	0.9	4.1	1.0	1.8	2.1	2.5
oreign	2.4	3.7	2.2	0.7	0.3	-0.2	0.0	-0.3	-0.4	0.2
omestic	3.0	1.2	-2.5	-2.3	0.5	4.4	1.0	2.2	2.5	2.3
Of which										
Bank financing	3.0	1.2	-2.5	-2 .3	0.5	3.1	0.1	0.5	0.6	0.6
Iemorandum items:					1.6	2.1	1.6	0.7	0.3	0.2
rimary balance	-3.5	-0.8	3.9	4.3	1.6	-2.1	1.6	0.7	0.3	-0.2

Sources: National Budget Office; Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Net of intrapublic sector transector transfers.

^{2/} Refers to the overall balance of the nonconsolidated public enterprises, off-budget revenues, unidentified discretionary spending, and statistical discrepancies.

Table 2. Dominican Republic: Summary Operations of the Central Government (In percent of GDP)

-	1980-89	1990	1991	1992	1993	1994	1995	1996	1997	Prel. 1998
Total revenue	12.9	12.4	13.5	15.2	15.7	14.7	15.1	14.4	16.1	15.9
	12.7	12.1	13.3	15.0	15.5	14.6	15.0	14.2	15.9	15.8
Current revenue	11.1	10.3	11.7	13.7	14.6	13.6	13.6	13.1	14.7	15.0
Tax revenue	2.4	2.6	2.4	2.4	2.5	2.3	2.5	2.5	2.7	2.8
Taxes on income and profits	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Taxes on property		3.4	5.1	5.4	6.4	6.7	6.9	6.6	7.5	7.6
Taxes on goods and services	3.9	3.4	3.1	3.4	0.4	0.7	0.7	0.0	7.5	7.0
Of which	0.0	0.3	2.0	1.7	2.0	2.3	2.1	1.8	2.4	2.6
Oil price differential	0.2	0.2	2.0 1.5	2.1	2.6	2.6	2.5	2.5	2.9	3.0
Value-added tax (ITBIS)	0.4	1.6		5.7	5.5	2.0 4.4	4.0	3.8	4.2	4.3
Taxes on international trade	4.2	4.1	4.0			0.1	0.1	0.1	0.1	0.1
Other taxes	0.2	0.1	0.1	0.1	0.1		1.4	1.1	1.3	0.1
Nontax revenue	1.6	1.8	1.6	1.3	0.9	1.0				
Capital revenue	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.3	0.2	0.1
Total expenditure	14.2	13.4	12.5	14.2	16.5	17.1	14.3	15.8	16.9	16.7
Current expenditure	9.5	7.4	6.5	6.8	7.8	7.8	7.9	9.0	11.4	12.0
Wages and salaries	4.2	2.7	2.3	2.5	2.9	3.1	3.5	3.6	5.1	4.6
Goods and services	1.6	1.0	0.9	1.4	1.8	2.1	1.3	1.3	1.5	0.6
<u> </u>	1.0	1.6	1.6	1.2	1.0	1.1	1.1	1.3	1.1	0.7
Interest	2.8	1.8	1.6	1.6	2.0	1.6	1.9	2.5	3.3	3.4
Current transfers	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.4	0.4	2.6
Other 1/		6.0	6.0	7.4	8.7	9.3	6.5	6.8	5.4	4.7
Capital expenditure	4.6			3.5	5.4	6.0	4.7	5.4	3.8	3.1
Fixed investment 1/	2.4	3.4	2.4	2.8	2.8	2.7	1.6	1.3	1.6	1.5
Capital transfers	1.9	2.3	2.6			0.5	0.1	0.1	0.0	0.1
Other	0.4	0.2	1.0	1.0	0.6	0.3	0.1	0.1	0.0	0.1
Current account balance	3.2	4.7	6.7	8.2	7.7	6.8	7.2	5.1	4.5	3.8
Other transfers payments 2/	0.0	-0.1	-0.7	-0.5	-0.9	-0.8	-0.7	-0.5	-0.2	-0.2
Statistical discrepancies 1/	-0.8	-0.2	0.4	0.7	0.6	-0.2	0.0	0.3	-0.4	-0.6
Overall balance	-2.1	-1.3	0.7	1.2	-1.1	-3.3	0.2	-1.7	-1.4	-1.6
With an along	2.1	1.3	-0.7	-1.2	1.1	3.3	-0.2	1.7	1.4	1.6
Financing	1.4	1.6	1.1	0.5	0.5	0.2	0.2	0.1	-0.3	0.0
Foreign		-0.2	-1.7	-1.7	0.6	3.1	-0.4	1.6	1.7	1.6
Domestic	0.7		-1.7 -1.7	-1.7 -1.7	0.5	2.3	-0.9	0.5	0.5	0.5
Banking system	0.7	-0.2	0.0	0.0	0.0	0.8	0.3	1.2	0.8	1.8
Domestic arrears (net change)	0.0	0.0		0.0	0.0	0.0	0.3	0.0	0.4	-0.8
Private sector 3/	0.0	0.0	0.0	V.V	0.0	υ.υ	U.L	0.0	V. T	

Sources: The National Budget Office (ONAPRE); the Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Includes extrabudgetary expenditure not reported by ONAPRE. 2/ External debt service of the public enterprises. 3/ Reflects net payments deferred to the following year.

Table 3. Dominican Republic: Tax Revenue by Source

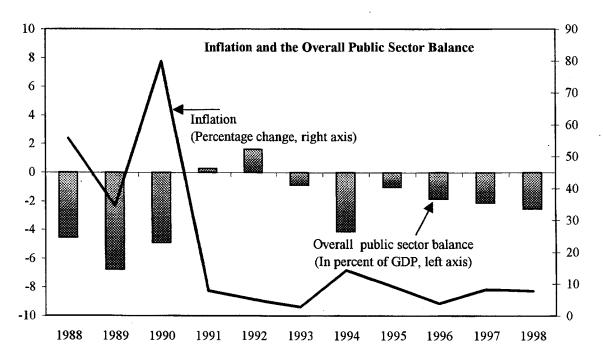
(In percent of total tax revenue)

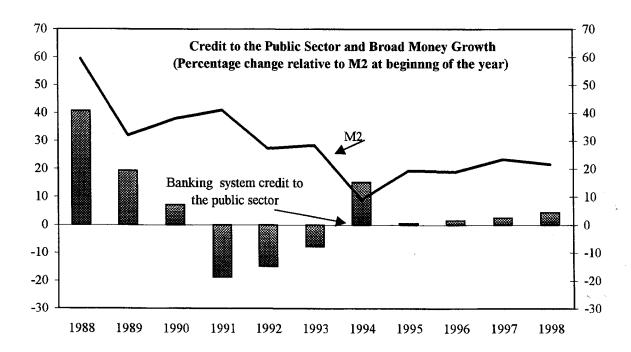
	1990	1991	1992	1993	1994	1995	1996	1997	Prel. 1998
Total tax revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Taxes on income and profits	25.6	20.9	17.8	17.4	17.1	18.7	19.2	18.7	19.1
Taxes on property	1.0	0.7	0.7	0.7	0.8	0.8	0.9	1.0	0.9
Taxes on goods and services	33.3	43.6	39.7	43.6	49.2	50.6	50.6	51.3	50:9
Of which	1.7	17.2	12.1	13.7	16.8	15.4	14.0	16.6	17.2
Oil price differential Value-added tax (ITBIS)	15.6	17.2	15.6	18.0	18.8	18.6	19.3	19.8	19.8
Taxes on international trade	39.4	34.4	41.4	37.7	32.4	29.5	28.9	28.6	28.8
Other taxes	0.7	0.5	0.4	0.6	0.5	0.5	0.4	0.4	0.4
Memorandum item:									
Broad-based domestic taxes 1/	41.2	33,9	33.4	35.4	36.0	37.3	38.5	38.5	38.9

Sources: The National Budget Office (ONAPRE); and the Central Bank of the Dominican Republic.

^{1/} Consists of income taxes and the value-added tax (ITBIS).

Figure 1. Dominican Republic: The Overall Public Sector Balance, Net Domestic Bank Credit to Public Sector, and Inflation





Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

V. MONEY DEMAND IN A SMALL OPEN ECONOMY: THE CASE OF THE DOMINICAN REPUBLIC⁵⁶

Abstract

This chapter estimates money demand under two alternative specifications, one using the domestic interest rate, and the other using the interest rate differential between the domestic interest rate and the United States interest rate. In the period 1992:1-1999:1, there is cointegration between the real monetary aggregates M1 and M2, real output, and either the domestic interest rate or the interest rate differential. The long-run income elasticity is not statistically different from one. The long-run interest rate semi-elasticity, or the long-run interest rate differential semi-elasticity, is only significant for real M2. The two semi-elasticities are not statistically different.

A. Introduction

95. The objective of this chapter is to estimate a money demand equation for the Dominican Republic. The formulation of monetary policy in the Dominican Republic is centered around an annual monetary program prepared by the central bank (BCRD) and discussed with the government. The theoretical framework of the program is the monetary approach to the balance of payments. Given expected annual real output growth, together with the inflation and exchange rate/foreign reserve objectives of the monetary authorities, an estimated money demand establishes a constraint on the assets and liabilities of the BCRD's balance sheet. The program also specifies quarterly objectives for the intermediate targets (currency) and monetary policy instruments (e.g., central bank paper). The quarterly objectives serve as guidelines for the Monetary and Exchange Affairs Committee as it monitors higher frequency indicators of the demand for money. Deviations from the projected

⁵⁶ This chapter was prepared by F. Nadal-De Simone. I am grateful to P. Brenner,

J. Chan-Lau, D. Dunn, M. Kaufman, S. Lizondo, R. Rennhack, E. Tanner, and P. Young for their comments.

⁵⁷ The Monetary and Financial Code currently being discussed in congress would require that the monetary program be submitted to congress.

path trigger a consultation with the governor of the BCRD and the Monetary Board, which ultimately decides the course of action to take.

- 96. The main instrument used for the implementation of monetary policy is central bank paper called *certificados de participación*. However, the BCRD also manages liquidity in the system using direct measures such as credit controls and the freezing of excess reserves held by financial institutions at the BCRD. The BCRD intervenes in the free (commercial bank) foreign exchange market mostly with the objective of smoothing the irregular and seasonal components of exchange rate behavior. Since late 1991, interest rates have been freely determined by market forces.
- 97. The motivation for this study is threefold. The first motivation for estimating a money demand equation for the Dominican Republic is to test whether there is a long-run (cointegrating) relationship between real monetary aggregates and real income. The key role that money demand plays in the formulation and implementation of monetary policy in the Dominican Republic contrasts with the doubt that there is a long-run relationship (cointegration) between real money aggregates and real income both in academia and among policy makers (Leiderman and Svensson, 1995, Blinder, 1998). ⁵⁹
- 98. The second motivation for this study is to test the degree of independence that the BCRD has in setting monetary policy. According to the Mundell-Fleming model, which underlies the estimation of money demand in this chapter, a policy induced increase in interest rates encourages capital inflows (Mundell, 1963). In the absence of central bank intervention in the foreign exchange market, the exchange rate appreciates as a result. Those capital inflows are normally intermediated by the banking system, which may buy the foreign currency with cash or lend the foreign currency domestically. If private agents demanding the foreign funds do not run down their bank deposits, it is possible for M2 (and credit to the private sector) to grow, and for interest rates to fall. The main point is that, depending on the degree of capital mobility and asset substitutability, the final effect of the monetary policy tightening may be smaller than its initial effect, both on M2 and on the interest rate.

⁵⁸ There is a dual foreign exchange market in the Dominican Republic: all traditional exports, credit card, and telecommunication transactions are subject to surrender requirements (about 15 percent of the total volume of foreign exchange transactions) and the remainder goes through the free market. The BCRD is responsible for providing foreign exchange for the payment of the petroleum import bill and the servicing of the public sector's foreign debt.

⁵⁹ Nonetheless, many economists believe that there may be a role for monetary policy in the short run.

⁶⁰ If the central bank intervenes in the foreign exchange market to moderate the change in the exchange rate, M2 will increase unless the intervention is fully sterilized.

- 99. The third motivation, a corollary of the last point, is to be able to assess the stance of monetary policy (see Christiano et al. 1998). The literature normally finds that a contractionary monetary policy increases domestic interest rates and appreciates the domestic currency. This highlights the role of capital flows in open economies discussed above. In the recent Asian crisis, this has been at the heart of much debate. The press argued that high interest rates in Asia indicated a "tight" monetary policy. Based on the growth of monetary aggregates, Corsetti et al. (1998) characterized the monetary policy stance in Asia as "loose." This debate suggests that the "monetary policy stance" may not be well measured by interest rates alone, or by the growth of monetary aggregates alone, whenever there is feedback between monetary aggregates and interest rates, as is the case in small open economies. Interest rates contain both policy- and market-determined elements and it is important to consider the evolution over time of financial variables in accurately assessing the stance of monetary policy (Tanner, 1999).
- 100. Econometric estimators of money demand equations should be able to deal with the suggested endogeneity of interest rates. This paper uses a Phillips-Loretan (1991) non-linear dynamic least squares estimator to estimate two versions of a standard money demand equation, one that uses as a regressor a domestic interest rate, and another one that uses the interest rate differential between the Dominican Republic and the United States. The next section describes the model and the econometric technique used. Section B discusses the results. Section C concludes and discusses some policy implications. The appendix discusses unit root and cointegration results in detail.

B. The Model and the Estimation Technique

- 101. Given the theoretical framework of the Dominican Republic monetary program, this paper investigates whether two measures of real money aggregates, M1 and M2, are cointegrated with real output and nominal interest rates. Two sets of interest rates are used, a domestic interest rate, and an interest rate differential between the country and the rest of the world. Because the interest rate differential can be viewed as a measure of the degree of capital mobility (Cuddington, 1983, or Siklos, 1996), a statistical comparison between the estimates using the domestic interest rate and the estimates using the interest rate differential will be used to assess whether it is valid to ignore the openness of the capital account in money demand estimation in the Dominican Republic.
- 102. With all variables except interest rates expressed in logs, the money demand equation is:

$$\left(\frac{M}{P}\right)_{t} = a + by_{t} + cr_{t} + \varepsilon_{t}, \tag{1}$$

where M is a nominal monetary aggregate, P is the consumer price index, y is real output, r is an interest rate, and ε is a normally distributed disturbance with zero mean and variance σ^2_{ε} . Similarly, the money demand equation with the interest rate differential is:

$$\left(\frac{M}{P}\right)_t = a + by_t + c(r_t - r_t^*) + \eta_t \tag{2}$$

where r^* is the foreign interest rate, and η is a normally distributed disturbance with zero mean and variance σ^2_n .

103. If there is a long-run relationship among real monetary aggregates, real income, and interest rates, then there will be feedback between that long-run equilibrium relationship and the errors that drive the regressors (i.e., real output and interest rates). OLS, single equation error correction methods, and unrestricted VARs will lead to estimators that are asymptotically biased and inefficient. Therefore, equations (1) and (2) were estimated using the non-linear dynamic least squares estimator of Phillips and Loretan. The authors show that this single-equation technique is asymptotically equivalent to a maximum likelihood estimator on a full system of equations under Gaussian assumptions. The technique provides estimators that are statistically efficient, and whose t-ratios can be used for inference in the usual way. Most importantly, the method takes into account both the serial correlation of the errors and the endogeneity of the regressors that are present when there is a cointegration relationship. The two regressions estimated are given by equations (3) and (4),

$$\left(\frac{M}{P}\right)_{t} = a + by_{t} + cr_{t} + \sum_{i=-k}^{k} \left[d_{i} \Delta y_{t-i} + e_{i} \Delta r_{t-i}\right] + \rho \left[\left(\frac{M}{P}\right)_{t-1} - a - by_{t-1} - cr_{t-1}\right] + \varepsilon_{t},$$
(3)

$$\left(\frac{M}{P}\right)_{t} = a + by_{t} + c(r - r^{*})_{t} + \sum_{i=-k}^{k} [d_{i} \Delta y_{t-i} + e_{i} \Delta (r - r^{*})_{t-i}] + \rho \left[\left(\frac{M}{P}\right)_{t-1} - a - by_{t-1} - c(r - r^{*})_{t-1}\right] + \eta_{t}. \quad (4)$$

- 104. Note that equations (3) and (4) include leads and not just lags. Phillips and Loretan (1991) show that leads are required to produce valid conditioning (i.e., to make the residuals ϵ_t and η_t orthogonal to the entire history of the regressors). Similarly, the estimator includes the lagged equilibrium relationship as well as lags of changes in the left-hand side variable $\left(\frac{M}{P}\right)_{t-1}$. The reason is that lags of $\left(\frac{M}{P}\right)_{t-1}$ are not good proxies for the past history of ϵ_t and η_t because of the persistence in effects of innovations from the unit roots in equations (1) and (2). This requires the use of a non-linear technique.
- 105. In this study, we are mostly interested in the estimated values of the coefficients "b" and "c" because they are the parameter estimates of the *long-run* relationship between money aggregates, real output, and interest rates. It is expected that b = 1, and that c < 0 in the case of M1. As indicated earlier, the openness of the capital account and the frequent foreign

exchange interventions of the BCRD may have resulted in a positive correlation between real M2 and the domestic interest rate, suggesting that c>0. Perhaps equally important, in the relatively underdeveloped state of the Dominican financial markets, time deposits (quasimoney) serve as the main savings instrument, also suggesting that c>0 for M2.

106. Equations (3) and (4) were estimated using quarterly data from 1992:1 to 1999:1. There are no indices of real activity available at a higher frequency in the Dominican Republic. Extending the sample back in time would imply going into a period when interest rates were not market-determined and important structural reforms, documented in other chapters of this report, had not yet taken place. The domestic interest rate used was the 90-day deposit rate and the foreign interest rate used was the 90-day U.S. treasury bill rate.

C. Unit Roots, Cointegration, and Long-Run Elasticities

Unit root and cointegration tests⁶¹

- 107. Table 1 reports the results for unit root tests. In general, the two sets of tests considered tend to indicate that real M1, real M2, the domestic interest rate, and the interest rate differential are unit root processes. However, in the case of real output, only one of the two tests confirmed it was a unit root process, but it was the more powerful of the two. Other econometric tests were consistent with real output being a unit root process (see Appendix).
- 108. Tests for cointegration were based on the Johansen-Juselius (1990) method with critical values corrected for small sample bias using Cheung and Lai's (1999) approach (Table 2). Tests of the residuals indicated that they were not serially correlated. Overall, there is strong statistical evidence of a long-run cointegration relationship between real monetary aggregates, real output, and interest rates in the Dominican Republic during the sample period. For more information on the tests see the Appendix.

The long-run elasticities of the model

Although the main objective of the paper is the testing of the existence of a long-run relationship between real money aggregates, real output, and interest rates, it was also thought important to look into the dynamics of the short-run disequilibrium. As a result, Table 3 reports not only the long-run parameters of the models, but also the parameters of the short-run dynamics from the Phillips-Loretan non-linear dynamic least squares estimator. 62

⁶¹ The Appendix elaborates on the unit root and cointegration tests performed.

⁶² The tests were started using a lag (and lead) structure similar to that in Johansen. The laglead structure necessary to eliminate serial correlation varied across models; one lag and one lead were preferred for all cases except for real M2 and the domestic interest rate where two leads and two lags were preferred. In all cases, however, conscious about Phillips and Loretan warning of over-fitting, the number of leads was reduced by one first. Lags were reduced then

- 110. Analysis of the residuals indicated that they were white noise; there is agreement between the non-parametric test (Bartlett-Kolmogorov-Smirnov) at the 10 percent level and the visual observation of the residuals in Figures 1-4.⁶³ The residuals are also homoskedastic according to two chi-square tests using one and four lags.⁶⁴
- 111. The constant and the long-run output elasticity are significant at the 99 percent level. As expected, the long-run output elasticity is not statistically different from one in any case at the 90 percent level (and above) as denoted by the χ^2 statistic.
- 112. Importantly, the long-run interest rate semi-elasticity of real M1, using either the domestic interest rate or the interest rate differential, is not statistically different from zero at conventional confidence levels. In contrast, the long-run interest rate semi-elasticity of real M2 is positive, and strongly significant. Its value, however, is small (0.05). It should be noted that the coefficient on the domestic interest rate is not statistically different from the coefficient on the interest rate differential. Given the econometric technique used, this is consistent with predictions of the Mundell-Fleming model, suggesting that it is the interest rate differential that matters for money demand in a small open economy such as the Dominican Republic. In other words, it is the ability of the central bank to affect the interest rate differential that influences money demand, not its ability to set a domestic interest rate independent of foreign interest rates.
- 113. The positive long-run interest rate semi-elasticity of real M2 is consistent with the open economy paradigm of Mundell-Fleming suggesting a reduction over time in the efficacy of monetary policy in creating a wedge between domestic and foreign interest rates. A tightening of monetary policy, for instance, increases the domestic interest rate, encouraging capital inflows and an appreciation of the exchange rate. If the authorities let the currency appreciate, real M2 may increase as the banking system intermediates the capital inflow and domestic currency denominated deposits rise. If the authorities intervene to prevent the appreciation of the exchange rate, the monetary base may increase (increasing real M2, ceteris

if necessary. Every time, the parameter estimates and their significance as well as whether the residuals were white noise, was checked.

⁶³ The figures have an upper and a lower confidence interval calculated as a Bartlett's test which is normally distributed. The confidence intervals are wide due to the relatively short sample period. However, note that 100 observations would give a value of ± 0.20 for the 95 percent level and about ± 0.16 for the 90 percent level.

⁶⁴ The R² is reported although in a cointegrated system estimated with valid conditioning it is not meaningful as a measure of fit.

⁶⁵ Nadal-De Simone and Razzak (1999) found that increases in the interest rate differential between the United States and Germany, and between the United States and the United Kingdom, appreciated the U.S. dollar during the floating period.

paribus) as long as they do not sterilize their intervention. Sterilization, to offset the increase in the monetary base, would put upward pressure on interest rates, attracting further capital inflows.

- 114. It is noteworthy that all coefficients of *changes* either in the domestic interest rate or in the interest rate differential (lagged, contemporaneous, led) that are significant, are also negative. Moreover, they are not statistically different across models. The coefficients on the interest rate changes reflect the short-run dynamics of the model.
- 115. The varying results for short- and long-run coefficients illustrate that in assessing the stance of monetary policy in open economies, it is important to distinguish the long-run equilibrium from the short-run dynamics. Otherwise, the identification of the effects of policy shocks (and nonpolicy shocks) on interest rates is likely to be difficult. For example, a policy induced monetary tightening will increase interest rates and reduce money demand in the short run. However, because of the feedback between interest rates and capital flows, over time, we may find that the initial monetary tightening produces an increase in monetary aggregates. In addition, if inflation expectations decline (as they should with a monetary policy tightening), interest rates will eventually decline, and this should not be interpreted as a loosening of monetary policy.
- 116. Finally, the highly significant values of the coefficients measuring the previous period deviation from long-run equilibrium indicate that adjustment takes place between three and six quarters. This is consistent with most accounts of the lags with which monetary policy normally operates.

D. Conclusions and Policy Implications

- 117. This study reports the estimation of two money demand models for two real monetary aggregates (M1 and M2), one using the domestic interest rate and the other using the interest rate differential between the 90-day domestic deposit rate and the 90-day U.S. treasury bill rate. The results suggest that in the sample period 1992:1–1999:1 there is cointegration between the real monetary aggregates M1 and M2, real output, and either the domestic interest rate or the interest rate differential.
- 118. The long-run income elasticity is not statistically different from one in any of the cases studied. The long-run interest rate semi-elasticity, or the long-run interest rate differential semi-elasticity, is significant for real M2 demand, but not for real M1 demand. Moreover, the long-run interest rate semi-elasticity of the domestic interest rate is not statistically different from the semi-elasticity of the interest rate differential. The long-run semi-elasticities always assume a low value.
- 119. Overall, the results of the paper lend support to the central role that money demand has in the monetary program of the BCRD. However, the results also indicate that the long-run efficacy of monetary policy in the Dominican Republic is reduced when it is measured by its efficacy in affecting the domestic interest rate in a lasting manner.

120. Despite the robustness of the results of the paper, it should be kept in mind that the short sample available prevented any meaningful stability test. Similarly, an out-of-sample simulation could not be performed. Finally, the use of the terms "long-run cointegration relationships" between real monetary aggregates, real output, and interest rates in this paper should be put in the context of the seven-year length of the sample available. 66

⁶⁶ Admittedly, seven years is already "the long-run" for monetary policy.

List of References

- Blinder, A. S., 1998, Central Banking in Theory and Practice (Cambridge, Massachusetts: The MIT Press).
- Cheung, Y.W. and K.S. Lai, 1993, "Finite Sample Sizes of Johansen's Likelihood Ratio Test for Cointegration," Oxford Bulletin of Economics and Statistics, 55: 313–328.
- Christiano, L. J., M. Eichenbaum, and C. L. Evans, "Monetary Policy Shocks: What Have We Learned and to What End?" *National Bureau of Economic Research*, Working Paper No. 6400.
- Corsetti, G., P. Pesenti, and N. Roubini, (1998), "What Caused the Asian Currency and Financial Crisis? Part II: The Policy Debate," *National Bureau of Economic Research*, Working Paper No. 6834.
- Cuddington, J. T., 1983, "Currency Substitution, Capital Mobility, and Money Demand," Journal of International Money and Finance, 2: 111-133.
- Dickey, D. and W.A. Fuller, 1979, "Distribution of Estimates for Autoregressive Time Series with Unit Root," *Journal of American Statistical Association*, 74: 427–431.
- Dickey, D. and W. Fuller, 1981, "The Likelihood Ratio Statistic for Autoregressive Time Series with a Unit Root," *Econometrica* 49: 1057–1072.
- Gonzalo, J., 1994, "Five Alternative Methods of Estimating Long-Run Equilibrium Relationships," *Journal of Econometrics*, 60: 203–233.
- Johansen S. and K. Juselius, 1990, "The Full Information Maximum Likelihood Procedure for Inference on Cointegration—With Application to the Demand for Money," Oxford Bulletin of Economics and Statistics, 52: 169–210.
- Leiderman, L. and L. O. Svensson (eds.), 1995, *Inflation Targets*, Centre for Economic Policy Research (London).
- Mundell, R. A., 1963, "Capital Mobility and Stabilization Policy Under Fixed and Flexible Exchange Rates," Canadian Journal of Economics and Political Science 29, 475-485.
- Nadal-De Simone, F. and W. Razzak, 1999, "Nominal Exchange Rates and Nominal Interest Rate Differentials," (Washington DC: International Monetary Fund) Working Paper (forthcoming).

- Perron, P., 1988, "Trends and random Walks in Macroeconomic Time Series," *Journal of Economic Dynamics and Control*, 12: 297–332.
- Phillips, P. C. B., 1987, "Time Series Regressions with a Unit Root," *Econometrica*, 55: 277-301.
- Phillips, P. C. B. and M. Loretan, 1991, "Estimating Long-Run Equilibria," *The Review of Economic Studies*, 58: 407-436.
- Said, S. and D. A. Dickey, 1984, "Testing for Unit Roots in Autoregressive-Moving Average Models of Unknown Order, *Biometrika*, 71: 599-608.
- Siklos, P., 1996, "Searching for an Improved Monetary Indicator for New Zealand," (Wellington: Reserve Bank of New Zealand), Discussion Papers Series G96/1.
- Tanner, E., 1999, "Exchange Market Pressure and Monetary Policy: Asia and Latin America in the 1990s" (Washington DC, International Monetary Fund, unpublished).

Table 1. Dominican Republic; Unit Root Tests at 5 Percent Level

$$\Delta X_{t} = \alpha + \beta t + \gamma X_{t-1} + \sum_{i=1}^{p-1} \phi i \Delta X_{t-i} + \varepsilon_{t}$$

(1992:1-1999:1)

			Dick	ey-Fuller			Phillips	s-Perron	
Variable	Lags 1/	Τ _μ 2/	Τ _τ 2/	ρ _μ 3/	ρ _τ 3/	Τ _μ 2/	T _Y 2/	ρ _μ 3/	ρ _τ 3/
M1	2	-1.37	-3.66 *	-2.62	-85.99 *	-0.75	-2.27	-1.06	-10.35
M2	3	-0.10	-3.26	-0.14	154.84	-0.34	-2.02	-0.34	-8.68
GDP	5	-4.11 *	-4.30 *	-0.83	-2.64	-7.12 *	-14.19 *	-4.01	-8.29
IDOM	1	-2.53	-2.46	-16.72 *	-16.78	-1.86	-1.81	-7.77	-7.55
IRD	1	-1.94	-1.89	-9.93	-11.55	-1.63	-1.38	-5.93	-5.32
MID	3	-3.93 *	-3.81 *	55.66	55.46	-3.54 *	-3.50	-18.26 *	-18.11
M2D	3	-3.68 *	-3.69 *	151.63	429.76	-3.30 *	-3.23	-18.15 *	-18.09
GDPD	6	-1.50	-2.70	-1.86	-6.67	-15.52 *	-12.42 *	-5.40	-5.83
IDOMD	1	-3.13 *	-3.40	-19.73 *	-22.17 *	-3.78 *	-3.97 *	-16.88 *	-17.14
IRDD	1	-3.13 *	-3.77 *	-18.66 *	-23.12 *	-4.17 *	-4.66 *	-17.82 *	-18.22 *
Probability a smaller v									
5 percent		-2.99	-3.58	-12.63	-18.20	-2.99	-3.58	-12.63	-18.20

Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

Note: IDOM=90-day lending rate in the Dominican Republic.

IRD=interest rate differential; i.e., 90-day lending rate in the Dominican Republic minus 90-day T-bill rate in the United States.

M1D=M1 first differenced.

M2D=M2 first differenced.

GDPD=GDP first differenced.

IDOMD=90-day lending rate in the Dominican Republic first differenced.

IRDD=90-day lending rate in the Dominican Republic minus 90-day T-bill rate in the United States first differenced.

^{1/} Lags were chosen according to the Akaike Information Criterion and for white noise of the residuals.

^{2/} The power of ρ_{μ} (only constant) and ρ_{τ} (constant and time trend) is higher than the power of T_{μ} (only constant) and T_{τ} (constant and time trend) when the alternative is stationary.

^{3/} The Newey-West weighting scheme was used for estimating the variances of S_{μ}^{2} and S_{τ}^{2} .

Table 2. Dominican Republic: The Johansen-Juselius Maximum Likelihood Test for Cointegration

1992:1-1999:1

					•	λι	nax	Tra	ace	
	Eigen Values	λ max	Trace	Н₀: г	p-r	95%	99%	95%	99%	Lag
M1-inter. rate	0.8517	51.53°	68.09	0	3	17.69	27.49	37.01	43.94	2
	0.4582	16.55*	16.56	1	2	14.48	16.45	19.32	24.81	
	0.0003	0.01	0.01	2	1	4.84	8.36	4.84	8.36	
Residuals										
Normality $\sim \chi_6^2$	6.038									
Normality ~ 16	(0.42)									
	14.793									
$_{LM1}\sim\chi_9^2$	(0.10)									•
2.2	8.923									
$_{LM4}\sim\chi_9^2$	(0.44)									
M2- inter. rate	0.8048	44.12	63.50	0	3	17.69	27.49	37.01	43.94	2
	0.5069	19.09°	19.38**	1	2	14.48	16.45	19.32	24.81	
	0.0108	0.29	0.29	2	1	4.84	8.36	4.84	8.36	
Residuals	-									
$_{ m Normality}$ $\sim \chi_6^2$	11.187									
Normality 16	(80.0)									
_	25,675									
$_{\rm LM1} \sim \chi_9^2$	(0.00)									
	13.593									
$_{\rm LM4}$ $\sim \chi_9^2$	(0.14)									<u></u>
M1- inter. diff.	0.8873	58.94°	73.95	0	3	17.69	27.49	37.01	43,94	2
	0.4254	14.96**	15.01	ì	2	14.48	16.45	19.32	24.81	_
	0.0019	0.05	0.05	2.	ī.	4.84	8.36	4.84	8.36	
Residuals	_		0.00				0.00		0.00	
$_{ m Normality}$ \sim χ_6^2	3.693									
Normanty	(0.70)									
	(0.72)									
$_{\rm LM1}$ $\sim \chi_9^2$	15.643									
	(0.07)									
$_{\mathrm{LM4}}\sim\chi_{9}^{2}$	9.600									
LM4 \mathcal{K}^{g}	(0.38)				····					
M2-inter. diff.	0.8578	52.67°	72.44	0	3	17.69	27.49	37.01	43.94	2
	0.5175	19.68**	19. 77**	1	2	14.48	16.45	19.32	24.81	
	0.0036	0.10	0.10	2	1	4.84	8.36	4.84	8.36	
Residuals	_	*****		_	_					
~ ~ ~ 2	6.731									
$_{ m Normality}$ \sim χ_6^2	(0.35)									
	23.128									
$_{\rm LM1} \sim \chi_9^2$	(0.01)									
$_{\rm LM4}$ $\sim \chi_9^2$	15.882									
	(0.07)									3

Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

r is the number of cointegrated vectors.

p is the number of variables.

The 99 percent (denoted with *) and 95 percent (denoted with **) critical values corrected for small samples using Cheung and Lai (1993) are also used to evaluate the results.

The models include a drift term in the variables but not in the cointegration space. The normality test is a multivariate version of the Shenton-Bowman test for normality for individual time series. The LM1 and LM4 are the Langrange multiplier tests. p values are in parentheses.

- 00 -

Table 3. Dominican Republic: The Phillips-Loretan Nonlinear Dynamic Least Squares Estimator (1992–1999:1)

	M1			<u>M2</u>	
Constant	-4.87	(-2.68)	Constant	-7.09	(-3.29)
y_t	0.73	(4.50)	y_t	0.95	(4.65)
$oldsymbol{r}_t$	0.02	(0.65)	r_t	0.05	(2.17)
Δy_{t-1}	-0.27	(-2.76)	Δy_{t-2}	-0.63	(-1.79)
Δr_{t-1}	-0.02	(-5.06)	Δr_{t-2}	-0.01	(-0.86)
Δy_t	0.30	(0.78)	Δy_{t-1}	0.28	(0.77)
Δr_t	-0.03	(-1.06)	Δr_{t-1}	-0.02	(-3.63)
Δy_{t+1}	0.24	(0.64)	Δy_t	0.00	(0.00)
Δr_{t+1}	-0.00	(-1.08)	Δr_t	-0.04	(-1.94)
ho	-0.83	(-11.98)	Δy_{t+1}	1.58	(1.46)
		, ,	Δr_{t+1}	0.00	(0.03)
			Δy_{t+2}	2.05	(2.76)
		•	Δr_{t+2}	0.01	(1.29)
	•		ρ^{i+2}	-0.68	(-4.56)
$\overline{\mathbb{R}}^2$	= 0.98 SF	$\Xi = 0.02$	1		E = 0.02
	- 0.98				2
		² ₄ = 1.58			² / ₄ = 1.21
B-K-S	$b = 0.27$ $b = 1 \sim \chi_1$	$a^2 = 2.75$	B-Y-2	$b = 0.22$ $b = 1 \sim \chi$	$1^2 = 0.05$

69

Table 3. Dominican Republic: The Phillips-Loretan Nonlinear Dynamic Least Squares Estimator (1992–1999:1)

	M1		$= a + by_t + c(r - r^*)_t + \sum_{i=-k}^k$	M		
Zanatant	-6.01	(-3.28)	Constant	_4	·.41	(-2.29)
Constant	0.84	(4.87)	y_t		.75	(4.29)
$(r-r^*)_t$	0.02	(1.36)	$(r-r^*)_t$	0	0.06	(2.48)
Δy_{t-1}	-0.26	(-2.40)	Δy_{t-2}	-0	0.22	(-2.25)
$oldsymbol{v}_{t-1}$	-0.02	(-4.98)	Δr_{t-2}	-0	0.02	(-4.08)
\mathcal{Y}_t	0.41	(1.13)	Δy_t	0	.39	(1.04)
$(r-r^*)_t$	-0.03	(-2.20)	$\Delta(r-r^*)_t$	0	0.06	(-2.54)
\mathcal{Y}_{t+1}	0.47	(1.26)	Δy_{t+1}	0	0.04	(0.08)
$(r-r^*)_{t+1}$	-0.01	(-1.54)	$\Delta(r-r^*)_{t+1}$	0	.00	(0.20)
) / / /t+1	-0.79	(-11.99)	ρ	-0	0.80	(-13.59)
$\bar{R}^2 = 0.98$	SE = 0.02	`		$\overline{R}^2 = 0.98$	SE = 0.02	
$\chi_1^2 = 0.20$	$\chi_4^2 = 2.06$			$\chi_1^2 = 0.06$	$\chi_4^2 = 0.89$	
	$b = 1 \sim \chi_1^2 = 0.82$			B-K-S = 0.18	$b = 1 \sim \chi_1^2 = 2.08$	

Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

t ratios are in parentheses. Barlett-Kolmogorov-Smirnov (B-K-S) 10 percent critical value is 0.305.

Figure 1. Dominican Republic: Residual from Model 1-M1

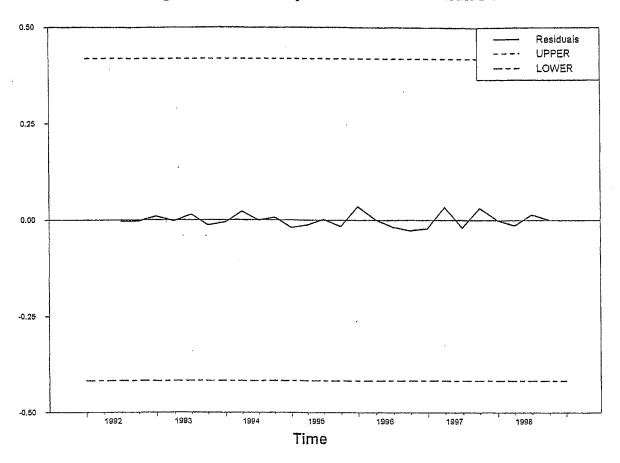


Figure 2. Dominican Republic: Residual from Model 1-M2

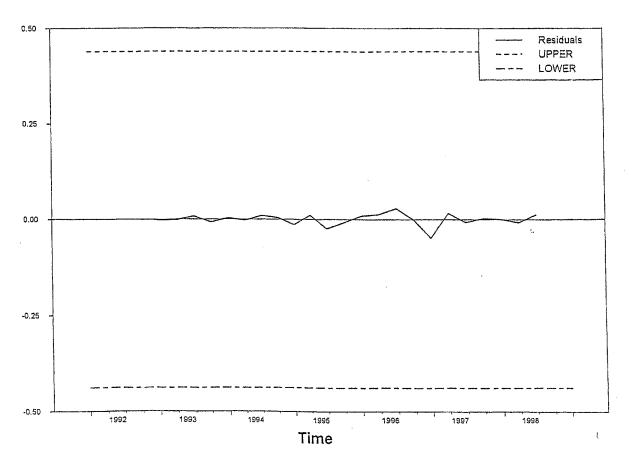


Figure 3. Dominican Republic: Residual from Model 2-M1

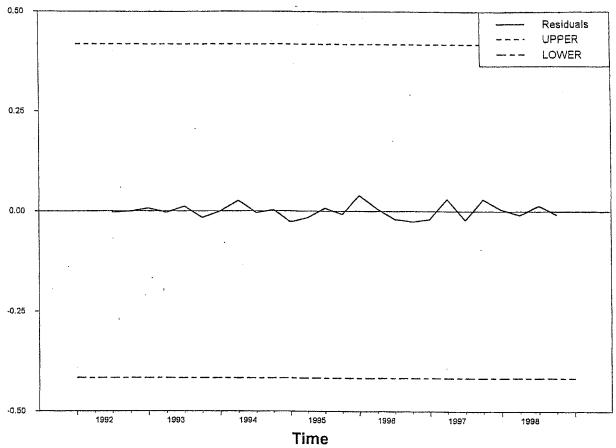
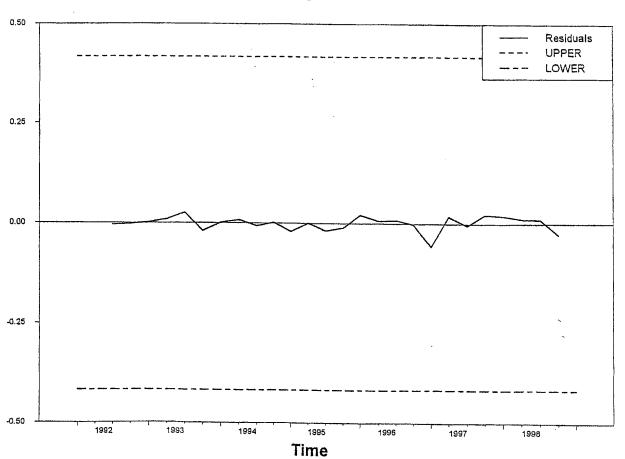


Figure 4. Dominican Republic: Residual from Model 2-M2



- 72 - ANNEX

UNIT ROOTS AND COINTEGRATION

- 121. The literature on unit roots and cointegration is vast and will not be reviewed here. Suffice it to say that there is a valid concern among economists about the appropriateness of the tests for unit roots and their power against stationary alternatives. The choice of a particular testing methodology is not straightforward. Ultimately, one may not be able to determine whether there is a unit root in a given time series. Inevitably, however, a choice has to be made. In testing for unit roots and cointegration, the strategy followed in this study is to use different tests. A decision is then made based on whether the results of these various tests converge or not. Two popular methods to test for unit roots were used: the ADF test (Dickey and Fuller, 1979, 1981, and Said and Dickey, 1984), and the Phillips-Perron test (Phillips (1987) and Perron (1988)).
- 122. Table 1 reports the results for unit root tests. ⁶⁷ In general, the two sets of tests considered tend to agree that real M1, real M2, the domestic interest rate, and the interest rate differential are unit root processes. However, while the T_{μ} and the T_{τ} versions of the ADF and the Phillips-Perron tests reject the null of a unit root in real output, the ρ_{μ} and the ρ_{τ} versions of those tests accept the null. As the latter versions of the tests are more powerful against a stationary alternative, it was decided that real output may contain a unit root. That decision was also based on the observation that the spectrum of the first difference of real output has Granger's typical spectral shape. ⁶⁸
- 123. Gonzalo (1994) compared five different residual-based tests for cointegration. Among them, he recommends using the Johansen-Juselius (1990) method. Although very popular in the literature, this test has been highly criticized for its lack of power in finite samples, and—among other problems—by its sensitivity to the choice of the lag length. This test was used and the results are reported in Table 2. Given the relatively short sample period available, the critical values were corrected for small sample bias using Cheung and Lai's (1993) approach. Lag length was evaluated as follows. A general lag model was fit. Then, unnecessary lags were eliminated by testing backward using the Schwarz Criterion. The residuals of the models were checked for white noise each time using LM(1) and LM(4) tests, and for normality using a multivariate version of the Shenton-Bowman test. In all cases the tests accepted the null of Gaussian residuals. The LM(1) tests for real M2 indicated some serial correlation. The LM(4)

⁶⁷ The choice of the lag structure always has been an issue. The objective of the lags is to remove serial correlation. With this objective in mind, the lag order was set as the highest significant lag order—using an approximate 95 percent confidence interval—from either the autocorrelation function or the partial autocorrelation function of the first-differenced series. Also the Akaike Information Criterion (AIC) was used. Every time a lag was eliminated, serial correlation was checked using the Ljung-Box test for white noise. The approach followed in selecting the lags was also followed in testing non-stationarity in the individual series.

⁶⁸ Results are available upon request.

tests—and LM tests with longer lags—however, accepted the null of white noise for the residuals at reasonable confidence levels.

- 124. At the 99 percent level and in all cases analyzed in this study, the λ_{trace} statistic strongly rejected the null hypothesis of no cointegrating vectors against the alternative of one or more cointegrating vectors (r>0). Similarly, at the 99 percent level and in all cases, the λ_{max} statistic rejected the null hypothesis of no cointegrating vectors against the alternative of one cointegrating vector (r=1). For M2, the λ_{trace} rejected the null hypothesis of r < 1 cointegrating vectors against the alternative of two or more cointegrating vectors at the 95 percent level. For M1, that rejection occurred at the 90 percent level. However, the λ_{max} statistics rejected the null of one cointegrating vector (r=1) against the specific alternative of two cointegrating vectors (r=2) at the 99 percent level in all cases except M1 and the interest rate differential where the rejection occurred at the 95 percent level.
- 125. Finally, if real output were stationary, one more cointegrating vector would be required. As a result, multivariate tests of non-stationarity were performed. They did not reject the null of a unit root for real output when the aggregate is real M1 but they did reject the null of a unit root for real output in the case of real M2. This confirmed the decision taken based on Dickey-Fuller and Phillips-Perron tests for the case of M1. As a result, real GDP was detrended assuming a deterministic trend and all the cointegration tests were run again. At the 99 percent level, the λ_{max} statistic rejected the null hypothesis of two cointegrating vectors against the alternative of three cointegrating vectors for real M2 and the domestic interest rate. That rejection occurred at the 95 percent level for real M2 and the interest rate differential.

⁶⁹ The λ_{max} statistic has a sharper alternative hypothesis than the λ_{trace} statistic. In case of conflict, the former is to be preferred to the latter.

VI. EXCHANGE MARKET PRESSURE, MONETARY POLICY, AND INTEREST RATES: RECENT EVIDENCE FROM THE DOMINICAN REPUBLIC⁷⁰

Abstract

Exchange market pressure (EMP) is defined as the sum of exchange rate depreciation and outflows of official international reserves. This chapter addresses several issues regarding EMP, monetary policy, and interest rates in the Dominican Republic. First, domestic monetary policy, measured by the growth of net domestic assets of the central bank, explains a substantial portion of EMP in the Dominican Republic. Second, to help accumulate reserves (or reduce EMP), domestic monetary policy is an effective policy tool. All else equal, a monetary contraction today should stimulate a reserve inflow of a comparable magnitude. Third, reductions in EMP were associated with declines in the differential between domestic and foreign interest rates (albeit with a short lag), possibly reflecting increased investor confidence.

A. Introduction

- 126. Recently, the authorities of the Dominican Republic have permitted more exchange rate flexibility while attempting to increase gross official reserves. Under a managed float, as in the Dominican Republic, in assessing the stance of monetary policy, it is inappropriate to examine either of these variables (exchange rate and reserve changes) in isolation. Instead, exchange rate and reserve movements should be combined to form a measure of exchange market pressure (EMP).
- 127. Under a managed float, contractionary monetary policy should, all else equal, attract capital inflows (raising official reserves) and increase the value of the Dominican peso, thereby reducing EMP. However, over time, lower EMP should increase investor confidence and ultimately put downward pressure on the differential between domestic and foreign interest rates.
- 128. This chapter examines several questions related to monetary policy and EMP in the Dominican Republic:

⁷⁰ This chapter was prepared by Evan Tanner.

- First, according to the historical record, does monetary policy affect EMP in the way that standard monetary frameworks would predict? For example, has contractionary monetary policy been successful in either defending the peso or increasing international reserves?
- Second and closely related, how should the stance of monetary policy be measured? While most recent work uses an interest rate as the policy variable, this chapter emphasizes changes in the domestic credit component of the monetary base, as in the traditional monetary approach to the balance of payments.
- Third, is the interest rate differential itself a function of EMP? Does lower EMP boost investor confidence and thus reduce the interest rate differential?
- Fourth, is the stance of monetary policy itself a function of EMP? Do the monetary authorities respond to changes in EMP with monetary expansions or contractions? Do the monetary authorities systematically sterilize changes of EMP with changes in domestic credit, as in several other emerging markets?⁷¹
- 129. To address such questions, this chapter develops a vector autoregression (VAR) framework with three variables, namely EMP, domestic credit growth, and the interest rate differential.⁷²

This methodology is well suited to address the above questions since it:

- pinpoints 'shocks' or 'innovations' to the variables mentioned above;
- estimates the responses to shocks between these variables, both contemporaneously and on a lagged basis; and
- summarizes how monetary policy (as measured by domestic credit growth) responds to lagged changes in either EMP or the interest differential.
- 130. Several policy-relevant conclusions (with numerical estimates) will be presented.
- First, the growth of central bank credit (scaled by base money) is a good indicator of the stance of monetary policy in the Dominican Republic.

⁷¹ Such behavior has been discussed recently in the context of balance of payments crises (Flood, Garber and Kramer (1996)). For empirical evidence related to this issue in Mexico during the 1994-95 crisis, see Calvo and Mendoza (1996). For evidence on this issue in other countries, see Tanner (1999).

⁷² In a monetary framework, a scale variable for money demand should also be included. Most frequently, this variable is gross domestic product (GDP). However, this study uses monthly data, at which frequency neither GDP nor industrial production data are available.

- Second, monetary policy affects EMP significantly and in the direction predicted by theory. For example, a tightening of monetary policy, i.e., a reduction in central bank credit growth, reduces EMP, both immediately and, to a lesser degree, within a one- to five-month period.
- Third, domestic monetary policy had an ambiguous effect on the interest differential. Contractionary (expansionary) monetary policy is generally associated with interest rate increases (decreases). However, an effect in the opposite direction can also occur, since monetary expansions (contractions) can raise (lower) inflation expectations and cause interest rates to rise (fall). Moreover, reductions in EMP were associated with a lagged reduction in the interest rate differential, possibly reflecting increased investor confidence.
- 131. The rest of this chapter is organized as follows. Section A introduces the idea of EMP in a monetary framework and presents an overview of the data. Section B develops a vector autoregression (VAR) model. Section C presents the empirical estimates. Finally, section D summarizes the results and presents some policy implications.

B. Exchange Market Pressure (EMP) in the Dominican Republic: An Overview

- 132. Prior to 1991, the Dominican Republic fixed the official exchange rate,⁷³ but devalued periodically. In late 1991, the authorities abandoned the fixed peg in favor of smaller, more frequent exchange rate movements. While the exchange rate has never floated freely, it has become more flexible in recent years. Between January 1992 and August 1994 monthly exchange rate depreciation averaged 0.15 percent. Subsequently, average monthly exchange rate depreciation was 0.35 percent, mainly reflecting devaluations in 1997 and 1998.
- 133. Under such a managed exchange rate regime, exchange market pressure (EMP) is reflected in both exchange rate and reserve movements. Girton and Roper (1977) showed that EMP is the flow excess supply of money. To see this, consider the following simple monetary model. On the demand side, the growth of real base money (m_t) is:

$$\mathbf{m}_{t} = \Delta \mathbf{M}_{t} / \mathbf{M}_{t-1} - \boldsymbol{\pi}_{t} \tag{1}$$

where M_t is nominal (base) money at time t and π_t is the inflation rate ($\Delta P_t/P_{t-1}$, where P_t is the price level at time t). The inflation rate is linked to foreign inflation π_t * through the rate of growth of the nominal exchange rate e_t :

$$\mathbf{e_t} = \boldsymbol{\pi_t} - \boldsymbol{\pi_t}^* + \mathbf{z_t} \tag{2}$$

where z_t is the deviation from purchasing power parity.

⁷³ Defined in Dominican pesos per U.S. dollar throughout this chapter.

134. On the supply side, the two components of nominal base money are international reserves R_t and net domestic assets D_t . Thus,

$$\Delta M_t/M_{t-1} = (\Delta R_t + \Delta D_t)/M_{t-1} = r_t + \delta_t$$
 (3)

where $r_t = \Delta R_t/M_{t-1}$ and $\delta_t = \Delta D_t/M_{t-1}$. The above equations restate the traditional monetary approach. Assuming that purchasing power parity holds and foreign inflation equals zero $(z_t = \pi_t^* = 0)$, substitute (2) and (3) into (1) and rearrange to obtain an expression for EMP:

$$\mathbf{e}_{t} - \mathbf{r}_{t} = \delta_{t} - \mathbf{m}_{t} \tag{4}$$

- 135. According to equation (4), exchange rate depreciation plus reserve outflows (scaled by base money) equals the difference between the growth rates of the domestic component of the monetary base (δ_t) and money demand (m_t). Under a fixed exchange rate regime, $e_t = 0$; with freely floating exchange rates, $r_t = 0$.
- Table 1 and Figure 1 present data on EMP, exchange rate growth, gross international reserves, and the interest rate differential in the Dominican Republic for the period 1992–98 and selected subperiods. These data show that EMP in the Dominican Republic primarily represents reserve movements rather than exchange rate depreciation. The data also suggest that EMP is higher in the early years of the decade than subsequently. Severe pressures, associated with an electoral campaign, occur between August 1993 and August 1994. During this period gross reserves fell by about US\$440 million (from about US\$640 million to just under US\$200 million), and EMP averaged over 3 percent per month, peaking at 13 percent in August 1994 (compared with an average of less than 1 percent for the 1990–98 period as whole). Thereafter, EMP falls and becomes less variable, despite devaluations in 1997 and 1998.

This definition may also be obtained for the more general case of non-zero π^* . An even more general definition of EMP (e - α r) where α is reduced-form coefficient that depends on several underlying structural parameters. Under standard assumptions of the monetary approach to exchange rates and the balance of payments, α should be unity. Subsequently, other authors relaxed these assumptions (see, for example Weymark (1998)) and found that α might be difficult to obtain. Therefore, α is nonetheless commonly set to unity, as doing so yields an informative indicator (although perhaps not one consistent with a deeper structural model).

⁷⁵ This framework also applies to freely floating exchange rates that are subject to a reserve growth target.

⁷⁶ All data are from the IMF's *International Financial Statistics*, international reserves are defined by series 11.d, gross reserves excluding gold. The monetary base is series 14. Domestic credit is defined as the difference between the monetary base and net foreign assets (series 14 minutes series 11 plus series 16c).

137. A key determinant of EMP is δ_t , the growth of the domestic component of the monetary base. If monetary policy is expansionary ($\delta_t > m_t$), EMP will rise (through some combination of reserve movements and exchange rate depreciation). In the Dominican Republic EMP_t and δ_t appear to move together. A positive correlation between EMP_t and δ_t is indicated both by visual inspection (see Figure 1, top) and a simple univariate regression (t-statistics in parenthesis):⁷⁷

$$EMP_{t} = -0.24 + 0.648 \,\delta_{t} \tag{5}$$

$$(-0.57) (4.17)$$

 R^2 (adjusted) = 0.17 Durbin-Watson Statistic = 2.09

- 138. Note that the coefficient on δ_t statistically differs from zero at the 99 percent level. Presumably, there should also be a relationship between lagged δ and EMP_t. However, the regression above examines only the contemporaneous relationship between δ_t and EMP_t. (The relationship between δ and EMP over time is explored in the next section.) According to the adjusted R^2 statistic, on a contemporaneous basis alone, 17 percent of EMP is explained by movements in δ_t .
- 139. This finding suggests that δ is an appropriate measure of the stance of monetary policy. However, in much recent work on monetary policy, many authors have used an interest rate, rather than a monetary aggregate like δ , to gauge the stance of monetary policy. For a small relatively open economy like the Dominican Republic, the differential between domestic and foreign (United States) interest rates ϕ_t conveys important information: it indicates both expected exchange rate depreciation and a premium required to satisfy the marginal investor. Thus, all else constant, an increase in ϕ_t (due to contractionary monetary policy) encourages capital inflows and reduces EMP. In theory, the relationship between ϕ and EMP is ambiguous. On the one hand, an increase in ϕ_t may signal anticipated exchange rate depreciation (a Fisher effect) and/or higher risk, reflecting loose monetary policy. In the

⁷⁷ Both EMP and δ are stationary. Hence, the regression does not represent a long-run (cointegrating) relationship.

⁷⁸ For example, for the United States, many authors, including Bernanke and Blinder (1992) argue that the stance of the Federal Reserve is best measured by the federal funds rate: higher interest rates reflect tighter monetary policy. In the context of developing countries, most authors have also used an interest rate to capture the stance of monetary policy. For example, in the case of Asia, several authors, including Radetlet and Sachs (1998), Furman and Stiglitz (1998), Goldfajan and Baig (1998), and Goldfajan and Gupta (1999) do so.

Dominican Republic, casual inspection suggests that, unlike δ_t , ϕ_t does not appear to be closely correlated with EMP_t, either visually (see Figure 1) or in bivariate regressions.⁷⁹

C. EMP and Monetary Policy: A Vector Autoregression Approach

- 140. As discussed above, one question that this chapter seeks to answer is whether monetary policy in the Dominican Republic affects EMP in the direction predicted by standard monetary theory. In this section, a vector autoregression (VAR) framework is developed to address this question.
- 141. Consider the following vector autoregression (VAR) system:

$$X_{t} = \mathbf{a}_{0} + \mathbf{a}_{1} X_{t-1} + \mathbf{a}_{2} X_{t-2} + \dots + \mathbf{v}_{t}$$
 (6)

where $X = (\delta, EMP, \phi)$ is a matrix of variables, a_i is a vector of coefficients, and $v_t = (v_{\delta}, v_E, v_{\phi})$ is a vector of error terms. ⁸⁰ A system like (6) permits testing for effects of past values of X on current values. Assumptions regarding the exogeneity of certain variables (like a policy variable) are easily incorporated into a system like (6). To do so, first assume that each element of the error vector v_t is in turn composed of "own" error terms $w_t = (w_{\delta}, w_E, w_{\phi})$ and contemporaneous correlations with "other" errors. That is:

$$\mathbf{v_t} = \mathbf{B} \ \mathbf{w_t} \tag{7}$$

where **B** is a 3 x 3 matrix whose diagonal elements ("own correlations") equal one and whose nonzero off-diagonal elements reflect contemporaneous correlations among the error terms. Now, assumptions regarding the exogeneity of certain variables may be incorporated in restrictions on the matrix \mathbf{B} .

142. As discussed above, the domestic credit growth variable δ is assumed to be exogenous. That is, *in any period*, innovations to δ (i.e., v_{δ}) reflect only the tastes and preferences of the policymaker:

$$\mathbf{v}_{\delta t} = \mathbf{w}_{\delta t} \tag{8}$$

 $^{^{79}}$ However, results not reported here, indicate that ϕ and the level of international reserves are negatively cointegrated, suggesting that higher reserve holdings reduce risk and the risk premium.

⁸⁰ Since ϕ_t is nonstationary in levels but stationary in first differences, it is entered accordingly as $\Delta \phi$.

143. Next, shocks to exchange market pressure (v_E) contain two elements: the "own" shock (w_E) plus one related to innovations in domestic credit:

$$v_{Et} = w_{Et} + b_{21}w_{\delta t} \tag{9}$$

- 144. Thus, w_E may be thought of as a shock to the demand for a country's currency, due perhaps to changes in investor confidence and sentiment. Thus $b_{21} w_{\delta t}$ represents the portion of shocks to EMP that is contemporaneously correlated with domestic credit growth.
- Finally, shocks to the change in the interest rate differential (w_{ϕ}) is the sum of three elements: the "own" shock (w_E) plus ones related to innovations in domestic credit and EMP:

$$v_{\phi t} = w_{\phi t} + b_{31} w_{\delta t} + b_{32} w_{Et} \tag{10}$$

- 146. According to equation (10), innovations to domestic credit w_{δ} affect the interest rate differential through either standard liquidity or Fisher channels. (Thus, the predicted sign of b_{31} is ambiguous.) Second, the interest rate differential should respond to changes in EMP: a rise in EMP may signal either further exchange rate depreciation in the future, or additional risk, or both. Such effects are captured in the term $b_{32}w_{Et}$ and b_{32} should be greater than zero. The "own" shock w_{ϕ} thus contains other factors not contained in either w_{δ} or w_{E} . This component should be thought of as a "hybrid" that potentially contains both policy- and market- determined elements. ⁸²
- 147. In addition to the contemporaneous relationships shown in equations (8)–(10), impulse response functions (IRFs) summarize the effect of past innovations (i.e., lagged elements of w) to current values of X. Thus, IRFs provide two additional ways to evaluate the effect of monetary policy on EMP. First, IRFs show effects on EMP of both current and past innovations to domestic credit (w_{δ}). Second, IRFs also show effects on EMP of past (but not current) innovations to the interest rate differential (w_{ϕ}). But, this latter IRF may only be thought of as a policy relationship insofar as innovations to the interest rate differential represent policy shocks. (Note also that IRFs show effects on $\Delta \phi$ of both current and past innovations to domestic credit and EMP, (w_{δ}) and (w_{E}), respectively.)

⁸¹ To implement these restrictions, either a Choleski decomposition or a procedure like Bernanke's (1986) may be used. For a review of issues regarding the estimation and identification of VARs, see also Enders (1995), Chapter 5.

⁸² An alternative assumption would be for EMP to be contemporaneously determined by both δ and $\Delta \phi$. In this case equation (9) would be rewritten as: $v_{Et} = w_{Et} + b_{21}w_{\delta t} + b_{23}w_{\phi t}$. Since ϕ represents the opportunity cost of holding money, $b_{23} > 0$. However, under this assumption, for the system also to be just identified, b_{31} must be zero in equation (10).

148. However, the framework discussed above also helps address the chapter's third main question, namely how the stance of monetary policy is determined. Specifically, the IRFs provide a *policy reaction function*: they show effects on current δ of past (but not current) innovations to EMP (w_E) and changes in the interest rate differential ($w_{\phi t}$). For example, when faced by positive innovations to EMP (for example, a decrease in investor confidence) policymakers may respond "prudently" with contractionary policy (reducing δ). However, policymakers might face pressures to act otherwise. For example, when EMP rises, the authorities might also face pressures to provide liquidity to the domestic financial system (raising δ). Such a response, in the context of balance of payments crises and speculative attacks, is discussed in several papers, including Flood, Garber, and Kramer (1996) and Calvo and Mendoza (1996).

D. Estimation Results

- 149. Estimation results are presented in Table 2, Part A. These include adjusted R-squared statistics, exclusion (Granger causality) tests, and IRFs. Also, IRFs are presented graphically in Table 2, Part B, and Figures 2 through 4.
- 150. Importantly, estimates confirm that shocks to domestic credit growth (w_δ) affect EMP positively, as expected. As Table 2, Part A shows, the hypothesis that lagged δ does not help explain current EMP is not rejected at conventional levels. Nonetheless (see table 2, part B, and Figure 2, top) the current period (period 0) IRF is positive and significantly different from zero at the 99 percent level. The results suggest that, contemporaneously, a 1 percent increase (decrease) to domestic credit causes EMP to increase (decrease) by about 1.4 percent. Note that an estimate of unity lies within two standard errors. As a numerical example, with a monetary base equal to US\$1.6 billion (the average for 1998), a US\$16 million reduction (expansion) of central bank domestic assets implies an approximate US\$20 million rise (fall) in international reserves (with a fixed exchange rate). Traditional monetary models suggest that international reserves would rise (fall) by US\$16 million, and this amount lies within the confidence interval. In subsequent periods, effects of w_δ on EMP remain positive, but with t-statistics below 2. Between months 0 and 5, the cumulative response of a 1 percent increase (decrease) to δ is an increase (decrease) in EMP of about $3\frac{3}{4}$ percent.
- 151. Shocks to changes in the interest rate differential (w_{ϕ}) negatively affect EMP (see table 2, part B, and Figure 2, bottom). The hypothesis that lagged $\Delta \phi$ does not help explain current

Note that the issue addressed here is similar to that of exchange rate targeting. For example, Edwards and Savastano (1998) also estimate a policy reaction function for Mexico during the mid-1990s. However, they examine the effect of changes in the exchange rate (rather than EMP) on M1 (rather than domestic credit of the central bank).

⁸⁴ An IRF is significant if its t-statistic exceeds |2|.

EMP is rejected at slightly higher than the 95 percent confidence level. There is an IRF at month 3 that is negative and significant. That is, according to these results, a 1 percent positive (negative) shock to the change in the interest rate differential causes EMP to fall (rise) by about 1 percent, but after three months.

- 152. Shocks to EMP (w_E) positively affect $\Delta \varphi$ (see table 2, part B and Figure 3, top). A positive relationship between w_E and $\Delta \varphi$ should not be surprising, as higher (lower) EMP generally indicates higher (lower) expected exchange rate depreciation, risk, or both. Reduced (increased) EMP boosts (lowers) investor confidence and reduces (increases) the domestic interest rate (relative to its U.S. counterpart). The hypothesis that EMP does not help explain current $\Delta \varphi$ is rejected only at the 80 percent level (as shown in Table 3). However, the response of $\Delta \varphi$ to a shock to EMP after two months equals 0.3 and has a t-statistic of about 2.19. That is, a 1 percent reduction (increase) in EMP reduces (increases) the interest rate differential by about 30 basis points after two months.
- 153. Domestic credit shocks (w_{δ}) appear to have little effect on the change in interest rate differentials (see Table 3 and Figure 3, bottom). Such a finding, need not be surprising, given the theoretically ambiguous nature of the link between these two variables, as mentioned in the previous section. The hypothesis that lagged δ does not help explain current ϕ is not rejected at conventional levels, and there are no significant responses.
- 154. Regarding a policy reaction function, there is little evidence that EMP shocks (w_E) systematically affect the growth of domestic credit (δ) (see Table 3 and Figure 4, top). The hypothesis that lagged EMP does not help explain current δ is not rejected at conventional levels. Moreover, no IRF has a t-statistic exceeding |2|. This suggests that the authorities have not been forced to respond, on average, to increased EMP with additional liquidity to the banking system. 85
- 155. Likewise, there is little evidence linking shocks to the interest rate differential (w_{ϕ}) to δ (see Table 2 and Figure 4, bottom). Rather, the hypothesis that lagged $\Delta \phi$ does not help explain current δ is not rejected at conventional levels, and there are no significant responses.

E. Summary and Policy Implications

156. This chapter examined the relationship between exchange market pressure (EMP) and monetary policy during the 1990s. Since the exchange rate regime was neither perfectly fixed nor freely floating, it would be misleading to focus exclusively on either reserve or exchange rate movements. Rather, EMP is more appropriate as it summarizes the difference between the growth rates of money supply and demand under managed exchange rate regimes.

⁸⁵ Tanner (1999) finds strong responses of δ to EMP within two months for Indonesia, Korea, Thailand, and Mexico. For a discussion of such behavior for balance of payments crises, see Flood, Garber, and Kramer (1996)).

- 157. This chapter provided evidence on several questions. First, shocks to the domestic credit component of the monetary base have powerful impacts on EMP in the "right" direction: a reduction in δ helps reduce EMP (either by increasing the value of the peso or the stock of international reserves, or both). The response of EMP to interest shocks was somewhat weaker than that linking EMP and domestic credit growth, but also in the "right" direction. These findings, taken together, support the hypothesis that monetary policy is effective in controlling EMP. In a related vein, the chapter provided some insights into the determinants of interest rate differentials, i.e., that shocks to EMP positively affect interest rate differentials. This is to be expected as higher EMP signals both expected exchange rate depreciation and higher risk.
- 158. This chapter has three main policy implications. First, the stance of monetary policy, as measured by the growth of the net domestic assets of the central bank (δ), has been an important determinant of EMP. On a contemporaneous basis alone, the growth of central bank domestic assets explains about 17 percent of all movements in EMP. Second, monetary policy is effective in helping to build up reserves. According to the estimates, a 1 percent reduction in the net domestic assets of the central bank will increase reserves (reduce EMP) in the same period by about 1.4 percent. In subsequent periods, there should be additional reserve gains. Numerically, with a monetary base equal to US\$1.6 billion (the average for 1998), a US\$16 million reduction of central bank domestic assets implies an approximate US\$20 million increase in international reserves. ⁸⁶ Third, EMP (primarily reserve movements in the case of the Dominican Republic) feed back to the interest rate differential. The estimates suggest that a US\$16 million increase in reserves will reduce the spread between domestic and U.S. interest rates by about 30 basis points.

⁸⁶ Such a reduction might reflect a corresponding reduction in the government budget deficit.

List of References

- Bernanke, Ben, 1986. "Alternative Explanations of the Money-Income Correlation," in K. Brunner and A. Meltzer, eds., Real Business Cycles, Real Exchange Rates, and Actual Policies, Carnegie Rochester Series on Public Policy No. 25.
- _____ and Alan Blinder, 1992, "The Federal Funds Rate and the Channels of Monetary Transmission," American Economic Review 82: 901-921.
- and Ilian Mihov, 1998, Measuring Monetary Policy," Quarterly Journal of Economics, August: 869–902.
- Brissimis, Sophocles N. and John A. Leventakis, 1984, "An Empirical Inquiry into the Short-Run Dynamics of Output, Prices and Exchange Market Pressure," *Journal of International Money and Finance*; 3(1):75-89.
- Burkett, Paul and Donald G. Richards, 1993, "Exchange Market Pressure in Paraguay, 1963-88: Monetary Disequilibrium Versus Global and Regional Dependency," *Applied Economics*, 25:1053-63.
- Calvo, Guillermo, and Enrique Mendoza, 1996, "Mexico's Balance-of-Payments Crisis: A Chronicle of a Death Foretold," *Journal of International Economics*, 41: 235-264.
- Christiano, Lawrence, Martin Eichenbaum, and Charles Evans, 1998, "Monetary Policy Shocks: What Have We Learned and To What End?" National Bureau of Economic Research Working Paper 6400, February.
- Connolly, Michael and Jose Dantas da Silveira, 1979, "Exchange Market Pressure in Postwar Brazil: An Application of the Girton-Roper Monetary Model," *American Economic Review*; 69(3): 448-54.
- Edwards, Sebastian and Miguel Savastano, 1998, "The Morning After: The Mexican Peso in the Aftermath of the 1994 Currency Crisis," (Cambridge, MA: National Bureau of Economics) Working Paper 6516.
- Eichengreen, Barry, Andrew Rose, and Charles Wyplosz, 1996, "Contagious Currency Crises: First Tests," *Scandinavian Journal of Economics*," 98, 4:463-84
- Enders, Walter, 1995, Applied Econometric Time Series (New York: John Wiley and Sons.).
- Flood, Robert, Peter Garber, and Charles Kramer, 1996, "Collapsing Exchange Rate Regimes: Another Linear Example," *Journal of International Economics*, 41: 223-234.

- Furman, Jason and Joseph Stiglitz, 1998, "Economic Crises: Evidence and Insights from East Asia," mimeo, Washington DC, World Bank. Presented at Brookings Panel on Economic Activity on September 4.
- Girton, Lance, and Don Roper, 1977, "A Monetary Model of Exchange Market Pressure Applied to the Postwar Canadian Experience," *American Economic Review*, 67(4):537-48.
- Goldfajn, Ilan and Taimur Baig, 1998, "Monetary Policy in the Aftermath of Currency Crises:
 The Case of Asia," (Washington DC: International Monetary Fund) Working Paper
 WP/98/180.
- Goldfajn, Ilan and Poonam Gupta, 1998, "Does Tight Monetary Policy Stabilize the Exchange Rate?" (Washington DC: International Monetary Fund) mimeo.
- Kaminsky, Graciela, Saul Lizondo, and Carmen M. Reinhart, 1998, "Leading Indicators of Currency Crises," *IMF Staff Papers* 45: 1-48.
- Radelet, Steven and Jeffery D. Sachs, 1998, "The East Asian Financial Crisis: Diagnoses, Remedies, Prospects, "Brookings Papers on Economic Activity, 1:1998, 1-74.
- Tanner, Evan, 1999, "Exchange Market Pressure and Monetary Policy: Evidence from Asia and Latin America in the 1990s," (Washington DC: International Monetary Fund), WP/98/___ (forthcoming).
- Weymark, Diana N., 1995, "Estimating Exchange Market Pressure and the Degree of Exchange Market Intervention for Canada," *Journal of International Economics*, 39:273-95.
- ______, 1998, "A General Approach to Measuring Exchange Market Pressure," Oxford Economic Papers; 50:106-21.
- Wohar, Mark E. and Bun Song Lee, 1992, "Application of the Girton-Roper Monetary Model of Exchange Market Pressure: The Japanese Experience, 1959–1986," *Indian Journal of Economics*, 72:379-407.

Table 1. Dominican Republic: Exchange Market Pressure and Related Variables

(Period averages, in percent)

	EMP	Reserves (Loss) ΔR/M	Exchange Rate Depreciation ΔE/E	Interest Rate Differential (φ)	Credit Growth (δ)
19921998	0.37	0.10	0.27	8.84	0.92
1992:1-1993:7	-0.95	-0.96	0.01	12.47	0.14
1993:8-1994:8	3.39	3.03	0.35	6.68	3.39
1994:9-1998:10	0.08	-0.27	0.36	8.01	0.56

Notes: 1. EMP is defined as exchange rate depreciation plus change in international reserves divided by monetary base. 2. Interest rate differential (ϕ) is domestic currency deposit rate minus U.S. (Libor) rate (3-month). 3. Credit variable (δ) is change in central bank credit divided by the monetary base. EMP and δ are percent per month; interest rates are percent per year.

Table 2. Dominican Republic: Summary of Estimates, Vector Autoregression System Equation (6)

(6)
$$\mathbf{X}_{t} = \mathbf{a}_{0} + \mathbf{a}_{1} \mathbf{X}_{t-1} + \mathbf{a}_{2} \mathbf{X}_{t-2} + \dots + \mathbf{v}_{t}, \mathbf{X} = (\delta, \text{EMP}, \Delta \phi)$$

1992 - 1998 (Monthly Data)

A. F-tests for exclusion (P-statistics in parentheses)

Dependent variable:	8	ЕМР	$\Delta\phi$
F-Test, exclusion of:			
Lagged δ	0.36	1.90	0.17
	(0.84)	(0.12)	(0.96)
Lagged EMP	0.39	0.60	1.57
	(0.81)	(0.67)	(0.19)
Lagged Δφ	0.76	2.67	2.21
	(0.55)	(0.04)	(0.08)
R ² adjusted	-0.05	0.12	0.05

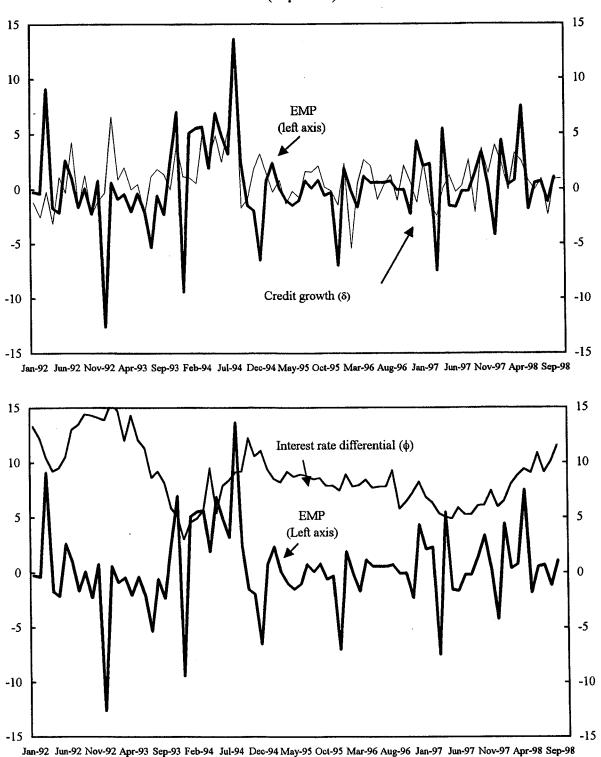
B. Impulse response functions (T-statistics in parentheses)

			Res	ponses of:			
	E	νIP		$\mathbf{I}\phi$	δ		
Shock to:	δ	Δφ	δ	<i>EMP</i>	<i>EMP</i>	Δφ	
Period 0	1.43	-	0.09	0.16	-	-	
	(4.23)	-	(0.52)	(1.12)	-	-	
Period 1	0.73	0.38	0.07	-0.03	-0.07	0.27	
	(1.80)	(0.89)	(0.43)	(-0.19)	(-0.26)	(0.94	
Period 2	0.75	0.36	0.05	0.34	0.33	0.06	
	(1.71)	(0.94)	(0.30)	(2.19)	(1.13)	(0.21	
Period 3	0.63	-1.05	0.13	0.05	0.08	-0.34	
	(1.54)	(-2.32)	(0.86)	(0.36)	(0.33)	(-1.2)	
Period 4	-0.16	0.40	0.04	-0.03	0.15	0.26	
	(-0.36)	(0.98)	(0.24)	(-0.17)	(0.62)	(0.98	
Period 5	0.37	-0.27	0.11	0.07	-0.06	-0.1	
	(1.08)	(-0.88)	(1.00)	(0.69)	(-0.40)	(-0.89	

Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

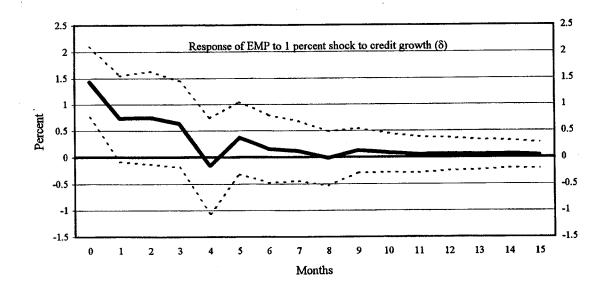
Note: For all estimates, 4 lags are used. P-statistics in parentheses. δ = growth of domestic credit (scaled by base money). EMP = exchange rate depreciation plus reserves loss (scaled by base money), $\Delta \phi$ = change in interest rate differential.

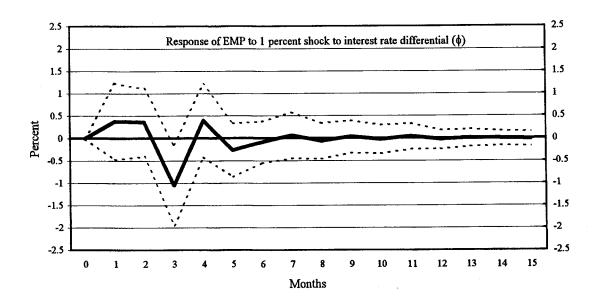
Figure 1. Dominican Republic: EMP, Credit Growth (δ) and Interest Rate Differential (φ) (In percent)



Sources: IMF, International Financial Statistics; and Fund staff estimates.

Figure 2. Dominican Republic: Response of EMP to Shocks 1/

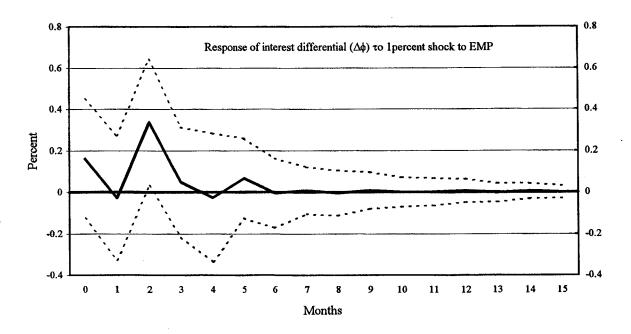


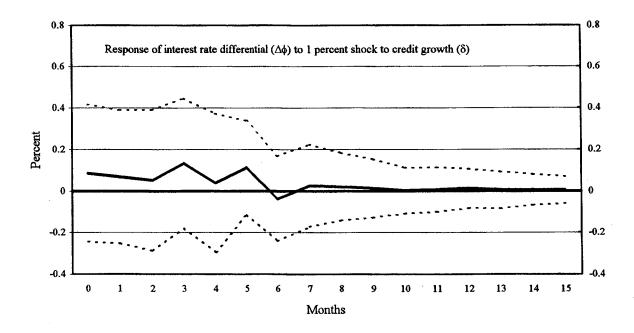


Sources: IMF, International Financial Statistics; and Fund staff estimates.

1/ Dotted lines represent plus or minus two standard errors.

Figure 3. Dominican Republic: Response of Interest Rate Differential (Δφ) to Shocks 1/

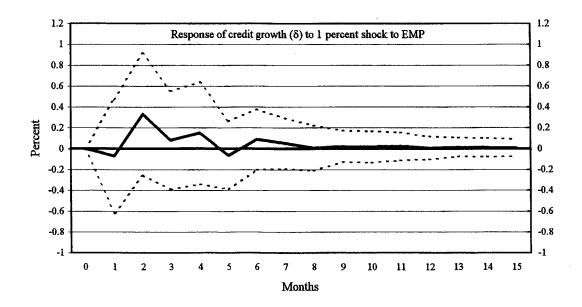


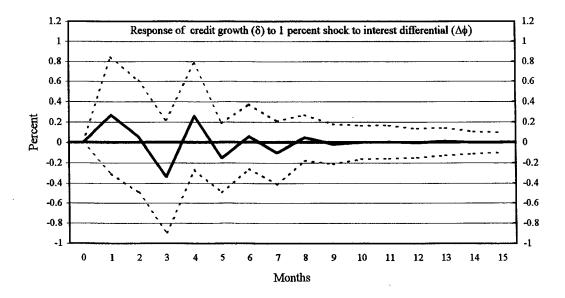


Sources: IMF, International Financial Statistics; and Fund staff estimates.

1/ Dotted lines represent plus or minus two standard errors.

Figure 4. Dominican Republic: Response of Credit Growth (δ) to Shocks 1/





Sources: IMF, International Financial Statistics (IFS); and Fund staff estimates.

1/ Dotted lines represent plus or minus two standard errors.

Major Fiscal Measures, April 1997–February 1999

Law No. 141-97—Public Enterprise Reform General Law of June 24, 1997.

Allows for participation of the private sector in the management and ownership of the Dominican Electricity Corporation, the State Sugar Council, enterprises held by the Dominican Corporation of State Enterprises, and hotels held by the Corporation for the Promotion of the Hotel Industry. Created the Public Enterprise Reform Committee as the entity responsible for the reform process, with jurisdiction over all entities subject to transformation.

Resolution No. 1 of the Secretary of Labor, July 12, 1997.

Raised the minimum monthly wage of workers in the free-trade zones to RD\$1,932.

Law No. 166 of July 27, 1997.

Created the General Department of Domestic Taxes (Dirección General de Impuestos Internos) for collection of all domestic taxes.

Resolution No. 2 of the Secretary of Labor of July 31, 1997.

Raised the minimum monthly wages of workers in hotels, bars, restaurants, and similar activities to RD\$2,350, RD\$1,675, and RD\$1,510 for large, medium and small enterprises, respectively.

Resolution No. 3 of the Secretary of Labor of September 29, 1997.

Raised the minimum monthly wages for workers in the industrial sector, commerce, and services to RD\$2,412, RD\$1,728, and RD\$1,555 for large, medium and small enterprises, respectively.

Decree No. 359 of September 28, 1998.

Created the Solidarity Fund for Reconstruction, whose financing would be provided, inter alia, by direct government transfers (RD\$100 million), bonds issues (RD\$800 million), and by a special tax on public sector employees.

Major Changes in Financial Sector Policies, April 1997-February 1999

Monetary Board Resolution No. 1 of October 28, 1997.

Authorized the central bank to issue RD\$1 billion of participation certificates with an annual interest rate of 14 percent.

Monetary Board Resolution No. 2 of October 28, 1997.

Modified Resolution No. 5 of January 23, 1997, and postponed to March 1, 1998 the date after which the commercial banks can opt for the gradual redemption of participation certificates issued under Resolution No. 9 of January 25, 1996. The annual interest rate paid on these certificates remained unchanged at 8 percent, as established by Resolution No. 3 of April 25, 1996.

Monetary Board Resolution No. 1 of January 20, 1998.

Established a minimum solvency ratio of 10 percent for commercial banks, multiservices banks, and other financial institutions

Monetary Board Resolution No. 2 of January 20, 1998.

Froze commercial and multiservice banks' excess reserves on January 16 for 90 days in a special account of the central bank to be remunerated at an annual interest rate of 8 percent.

Monetary Board Resolution No. 3 of January 20, 1998.

Limited the commercial bank net credit to the consolidated public sector in 1998, including the central government, to the level outstanding on January 31, 1997. The resolution also applied to the Reserves Bank.

Monetary Board Resolution No. 4 of January 20, 1998.

Modified Resolution No. 1 of October 28, 1997 by raising the interest rate on certificates of participation to 16 percent.

Monetary Board Resolution No. 5 of January 20, 1998.

Established a surrender requirement for foreign exchange agencies. Agencies may not maintain open positions in foreign exchange and are obliged to surrender to the central bank (within 48 hours) their excess purchases of foreign exchange.

Monetary Board Resolution No. 6 of January 20, 1998.

Established a weight of 100 percent for credits in foreign currency in the calulation of the basis for banks' provisions on loans.

Monetary Board Resolution No. 7 of January 20, 1998.

Established that all financial institutions should finalize by December 31, 1998 their plans to comply with Y2K standards.

Monetary Board Resolution No. 1 of March 5, 1998.

Established that foreign exchange dealers must open special foreign exchange accounts with commercial and multiservice banks for all transactions, except those related to imports.

Monetary Board Resolution No. 2 of March 5, 1998.

Confirmed the Resolution of January 13, 1995, which established a surrender requirement for commercial and multiservice banks.

Monetary Board Resolution No. 1 of July 2, 1998.

Devalued the official exchange rate and reestablished the weekly adjustment mechanism based on the average of the commercial bank buy rates.

Monetary Board Resolution No. 2 of July 2, 1998.

Raised the commission on foreign exchange operations from 1.5 percent to 1.75 percent.

Monetary Board Resolution No. 1 of July 30, 1998.

Excluded interbank deposits from the calculation of the reserve requirement.

Monetary Board Resolution No. 1 of November 25, 1998.

Authorized the central bank to issue up to RD\$1 billion of participation certificates with a one-year maturity and interest rate of 16 percent.

Monetary Board Resolution No. 1 of February 12, 1999.

Limited the Reserves Bank's net credit to the public sector in 1999, including the central government, to the level outstanding on January 31, 1999.

Monetary Resolution No. 2 of February 12, 1999.

Authorized the central bank to postpone by 45 days the early redemption of participation certificates. The resolution was to be reviewed after 30 days

Monetary Resolution No. 3 of February 12, 1999.

Limited credit by commercial and multiservice banks to the commercial sector, excluding in foreign currencies, to the level outstanding on December 31, 1998. The ceiling was imposed for 90 days. Banks with outstanding credits above the ceiling had 30 days to comply. The resolution was to be reviewed after 30 days.

Monetary Resolution No. 4 of February 12, 1999.

Froze 20 percent of the excess reserves held by commercial and multiservice banks on February 11, 1999, for a period of 90 days. The rate of remuneration was set to 8 percent. The resolution was to be reviewed after 45 days.

- 96 -

APPENDIX III

Major Changes in the Exchange and Trade System, April 1997-February 1999

Law No. 150 of July 7, 1997.

Set a zero tariff rate for imports of animals, inputs, machinery, and equipment used in agricultural production. Exempted these imports from the value-added tax and exchange rate surcharge.

Decree No. 367-97 of August 29, 1997.

Set a zero tariff rate for several items, including raw materials and industrial equipment used in textile manufacturing.

Decree No. 114-98 of March 16, 1998.

Eliminated all remaining nontariff trade barriers that had been created by earlier presidential or administrative decrees.

	Tax	Nature of Tax	Exemptions and Deductions	Rates
1. Ta	xes on income and profits			
1.1	Personal income tax, Law 11-92 (Tax Code), 3/26/96	Tax on net income from Dominican sources of individuals and estates; financial profits from abroad and income from foreign investment of Dominican residents are also taxed; capital gains included in net income; income paid in kind is also taxable	Workers' compensation for illness, death, disability and severance; life insurance payments; interest paid by government financial intermediaries to individuals	Minimum annual taxable income RD\$97,800; initial tax rate of 15 percent; marginal tax rate of 20 percent on income between RD\$162,996 and RD\$244,488; marginal tax rate of 25 percent on income above RD\$244,488
12	Corporate income tax, Law 11-92 (Tax Code), 3/26/96	Tax on corporate profits	Nonprofit institutions	25 percent
13	Tax on horse racing, Law 194, 10/21/67	Tax on bets and race track revenue	None	3 percent on each bet; race track should retain 27 percent of betting proceeds
1.4	Tax on casinos, Law 281, 4/1/68, modified by Law 24-98, 2/4/98	Tax on gambling tables	None	Monthly fee of RD\$6,000— RD\$16,000 per table, based on the size and location of the casino
1.5	Tax on revenue from gambling machines, Law 96-88, 12/27/98	Tax on the gross revenue from gambling machines	None	50 percent on the gross revenue from the gambling machines; the law sets a minimum revenue by machine and denomination of the coin used for the bet
2. Ta	ixes on property			
2. 1	Tax on luxury homes, Law 18-88, 2/26/88	Tax on luxury homes worth over RD\$500,000 and vacant urban land regardless of the value	Government property, nonprofit or religious organizations, commercial and diplomatic properties, owner-occupied property with outstanding mortgages of 50 percent or more of the property's value	0.5 percent of the property value; 0.25 percent, when the house is occupied by the owner or his immediate family
2.2	Tax on property, Law 1542, 10/11/47, Law 370, 10/22/68	Registry tax on the value of land and improvements	None	0.20 percent on the value of land and improvements; RD\$5.0 on every new entry in the property registry
2.3	Tax on property transfers, Law 3341, 7/13/52, and Law 32-72, 10/8/74	On real estate transactions and on transfers of real estate	None	1 percent; 2 percent on the value of the property transferred

	Tax	Nature of Tax	Exemptions and Deductions	Rates
2.4	Tax on inheritances and gifts, Laws 2569, 3992, and 5655	On estates and gift transfers of moveable assets and real estate in Dominican territory	Life insurance payments and gifts to nonprofit organizations	There are 15 brackets ranging from RD\$1,000 to RD\$500,000 and higher; there are four rates in each bracket; the rates are applied according to the degree of consanguinity between transferor and transferee; the rates range from 1 percent in the first category of the first bracket to 3.2 percent in the fourth category of the highest bracket
2.5	Tax on business incorporation	N/A	N/A	N/A
3. Ta	xes on goods and services			
3.1	Taxes on goods			
3.1.1	Tax on alcoholic beverages, Law 11-92 (Tax Code), 3/26/96, modified by norm 4-99	Tax on consumption of rum, wine, beer, and other alcoholic drinks	None	20 percent on the retail price of beer and 25 percent on other alcoholic drinks
3.1.2	Tax on tobacco, Law 11-92 (Tax Code), 3/26/96	Tax on consumption of cigarettes and cigars	None	20 percent
3.1.3	Tax on matches, Laws 1922, 5306, and 5764.	Tax on match boxes	None	RD\$0.0033 per box of 15-30 matches; RD\$0.01 on boxes of 30 matches or more
3.1.4	Tax on oil derivatives, Decree 128-96, 12/20/96	Tax on premium and regular gasoline, diesel, kerosene, avtur, and fuel oil.; tax is the difference between retail price, and ex-refinery cost plus distributors' margin	None	Prices (RD\$ per gallon): 1/ Gasoline (regular) 22.00 Gasoline (premium) 27.90 Diesel 12.90 Kerosene 17.85 Avtur 16.30 Fuel oil 6.87
3.1.5	Tax on soft drinks, Laws 1922, 5306, and 5764	Tax on soft drinks		RD\$0.05 per bottle

	Tax	Nature of Tax	Exemptions and Deductions	Rates
3.2	Value Added Tax, Law 11-92 (Tax Code), 3/26/96		Domestic goods: Nonprocessed agriculture, livestock, fishery and forestry products, fluid and powder milk, flour, bread, cereals, ground coffee, chocolate and cocoa for home consumption, rice, ketchup, edible oil, eggs, poultry, fresh and frozen beef, fish and seafood, natural water, cheese, butter, sausages, and pasta, salt, sugar, honey, charcoal and oil derivatives, pharmaceutical and veterinary products, fertilizer, seeds, animal food, agrochemicals, soaps, dental cream, detergents, art works, newsprint, books, journals, and magazines Imported goods: books, journals, magazines Imported by publishing companies, crude oil and oil derivatives, pharmaceutical and veterinary products, fertilizer, seeds, and animal feed, bacalao, herring, powder milk, corn, wheat, crude edible oil, agrochemicals, import samples and imports under special regimes	8 percent
33 Te	ixes on services			
3.3.1	Tax on international airlien tickets, Law 11-92 (Tax Code), 3/26/96	Tax on ticket sales for international flights	None	20 percent
3.3.2	Airport user fees	Fees on air travelers	Diplomatic travelers	US\$10 per passenger traveling abroad
3.3.3	Tax on long distance communication services at home or abroad, Law 11-92 (Tax Code), 3/26/96	Tax on oral, written and graphics communications by radio, cable, telegraph, phone and satelites	None	10 percent
3.3.4	Tax on tickets for public performance and sports events, Law 1646, 2/18/48, Law 44, 11/83/66	Tax on the sales of tickets for public performance and for sport events	None	RD\$0.01 per ticket with price of RD\$0.20 or lower, and 7 percent on the value of tickets with higher prices; RD\$0.05 per ticket for sport events
3.3.6	Tax on hotel rooms, Law 11-92 (Tax Code), 3/26/96	On hotel room occupancy	None	5 percent

	Tax	Nature of Tax	Exemptions and Deductions	Rates
3.3.7	Tax on insurance premiums, Law 11-92 (Tax Code), 3/26/96	Tax on life, car, hazard, health, accident, home, and freight insurance	None	10 percent
3.4.1	Tax on motor vehicles, Laws 16, 562, 241, and 32-72.	Fees for motor vehicle licenses and registration	None	Various
4.1.1	Tax on imports, Law 14-93 (Customs Code), 8/26/93	Tax on imported goods	Crude oil and oil derivatives, imports for the industrial free-trade zones, machinery and equipment, and other inputs used in agricultural production	Tax imports at duty rates ranging between 0 and 35 percent; special rate of 3-5 percent for some foodstuff, newsprint, books, and magazines; inputs for pharmaceuticals and agricultural production are subject to a duty rate of 3 percent
4.1.2	Tax on luxury goods, Law 11-92 (Tax Code), 3/26/96	Perfumes, bathtubs, rugs, carpets, diamonds, precious stones, pearls, air conditioners, vacuum cleaners, ovens, waste disposal, heaters, electronics, vehicles, motoroycles, yachts, watches, and firearms	None	20-50 percent
4.2	Taxes on sales of the industrial free-trade zone	N/A	None	N/A
5. Oth	er taxes			
5.1	Industry and commerce licenses, Law 213-84	Eliminated by Law 96-97, 5/30/97	None	N/A
5.1.1	Financial institutions licenses, Law 140-87	Eliminated by accord 1/1/98	None	N/A
5.2	Stamp taxes, Law 210, 5/11/84	On documents	None	The minimum rate is RD\$0.50 and the maximum RD\$50.0

1/ Prices in effect on March 31, 1998. Resolution 128-96 allows for prices to be adjusted periodically for, inter alia, changes in the consumer price index, world oil prices, and the official exchange rate, but in practice, adjustments have been infrequent.

Table 1. Dominican Republic: Macroeconomic Flows

	1993	1994	1995	1996	1997	Ртеl. 1998
	(In percent	of GDP)				
	I. Balance of	f Payments				
Current account balance	-5.5	-2.6	-1.5	-1.6	-1.1	-2.2
Exports	13.9	14.3	14.6	14.2	14.6	14.4
mports	28.7	27.7	26.0	26.6	27.8	30.8
Net services and income	0.2	1.7	1.8	2.2	3.2	1.8
Of which					10.0	12.4
Tourism receipts	12.6	13.2	12.9	13.2	13.9 1.2	13.5 1.1
Interest payments	2.8 9.2	2.0 9.1	1.8 8.2	1.6 8.7	9.0	12.4
Net transfers	7.2	9.1	0.2	6.7	7.0	
Capital and financial accounts	0.8	-3.0	2.3	1.5	1.7	2.6
Public	-5.5	-2.1	-0.1	-0.5	-0.6	-0.1
Private, including errors and omissions	6.2	-0.9	2.4	2.0	2.3	2.7
Overall balance	-4.7	-5.6	0.8	-0.1	0.6	0.4
Net international reserves (increase -)	-1.4	4.4	-1.1	-0.3	-0.7	-0.6
,			0.3	0.4	0.1	0.2
Extraordinary financing Net change in arrears	6.1 -3.6	1.3 -9.0	0.3	0.4	-1.3	-0.2
Net change in arrears Debt relief	0.2	-9.0 5.5	0.3	0.2	0.5	0.0
Exceptional financing 1/	9.5	4.8	0.0	0.2	0.9	0.4
•	regate Expenditure	. Savings, and	Investment			
	107.5	105.4	103.3	104.9	104.8	108.9
Aggregate domestic expenditure Consumption	80.9	81.6	81.7	83.8	82.7	83.
Public	4.4	4.9	5.1	5.2	7.8	8.
Private	76.5	76.8	76.5	78.6	75.0	74.
Investment	26.5	23.8	21.7	21.1	22.0	25.
Public	10.0	9.8	7.4	7.6	5.7	5.
Private	16.5	14.0	14.2	13.5	16.3	20.
National savings	21.1	21.1	20.2	19.5	21.0	23.
Public Private	8.0 13.0	6.3 14.9	6.5 13.6	4.7 14.9	3.6 17.4	3. 20.
				1.6	1.1	2.
External savings	5.5	2.6	1.5	1.0	1.1	Ær.
	III. Consolidate	d Public Sector				
Current account balance	8.0	6.3	6.5	4.7	3.6	3.
Capital expenditure	10.0	9.8	7.4	7.9	6.1	6.
Primary balance	1.6	-2.5	1.1	0.1	-0.4	-0. -2.
Overall balance (after grants) 3/	-0.9	-4.1	-1.0	-1.8	-2.1	-2.
	IV. Banki	ng System				
Net foreign assets	5.7	0.4	1.9	1.7	2.0	1
Net domestic assets	34.0	33.2	31.9	33.3	33.6	35
Public sector (net)	-0.8	33.2 2.5	2.2	33.3 2.2	2.4	3
Private sector	-0.8 16.0	16.1	16.4	18.5	20.4	21
Other	18.9	14.6	13.3	12.6	10.8	10
Medium- and long-term foreign liabilities	12.4	6.7	6.2	5.7	4.7	4
Liabilities to the private sector	27.3	26.9	27.6	29.3	30.8	33
Velocity (GDP/M2) 4/	4.7	4.5	4.7	4.4	4.3	3
	(Annual perce	ntage change)				
Memorandum items:	_					_
Real GDP	3.0	4.3	4.8	7.3	8.2	7
Consumer prices (year average) Consumer prices (end of year)	5.3 2.8	8.3 14.3	12.5 9.2	5.4 3.9	8.3 8.4	7
Commission prices (cité or year)				3.7	0.4	,
	(In millions of D	-	Í			
GDP	121,808	137,566	162,283	183,532	215,064	241,91

^{1/} In response to Hurricane Georges, Paris Club creditors informally agreed to tolerate arrears for up to six months on debt service due from September 22, 1998 to December 31, 1999.
2/ Includes quasi-fiscal operations of the central bank.
3/ Includes the overall balance of the nonconsolidated public enterprises.
4/ The denominator is the average of the stock of money and quasi-money (M2) at the beginning and end of the year.

Table 2. Dominican Republic: GDP by Sector at Current Prices

	1993	1994	1995	1996	1997	Prel. 1998
	(In mi	lions of Domini	can pesos)			
GDP at market prices	121,808	137,566	162,283	183,532	215,064	241,910
Primary production	17,969	20,831	24,990	28,521	31,941	32,893
Crops	8,648	9,061	11,096	13,255	14,908	15,415
Livestock	6,842	7,391	8,561	9,513	10,628	11,314
Forestry and fishing	709	773	894	960	1,051	1,443
Mining	1,770	3,605	4,439	4,792	5,354	4,722
Secondary production	36,695	41,325	47,101	53,251	64,172	74,628
Manufacturing	22,897	25,479	28,564	31,252	36,525	40,215
Sugar	1,439	1,494	1,498	1,883	2,200	1,802
Other	17,043	18,853	21,029	23,037	26,732	29,842
Free-trade zones 1/	4,415	5,132	6,037	6,333	7,592	8,57
Construction	11,254	12,988	15,452	18,410	23,366	29,307
Electricity and water	2,544	2,858	3,086	3,589	4,282	5,10
Services	67,144	75,411	90,191	101,761	118,952	134,389
Wholesale and retail trade	14,657	16,103	19,684	22,621	26,691	31,21
Hotels and restaurants	6,333	7,882	10,344	12,132	15,341	16,852
Transport	8,341	9,210	10,978	12,501	14,642	16,753
Communications	3,458	4,199	5,645	6,922	8,943	11,30
Financial services	6,444	6,997	7,938	8,528	9,536	10,40
Housing	6,742	7,370	8,437	9,037	10,041	10,76
Government services	10,804	12,127	13,704	15,272	17,069	18,83
Other	10,365	11,522	13,462	14,747	16,689	18,25
		(In percent of G	DP)			
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0
Primary production	14.8	15.1	15.4	15.5	14.9	13.6
Crops	7.1	6.6	6.8	7.2	6.9	6.
Livestock	5.6	5.4	5.3	5.2	4.9	4.
Forestry and fishing	0.6	0.6	0.6	0.5	0.5	0.
Mining	1.5	2.6	2.7	2.6	2.5	2.
Secondary production	30.1	30.0	29.0	29.0	29.8	30.
Manufacturing	18.8	18.5	17.6	17.0	17.0	16.
Sugar	1.2	1.1	0.9	1.0	1.0	0.
Other	14.0	13.7	13.0	12.6	12.4	12.
Free-trade zones 1/	3.6	3.7	3.7	3.5	3.5	3.
Construction	9.2	9.4	9.5	10.0	10.9	12.
Electricity and water	2.1	2.1	1.9	2.0	2.0	2.
Services	55.1	54.8	55.6	55.4	55.3	55.
Wholesale and retail trade	12.0	11.7	12.1	12.3	12.4	12.
Hotels and restaurants	5.2	5.7	6.4	6.6	7.1	7.
Transport	6.8	6.7	6.8	6.8	6.8	6.
Communications	2.8	3.1	3.5	3.8	4.2	4.
Financial services	5.3	5.1	4.9	4.6	4.4	4.
Housing	5.5	5.4	5.2	4.9	4.7	4.
Public administration	8.9	8.8	8.4	8.3	7.9	7.
Other	8.5	8.4	8.3	8.0	7.8	7.

Source: Central Bank of the Dominican Republic.

^{1/} Only includes wages and salaries.

Table 3. Dominican Republic: GDP by Sector at Constant Prices

	1000	1004	1005	1007	1007	Prel
	1993	1994	1995	1996	1997	1998
	(In millions o	of Dominican pe	sos at 1990 pric	ces)		
GDP at market prices	67,755	70,695	74,094	79,477	85,956	92,19
Primary production	9,995	10,705	11,410	12,351	12,766	12,53
Crops	4,810	4,656	5,066	5,740	5,958	5,87
Livestock	3,806	3,798	3,909	4,120	4,248	4,31
Forestry and fishing	395	397	408	416	420	55
Mining	984	1,853	2,027	2,075	2,140	1,79
Secondary production	20,411	21,237	21,505	23,060	25,648	28,44
Manufacturing	12,736	13,094	13,041	13,534	14,598	15,32
Sugar	800	768	684	815	87 9	68
Other	9,480	9,689	9,601	9,976	10,684	11,37
Free-trade zones 1/	2,456	2,638	2,756	2,742	3,034	3,26
Construction	6,260	6,675	7,055	7,972	9,339	11,16
Electricity and water	1,415	1,469	1,409	1,554	1,711	1,94
Services	37,349	38,753	41,179	44,067	47,542	51,21
Wholesale and retail trade	8,153	8,275	8,987	9,796	10,668	11,89
Hotels and restaurants	3,523	4,051	4,723	5,254	6,131	6,42
Transport	4,640	4,733	5,012	5,413	5,852	6,38
Communications	1,924	2,158	2,577	2,997	3,574	4,30
Financial services	3,584	3,595	3,624	3,693	3,811	3,90
Housing	3,750	3,788	3,852	3,914	4,013	4,10
Government services	6,010	6,232	6,257	6,614	6,822	7,18
Other	5,766	5,921	6,146	6,386	6,670	6,95
	(A	nnual percentage	e change)			
GDP at market prices	3.0	4.3	4.8	7.3	8.2	7
Primary production	-4.7	7.1	6.6	8.2	3.4	-1
Crops	-2.9	-3.2	8.8	13.3	3.8	-1
Livestock	5.8	-0.2	2.9	5.4	3.1	1
Forestry and fishing	-0.6	0.7	2.7	1.9	1.0	30
Mining	-36.0	88.2	9.4	2.4	3.1	-15
Secondary production	5.4	4.0	1.3	7.2	11.2	10
Manufacturing	2.2	2.8	-0.4	3.8	7.9	5
Sugar	12.1	-4.1	-10.9	19.2	7.9	-21
Other	-1.6	2.2	-0.9	3.9	7.1	6
Free-trade zones 1/	16.4	7.4	4.5	-0.5	10.6	7
Construction	10.1	6.6	5.7	13.0	17.1	19
Electricity and water	15.5	3.8	-4.1	10.3	10.1	13
Services	4.0	3.8	6.3	7.0	7.9	7
Wholesale and retail trade	0.7	1.5	8.6	9.0	8.9	11
Hotels and restaurants	21.3	15.0	16.6	11.2	16.7	4
Transport	4.8	2.0	5.9	8.0	8.1	g
Communications	10.7	12.2	19.4	16.3	19.2	20
Financial services	-1.0	0.3	0.8	1.9	3.2	2
Housing	0.9	1.0	1.7	1.6	2.5	2
Public administration	3.1	3.7	0.4	5.7	3.1	4
Other	3.2	3.7 2.7	3.8	3.7	3.1 4.4	2

^{1/} Only includes wages and salaries.

Table 4. Dominican Republic: Gross Domestic Expenditure at Current Prices

						Prel.
	1993	1994	1995	1996	1997	1998
	(In mill	ions of Dominica	nn pesos)			
GDP at market prices	121,808	137,566	162,283	183,532	215,064	241,910
Resource balance	-9,11 9	-7,448	-5,419	-8,938	-10,280	-21,596
Exports of goods and services	36,747	43,423	50,230	56,287	67,576	73,993
Imports of goods and services	-45,866	-50,871	-55,649	-65,225	-77,856	-95,589
Gross domestic expenditure	130,927	145,014	167,702	192,470	225,344	263,506
Consumption	98,600	112,314	132,541	153,724	177,956	200,988
Private sector	93,202	105,622	124,210	144,165	161,287	181,252
Public sector	5,398	6,692	8,331	9,559	16,669	19,736
Gross capital formation	32,169	32,525	34,952	38,507	47,095	62,188
Private sector	19,972	19,035	22,897	24,489	34,792	48,341
Public sector	12,197	13,490	12,055	14,018	12,303	13,847
Change in inventories	158	175	209	240	293	330
	(In percent of GD	P)			
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0
Resource balance	-7 .5	-5.4	-3.3	-4.9	-4.8	-8.9
Exports of goods and services	30.2	31.6	31.0	30.7	31.4	30.6
Imports of goods and services	-37.7	-37.0	-34.3	-35.5	-36.2	-39.5
Gross domestic expenditure	107.5	105.4	103.3	104.9	104.8	108.9
Consumption	80.9	81.6	81.7	83.8	82.7	83.1
Private sector	76.5	76.8	76.5	78.6	75.0	74.9
Public sector	4.4	4.9	5.1	5.2	7.8	8.2
Gross capital formation	26.4	23.6	21.5	21.0	21.9	25.7
Private sector	16.4	13.8	14.1	13.3	16.2	20.0
Public sector	10.0	9.8	7.4	7.6	5.7	5.7
Change in inventories	0.1	0.1	0.1	0.1	0.1	0.1

Table 5. Dominican Republic: Gross Domestic Expenditure at Constant Prices

						Prel.
	1993	1994	1995	1996	1997	1998
	(In millions of	Dominican pes	sos at 1990 pric	ces)		
GDP at market prices	67,755	70,695	74,094	79,477	85,956	92,193
Resource balance	-5,072	-3,827	-2,474	-3,871	-4,109	-8,230
Exports of goods and services	20,440	22,315	22,934	24,375	27,009	28,199
Imports of goods and services	-25,513	-26,142	-25,408	-28,245	-31,117	-36,429
Gross domestic expenditure	72,828	74,522	76,568	83,348	90,065	100,423
Consumption	54,846	57,718	60,515	66,569	71,125	7 6,597
Private sector	51,843	54,279	56,711	62,430	64,463	69,076
Public sector	3,003	3,439	3,804	4,139	6,662	7,522
Gross capital formation	17,894	16,714	15,958	16,675	18,823	23,700
Private sector	11,109	6,932	5,504	6,070	4,917	5,277
Public sector	6,785	9,782	10,454	10,605	13,906	18,423
Change in inventories	88	90	95	104	117	126
	(Anı	ual percentage	change)			
GDP at market prices	3.0	4.3	4.8	7.3	8.2	7.3
Resource balance	-33.8	-24.5	-35.3	56.4	6.1	100.3
Exports of goods and services	18.7	9.2	2.8	6.3	10.8	4.4
Imports of goods and services	2.5	2.5	-2.8	11.2	10.2	17.1
Gross domestic expenditure	-0.8	2.3	2.7	8.9	8.1	11.5
Consumption	-6.4	5.2	4.8	10.0	6.8	7.7
Private sector	-8.3	4.7	4.5	10.1	3.3	7.2
Public sector	47.8	14.5	10.6	8.8	61.0	12.9
Gross capital formation	21.2	-6.6	-4.5	4.5	12.9	25.9
Private sector	10.0	-37.6	-20.6	10.3	-19.0	7.3
Public sector	45.2	44.2	6.9	1.4	31.1	32.5
Change in inventories	0.4	2.3	6.1	8.9	12.7	7.3

Table 6. Dominican Republic: Savings and Investment

						Prel.
	1993	1994	1995	1996	1997	1998
	(In r	nillions of Domi	nican pesos)			
Gross domestic investment	32,327	32,700	35,161	38,747	47,388	62,517
Private sector 1/	20,130	19,210	23,106	24,729	35,085	48,670
Public sector	12,197	13,490	12,055	14,018	12,303	13,847
Gross national savings	25,669	29,090	32,721	35,846	45,060	57,167
Private sector	15,885	20,489	22,123	27,284	37,406	49,389
Public sector	9,784	8,601	10,597	8,562	7,653	7,777
External savings	6,658	3,610	2,440	2,900	2,329	5,350
		(In percent of	GDP)			
Gross domestic investment	26.5	23.8	21.7	21.1	22.0	25.8
Private sector 1/	16.5	14.0	14.2	13.5	16.3	20.1
Public sector	10.0	9.8	7.4	7.6	5.7	5.7
Gross national savings	21.1	21.1	20.2	19.5	21.0	23.6
Private sector	13.0	14.9	13.6	14.9	17.4	20.4
Public sector	8.0	6.3	6.5	4.7	3.6	3.2
External savings	5.5	2.6	1.5	1.6	1.1	2.2
Memorandum item:						
Gross domestic savings	19.1	18.4	18.3	16.2	17.3	16.9

^{1/} Includes change in inventories.

Table 7. Dominican Republic: Output of Selected Products

(In thousands of metric tons; unless otherwise specified)

	·				··	Prel.
	1993	1994	1995	1996	1997	1998
Agricultural products						
Sugarcane	7,368	6,258	5,199	6,076	6,294	5,028
Coffee beans	75	74	88	89	82	88
Cocoa beans	54	63	65	67	58	68
Tobacco leaves	19	17	19	29	36	43
Unprocessed rice	443	376	487	474	509	475
Beans	39	37	37	37	27	24
Tomatoes	88	83	94	206	254	278
Livestock products						
Beef	86	81	80	80	79	80
Poultry	128	131	137	149	156	158
Milk (millions of liters)	370	360	374	381	378	389
Manufacturing products						
Raw sugar	621	583	508	619	690	514
Refined sugar	117	101	98	111	113	105
Rice	288	244	316	308	331	309
Rum (millions of liters)	43	43	41	45	43	42
Beer (millions of liters)	184	219	208	220	259	299
Pasteurized milk (millions of liters)	22	30	31	25	28	33
Cement	1,271	1,303	1,450	1,642	1,822	1,872
Construction bars	110	105	127	153	186	220
Mineral products						
Ferronickel	35	80	81	78	85	66
Gold (thousands of troy ounces)	8	49	106	118	76	46
Silver (thousands of troy ounces)	39	296	677	547	399	238

Source: Central Bank of the Dominican Republic.

Table 8. Dominican Republic: Free-Trade Zones

Year	Number of Firms (Units)	Number of Employees (Thousands)	Foreign Exchange Surrendered to the Central Bank 1/ (In millions of US\$)	Gross Value of Exports (In millions of US\$)
1000	71.0	16.4	44.5	276.2
1980	71.0	16.4	44.5	276.2
1981	77.0	18.3	57.6	357.5
1982	87.0	18.7	61.1	379.2
1983	101.0	19.3	61.9	384.2
1984	120.0	25.7	52.1	323.3
1985	136.0	30.9	44.6	276.8
1986	156.0	51.2	88.5	549.2
1987	199.0	66.0	98.1	608.8
1988	220.0	83.8	130.0	806.8
1989	299.0	122.9	191.3	1,187.2
1990	331.0	130.0	196.1	1,217.0
1991	366.0	135.5	249.9	1,550.9
1992	404.0	141.1	305.7	1,897.2
1993	462.0	164.3	401.0	2,608.9
1994	476.0	176.3	441.2	2,716.1
1995	469.0	165.6	512.2	2,907.4
1996	434.0	164.6	545.2	3,107.3
1997	446.0	182.2	698.3	3,596.4
1998 2/	496.0	195.2	826.5	4,100.2

Sources: National Planning Office; and Dominican Republic Free-Trade Zones Association.

^{1/} Since March 20, 1992, earnings of the free-trade zones do not have to be surrendered to the central bank. From 1992 on, the data represent an estimate of local expenditures.

2/ Preliminary.

Table 9. Dominican Republic: Production and Sales of Electricity

			-			Prel.
	1993	1994	1995	1996	1997	1998
		(In gigawatt-h	ours)			
Production	5,666	5,984	5,765	6,903	7,546	7,928
Hydroelectric	1,419	673	762	1,087	839	922
Thermal	2,794	3,210	2,846	2,336	2,465	2,420
Gas turbines	709	727	573	613	609	1,227
Diesel	4	5	6	6	5	11
Private sector production	741	1,369	1,577	2,862	3,628	3,348
Less	2,345	2,557	2,473	3,269	3,524	3,334
CDE internal consumption	232	236	234	211	211	236
Losses 1/	2,113	2,321	2,239	3,059	3,312	3,098
Sales	3,321	3,427	3,292	3,634	4,022	4,594
Residencial	1,318	1,374	1,301	1,392	1,441	1,513
Commercial	383	391	375	419	449	474
Industrial	1,066	1,129	1,081	1,247	1,392	1,582
Public sector	371	348	351	391	565	859
Street lights	184	184	184	184	176	167
	(A	nnual percentag	e change)			
Sales	14.6	3.2	-3.9	10.4	10.7	14.2
Residencial	14.2	4.2	-5.3	7.0	3.5	5.0
Commercial	17.7	2.2	-4.2	11.7	7.2	5.6
Industrial	21.4	6.0	-4.3	15.4	11.6	13.6
Public sector	4.0	-6.0	0.8	11.4	44.5	52.0
Street lights	0.0	0.0	0.0	0.0	-4.6	-5.1

Sources: Dominican Electricity Corporation; and Central Bank of the Dominican Republic.

^{1/} Residual, mostly accounted for by transmission losses and unregistered line connections.

Table 10. Dominican Republic: Milled Sugarcane and Production of Raw Sugar (Volume in thousands of metric tons; share and recovery rates in percent)

	Sugarca	ne Milled	Production	Production of Raw Sug		
Year	Volume	Share	Volume	Share	Rates 1/	
1993	7,368	100.0	621	100.0	8.4	
State Sugar Council (CEA)	3,944	53.5	276	44.5	7.0	
Central Romana	3,144	42.7	321	51.7	10.2	
Vicini	280	3.8	23	3.8	8.4	
1994	6,258	100.0	582	100.0	9.3	
State Sugar Council (CEA)	3,083	49.3	253	43.5	8.2	
Central Romana	2,543	40.6	285	49.0	11.2	
Vicini	632	10.1	44	7.5	6.9	
1995	5,199	100.0	507	100.0	9.8	
State Sugar Council (CEA)	2,665	51.3	222	43.8	8.3	
Central Romana	2,061	39.6	245	48.3	11.9	
Vicini	473	9.1	40	7.9	8.5	
1996	6,075	100.0	619	100.0	10.2	
State Sugar Council (CEA)	2,247	37.0	197	31.8	8.8	
Central Romana	3,110	51.2	358	57.8	11.5	
Vicini	718	11.8	64	10.3	8.9	
1997	6,294	100.0	690	100.0	11.0	
State Sugar Council (CEA)	2,373	37.7	234	33.9	9.9	
Central Romana	3,099	49.2	389	56.5	12.6	
Vicini	822	13.1	67	9.6	8.1	
1998	5,028	100.0	514	100.0	10.2	
State Sugar Council (CEA)	1,811	36.0	164	31.9	9.1	
Central Romana	2,471	49.1	282	55.0	11.4	
Vicini	746	14.8	67	13.1	9.0	

Sources: Dominican Sugar Institute; and Central Bank of the Dominican Republic.

^{1/} The ratio of raw sugar production to milled sugarcane.

Table 11. Dominican Republic: Petroleum Statistics

						Prel.
	1993	1994	1995	1996	1997	1998
D	n millions of U.	S. dollars)				
Imports of crude oil and derivatives 1/	453	521	604	767	814	648
Crude oil	231	237	264	297	294	184
Refined derivatives	222	284	340	470	520	464
	(In millions of	barrels)				
Imports of crude oil and derivatives	26.4	32.1	33.8	35.4	40.4	44.2
Crude oil	15.3	16.1	16.2	15.0	16.3	15.9
Refined derivatives	11.1	16.0	17.6	20.4	24.1	28.3
Refinery output	9.7	8.9	7.6	6.5	5.1	1.5
Domestic consumption	20.8	24.9	25.2	26.9	29.2	29.8
Gasoline	4.9	5.6	6.2	6.7	7.2	7.7
Diesel	6.1	7.3	7.4	8.7	10.2	10.8
Fuel oil	5.7	7.2	6.8	6.1	6.3	5.1
Kerosene	0.1	2.0	2.3	2.5	2.6	2.7
Liquid petroleum gas	2.1	2.8	2.5	2.9	2.9	3.5
Other oil products	1.9	0.0	0.0	0.0	0.0	0.0

^{1/} Includes imports by the Dominican Electricity Corporation.

Table 12. Dominican Republic: Selected Price and Wage Indices

(Annual percentage change)

				***************************************		Prel.
	1993	1994	1995	1996	1997	1998
End period consumer price index	2.8	14.3	9.2	3.9	8.4	7.8
Period average consumer price index	5.2	8.3	12.5	5.4	8.3	4.8
GDP deflator	4.9	8.2	12.6	5.4	8.3	4.9
Export price index	-0.4	6.6	1.0	1.7	4.2	-2.4
Import price index	-0.3	1.2	2.4	2.8	0.3	-3.5
Terms of trade index	-0.1	5.4	-1.3	-1.1	3.9	1.2
Minimum wages 1/	15.4	0.0	20.0	0.0	20.0	0.0

^{1/} For medium-sized businesses in the private sector.

Table 13. Dominican Republic: Consumer Price Index

	1993	1994	1995	1996	1997	1998	Prel. 1999
		(Janua	ry 1999 = 100)			
		·	•	•		0 # 4	
Average	65.3	70.7	79.5	83.8	90.8	95.1	100.0
January	65.1	66.8	77.0	82.7	88.5	93.3	100.0
February	65.0	67.5	77.3	82.8	88.3	93.3	99.7
March	64.6	68.2	77.9	82.9	88.5	93.1	100.3
April	64.3	69.0	77.8	83.0	89.2	93.0	100.5
May	64.6	69.7	78.1	83.2	89.4	93.4	100.5
June	65.0	70.3	78.6	83.5	89.8	93.9	99.9
July	65.3	70.4	79.1	83.7	91.5	94.5	•••
August	65.3	71.3	80.0	83.9	92.1	94.7	•••
September	65.7	72.2	81.3	84.3	92.6	95.3	
October	66.0	73.1	81.8	84.5	92.9	97.4	
November	66.1	73.7	82.6	85.1	93.1	99.2	•••
December	66.3	75.8	82.8	86.0	93.2	100.5	
		(Annual)	ercentage cha	nge)			
Average	5.3	8.3	12.5	5.4	8.3	4.8	
End of period	2.8	14.3	9.2	3.9	8.4	7.8	
		(Monthly	percentage ch	ange)			
January	0.9	0.7	1.5	-0.1	2.8	0.1	-0.5
February	-0.1	1.1	0.4	0.1	-0.1	-0.1	-0.3
March	-0.6	1.0	0.8	0.1	0.1	-0.2	0.5
April	-0.4	1.2	-0.1	0.1	0.9	-0.1	0.3
May	0.3	1.0	0.4	0.2	0.2	0.4	-0.0
June	0.7	0.9	0.6	0.3	0.4	0.5	-0.5
July	0.5	0.2	0.7	0.3	1.9	0.6	
August	0.0	1.2	1.1	0.2	0.6	0.2	
September	0.6	1.3	1.5	0.5	0.6	0.7	
October	0.5	1.2	0.7	0.2	0.3	2.2	
November	0.2	0.8	0.9	0.7	0.2	1.8	
December	0.3	2.8	0.2	1.2	0.2	1.3	
		(12-month	percentage cl	nange)			
January	6.1	2.6	15.3	7.5	6.9	5.5	7.1
February	7.6	3.8	14.5	7.2	6.7	5.6	6.9
March	7.5	5.6	14.2	6.5	6.7	5.3	7.7
April	6.6	7.2	12.8	6.8	7.5	4.2	8.1
May	6.5	7.9	12.1	6.5	7.4	4.5	7.5
June	4.3	8.2	11.8	6.2	7.5	4.6	6.4
July	5.4	7.9	12.3	5.8	9.3	3.3	
August	4.4	9.1	12.3	4.8	9.8	2.9	•••
September	4.2	10.0	12.5	3.8	9.9	2.9	
October	4.2	10.8	12.0	3.3	10.0	4.8	
November	3.9	11.4	12.1	3.0	9.4	6.6	
December	2.8	14.3	9.2	3.9	8.4	7.8	

Table 14. Dominican Republic: Average Selling Price of Electricity

	1000		-	*****		Prel.
	1993	1994	1995	1996	1997	1998
	(In Domi	nican cents pe	r kilowatt-hou	r)		
All users	125.0	127.9	153.6	151.5	167.7	172.9
Residential	111.5	114.2	134.5	135.0	149.4	154.5
Commercial	151.2	154.2	181.6	178.4	197.7	205.9
Industrial	134.7	137.9	170.3	161.3	178.2	183.8
Public sector	129.7	132.4	158.3	162.1	172.5	172.2
Street lights	102.2	104.6	123.8	126.9	141.6	145.9
	(An	nual percentag	ge change)			
All users	-2.5	2.3	20.1	-1.4	10.7	3.1
Residential	-0.6	2.4	17.8	0.4	10.7	3.4
Commercial	0.7	2.0	17.8	-1.8	10.8	4.1
Industrial	-5.3	2.4	23.5	-5.3	10.5	3.1
Public sector	-5.3	2.1	19.6	2.4	6.4	-0.2
Street lights	-3.3	2.3	18.4	2.5	11.6	3.0
	(In U.	S. cents per ki	llowatt-hour)			
All users	10.0	9.8	11.6	11.2	11.8	11.0
Residential	8.9	8.7	10.2	10.0	10.5	9.8
Commercial	12.1	11.8	13.8	13.2	13.9	13.1
Industrial	10.8	10.5	12.9	12.0	12.5	11.7
Public sector	10.4	10.1	12.0	12.0	12.1	10.9
Street lights	8.2	8.0	9.4	9.4	9.9	9.3
Memorandum item:						
Exchange rate 1/	12.53	13.08	13.20	13.47	14.27	15.75

Sources: Dominican Electricity Corporation; and Central Bank of the Dominican Republic.

^{1/} December commercial bank buy rate in Dominican pesos per U.S. dollar.

Table 15. Dominican Republic: Retail Prices of Selected Petroleum Products

	1993	1994	1995	1996	1997	1998
	(In Domini	can pesos per	gallon, end-p	eriod)		
Gasoline	20.00	20.00	20.00	26.00	24.70	22.00
Diesel	13.70	13.70	13.70	17.00	14.60	12.90
Kerosene	18.00	18.00	18.00	20.36	17.85	17.85
Liquid petroleum gas						
Domestic use 1/	3.11	3.11	5.72	6.00	6.00	6.00
Industrial use 1/	3.11	3.11	8.19	10.00	10.00	10.00
Fuel oil	5.05	5.05	5.05	7.65	6.67	6.87
	(Percentage cha	ange from pre	vious end-per	riod price)		
Gasoline	0.0	0.0	0.0	30.0	-5.0	-10.9
Diesel	0.0	0.0	0.0	24.1	-14.1	-11.6
Kerosene	0.0	0.0	0.0	13.1	-12.3	0.0
Liquid petroleum gas						
Domestic use	0.0	0.0	83.9	4.9	0.0	0.0
Industrial use	0.0	0.0	163.3	22.1	0.0	0.0
Fuel oil	0.0	0.0	0.0	51.5	-12.8	3.0
	(In	U.S. dollars	per gallon)			
Gasoline	1.60	1.53	1.52	1.93	1.73	1.40
Diesel	1.09	1.05	1.04	1.26	1.02	0.82
Kerosene	1.44	1.38	1.36	1.51	1.25	1.13
Liquid petroleum gas						
Domestic use	0.25	0.24	0.43	0.45	0.42	0.38
Industrial use	0.25	0.24	0.62	0.74	0.70	0.63
Fuel oil	0.40	0.39	0.38	0.57	0.47	0.44
Memorandum item:						
Exchange rate 2/	12.53	13.08	13.20	13.47	14.27	15.75

Sources: Secretariat of Commerce and Industry; and Central Bank of the Dominican Republic.

^{1/} Prices were raised in January 1995. At that time, separate prices were established for domestic and industrial usage.

^{2/} December commercial bank buy rate in Dominican pesos per U.S. dollar.

Table 16. Dominican Republic: Trends in Minimum Monthly Wages 1/

		Private Businesses		Free- Trade	Public	
Year	Large	Medium	Small	Zones	Sector	
		(In Dominic	an pesos)			
1003	1 (75	1 200	1 000	1 260	780	
1993	1,675	1,200	1,080	1,269	780 780	
1994	1,675	1,200	1,080	1,400	1,014	
1995	2,010	1,440	1,296	1,680		
1996	2,010	1,440	1,296	1,680	1,014 1,500	
1997	2,412	1,728	1,555	1,932		
1998	2,412	1,728	1,555	1,932	1,500	
1999 2/	2,895	1,987	1,757	2,222	1,500	
		(In Dominican p	esos of 1980)			
1993	134.3	96.2	86.6	101.8	62.6	
1994	117.5	84.2	75.8	98.2	54.7	
1995	12 9.1	92.5	83.2	107.9	65.1	
1996	124.2	89.0	80.0	103.8	62.6	
1997	137.5	98.5	88.6	110.2	85.5	
1998	127.5	91.4	82.2	102.2	79.3	
1999 2/	154.0	105.7	93.5	118.2	79.8	
		(Real minimum wage	index 1980 = 100)			
1993	107.5	77.0	69.3	81.4	50.0	
1994	94.0	67.3	60.6	78.6	43.8	
1995	103.3	74.0	66.6	86.3	52.1	
1996	99.4	71.2	64.1	83.0	50.1	
1997	110.0	78.8	71.0	88.1	68.4	
1998	102.0	73.1	65.9	81.7	63.4	
1999 2/	123.2	84.6	75.0	94.5	63.8	
		(In U.S. do	ollars) 3/			
1993	133.7	95.8	86.2	101.3	62.3	
1994	128.1	91.7	82.6	107.0	59.6	
1995	152.3	109.1	98.2	127.3	76.8	
1996	149.2	106.9	96.2	124.7	75.3	
1997	169.0	121.1	109.0	135.4	105.1	
1998	153.1	109.7	98.7	122.7	95.2	
1999 2/	182.4	125.2	110.7	140.0	94.	

^{1/} Wages in effect at the end of the year.

^{2/} Wages in effect as of June 1, 1999. Also, evaluated using the June 1999 consumer price index and exchange rate.

^{3/} Except for 1999, converted to U.S. dollars using the December commercial bank buy rate.

Table 17. Dominican Republic: Employment by Sector of Economic Activity

(In percent of total employment)

	1002	1004	1005	1996	1997	Prel. 1998
	1993	1994	1995	1996	1997	1998
Total employment	100.0	100.0	100.0	100.0	100.0	100.0
Primary production	17.2	14.8	15.0	14.9	20.2	17.0
Agriculture	16.9	14.4	14.6	14.5	19.9	16.7
Mining	0.3	0.4	0.4	0.4	0.3	0.3
Secondary production	23.6	23.7	23.5	23.2	24.8	24.3
Manufacturing	18.6	18.5	18.2	17.5	18.2	18.4
Construction	4.3	4.5	4.7	5.1	5.8	5.0
Electricity	0.7	0.7	0.6	0.6	0.8	0.9
Services	59.1	61.4	61.3	61.7	55.0	58.7
Transport and communications	5.8	6.7	7.3	7.5	7.6	6,9
Commercial services	23.5	23.2	23.3	23.2	20.1	22.8
Financial services	2.8	3.7	3.6	3.8	1.3	1.9
Public administration and defense 1/	8.3	8.8	8.8	9.5	4.7	4.9
Other services	18.7	19.0	18.3	17.7	16.9	18.1
Hotels, cafes, and restaurants				•••	4.3	4.1
Nonspecified activities	0.1	0.1	0.1	0.2	0.0	0.0
Memorandum items:						
Labor force (in percent of						
working age population)	57.4	53.3	51.9	53.2	54.1	53.6
Unemployment (in percent of						
economically active population)	19.9	16.0	15.8	16.7	15.9	14.3

^{1/} Employment in the central government.

Table 18. Dominican Republic: Summary Operations of the Consolidated Public Sector

						Prel.
	1993	1994	1995	1996	1997	1998
	(In millions o	f Dominican p	pesos)			
	I. Consolid	ated Public Se	ector			
Current account balance of nonfinancial public sector, before grants	9,372	8,935	11,117	9,539	9,066	9,089
Capital account balance of nonfinancial	•	•	·	-		
public sector	-11,674	-13,305	-11,406	-12,747	-11,470	-13,902
Capital revenue	523	185	613	1,829	1,598	2,037
Capitial expenditure	12,197	13,490	12,018	14,576	13,068	15,940
Residual 1/	839	-956	-862	830	-754	9
Grants	412	244	156	123	125	303
Overall balance of nonfinancial						
public sector	-1,051	-5,083	-995	-2,255	-3,033	-4,501
Quasi-fiscal operations 2/	0	-577	-675	-1,099	-1,537	-1,614
Overail balance	-1,051	-5,660	-1,671	-3,354	-4,570	-6,116
Financing	1,051	5,660	1,671	3,354	4,570	6,116
Foreign	381	-331	43	-638	-797	567
Domestic	670	5,991	1,627	3,993	5,367	5,54
Banking system	634	4,254	147	860	1,273	1,37
Private sector 3/	0	0	284	-91	1,296	-1,489
Domestic arrears (net change)	35	1,160	522	2,124	1,261	4,04
Financing of quasi-fiscal operations	0	577	675	1,099	1,537	1,614
•	II. Gener	al Governmen	at 4/			
Total revenue	20,558	21,892	26,514	28,663	37,032	41,392
Current revenue	20,182	21,743	26,284	28,079	36,401	41,04
Central government tax revenue	17,793	18,729	22,070	24,006	31,516	36,17
Other current revenue	2,389	3,014	4,214	4,073	4,885	4,87
Capital revenue	376	149	229	583	631	34
Total expenditure	19,039	21,927	23,506	27,737	32,840	39,12
Current expenditure	10,806	12,123	14,736	16,876	23,786	29,84
Of which	3,562	4 2 4 1	5 626	6 527	10,951	11,21
Central government wages Capital expenditure	8,233	4,241 9,805	5,636 8,770	6,537 10,861	9,053	9,27
•				•	·	
Overall balance	1,520	-36	3,008	926	4,192	2,26
	III. Publ	ic Enterprises	s 4/			
Net operating balance	-5	-686	-431	-1,665	-3,548	-2,10
Capital account balance	-3,816	-3,650	-2,866	-2,469	-3,047	-4,97
Capital revenue	147	36	383	1,246	968	1,69
Capital expenditure	3,964	3,686	3,249	3,715	4,015	6,66
Overall balance	-3,821	-4,335	-3,296	-4,134	-6,596	-7,08
Memorandum items:	2040	2 225	4 500	2 (01	2 (21	4.04
Interest payments 5/	2,942	2,237	3,530	3,601	3,621	4,01
Primary balance	1,891	-2,846	2,535	1,346	588	-48
Current account balance, including quasi-fiscal operations	9,784	8,601	10,597	8,562	7,653	7,77
					7	

Table 18. Dominican Republic: Summary Operations of the Consolidated Public Sector

	1993	1994	1995	1996	1997	Prel. 1998
	(In perce	nt of GDP)				
	I. Consolidat	ed Public Sec	tor			
Current account balance of nonfinancial public sector, before grants	7.7	6.5	6.9	5.2	4.2	3.8
Capital account balance of nonfinancial						
public sector	-9.6	-9.7	-7.0	-6.9	-5.3	-5.7
Capital revenue	0.4	0.1	0.4	1.0	0.7	0.8
Capitial expenditure	10.0	9.8	7.4	7.9	6.1	6.6
Residual 1/	0.7	-0.7	-0.5	0.5	-0.4	0.0
Grants	0.3	0.2	0.1	0.1	0.1	0.1
Overall balance of nonfinancial	0.0	2 7	0.6	-1.2	-1.4	-1.9
public sector	-0.9	-3.7	-0.6			
Quasi-fiscal operations 2/	0.0	-0.4	-0.4	-0.6	-0.7	-0.7
Overall balance	-0.9	-4.1	-1.0	-1.8	-2.1	-2.5
Financing	0.9	4.1	1.0	1.8	2.1	2.5
Foreign	0.3	-0.2	0.0	-0.3	-0.4	0.2
Domestic	0.5	4.4	1.0	2.2	2.5	2.:
Banking system	0.5	3.1	0.1	0.5	0.6	0.0
Private sector 3/	0.0	0.0	0.2	0.0	0.6	-0.0
Domestic arrears (net change)	0.0	0.8	0.3	1.2	0.6	1.
Financing of quasi-fiscal operations	0.0	0.4	0.4	0.6	0.7	0.7
	II. General	Government	4/			
Total revenue	16.9	15.9	16.3	15.6	17.2	17.1
Current revenue	16.6	15.8	16.2	15.3	16.9	17.
Central government tax revenue	14.6	13.6	13.6	13.1	14.7	15.0
Other current revenue	2.0	2.2	2.6	2.2	2.3	2.
Capital revenue	0.3	0.1	0.1	0.3	0.3	0.
Total expenditure	15.6	15.9	14.5	15.1	15.3	16.
Current expenditure	8.9	8.8	9.1	9.2	11.1	12.
Of which Central government wages	2.9	3.1	3.5	3.6	5.1	4.
Capital expenditure	6.8	7.1	5.4	5.9	4.2	3.
Overall balance	1.2	0.0	1.9	0.5	1.9	0.
	III. Public	Enterprises 4	4/			
Net operating balance	0.0	-0.5	-0.3	-0.9	-1.6	-0.
Capital account balance	-3.1	-2.7	-1.8	-1.3	-1.4	-2.
Capital revenue	0.1	0.0	0.2	0.7	0.4	0.
Capital expenditure	3.3	2.7	2.0	2.0	1.9	2.
Overall balance	-3.1	-3.2	-2.0	-2.3	-3.1	-2.
Memorandum items:				• •		
Interest payments 5/	2.4	1.6	2.2	2.0	1.7	1
Primary balance	1.6	-2.1	1.6	0.7	0.3	-0
Current account balance, including					2.0	_
quasi-fiscal operations	8.0	6.3	6.5	4.7	3.6	3

Sources: National Budget Office; Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Refers to the overall balance of the state gold mining company and affiliates of the state holding company and statistical discrepancies.

2/ Excludes the net cost of the bailout of the second largest bank in 1996 that amounted to 0.6 percent of GDP.

3/ Reflects net payments deferred to the following year.

4/ Net of intrapublic sector transfers.

5/ Accrual basis, with interest on external debt valued at the official exchange rate. Includes interest on domestic debt.

Table 19. Dominican Republic: Operations of the General Government

	1993	1994	1995	1996	1997	Prel. 1998
	*	Government		1770	1,,,	1,70
T-4-1			26 651	20 702	37,262	41,632
Total revenue	20,967	22,179	26,651	28,792	37,202 36,631	41,032
Current revenue	20,591	22,030	26,421	28,209	33,955	39,049
Tax revenue	19,320	20,329	23,843	25,995	6,549	7,60
Direct 1/	3,442	3,590	4,557	5,102	-	-
Indirect 2/	15,879	16,740	19,285	20,893	27,406	31,44
Nontax revenue 3/	1,271	1,701	2,579	2,215	2,676	2,23
Capital revenue 3/	376	149	229	583	631	34
Total expenditure	22,387	25,375	25,602	30,471	37,518	43,16
Current expenditure	11,797	12,780	15,292	18,057	25,704	30,95
Wages and salaries	4,635	5,616	7,243	8,380	13,463	14,21
Goods and services	2,906	3,692	2,583	2,877	3,829	2,39
Interest	2,177	1,734	2,446	2,435	2,458	2,58
Foreign 4/	2,175	1,726	2,424	2,364	2,370	2,40
Domestic	2	8	22	71	88	17
Current transfers 3/	2,062	1,713	2,631	3,576	5,113	5,92
Public enterprises	1,007	654	1,200	1,849	2,671	3,24
Extrabugetary agencies	29	31	134	27	33	
Private and external sectors	1,025	1,028	1,297	1,700	2,410	2,68
Other expenditure	18	25	389	789	840	5,83
Capital expenditure	10,590	12,595	10,309	12,414	11,814	12,20
Fixed investment	7,305	9,026	8,374	10,631	8,894	8,70
Capital transfers 3/	2,552	2,885	1,716	1,594	2,813	2,43
Public enterprises	2,351	2,787	1,699	1,580	2,761	2,41
Private and external sectors	202	97	17	14	52	2
Other	733	685	219	188	107	1,06
Current account balance	8,794	9,251	11,129	10,152	10,927	10,32
Quasi-fiscal operations	0	-577	-675	-1,099	-1,537	-1,61
Other transfers payments 5/	1,113	1,039	1,080	221	511	58
Statistical discrepancies	-694	274	-739	-477	967	61
Overall balance before grants	-3,227	-4,538	-1,446	-3,476	-1,338	-3,10
Grants	412	244	156	123	125	30
Overall balance after grants	-2,816	-4,294	-1,290	-3,353	-1,213	-2,80
Financing	2,816	4,294	1,290	3,353	1,213	2,8
External 6/	661	285	403	180	-570	
Domestic	2,154	4,009	887	3,173	1,783	2,7

Table 19. Dominican Republic: Operations of the General Government

	1993	1994	1995	1996	1997	Prel. 1998
	II. Central	Government				
Total revenue	19,153	20,309	24,584	26,457	34,732	38,566
Current	18,856	20,131	24,407	25,975	34,233	38,219
Of which	20,020	20,201	2.,	,-	,	,
Transfers 7/	692	752	418	671	842	1,045
Capital	296	178	178	482	499	347
Total expenditure	20,084	23,526	23,940	29,049	36,316	41,179
Current	9,478	10,776	13,452	16,568	24,616	29,725
Of which						
Transfers 7/	696	757	881	1,395	2,606	3,014
Capital	10,606	12,750	10,489	12,481	11,700	11,454
Of which	•	•	-	•	-	-
Transfers 7/	849	924	794	836	680	1,280
Current account balance	9,379	9,355	10,955	9,408	9,617	8,493
Overall balance	-932	-3,217	644	-2,592	-1,584	-2,614
	III. Social Securi	ty Institute (I	DSS)			
Total revenue	816	901	984	1,149	1,606	1,672
Current	816	901	982	1,149	1,576	1,672
Of which						
Transfers 7/	0	0	1	4	130	140
Capital	0	0	2	0	31	(
Of which						
Transfers 7/	0	0	2	0	0	(
Total expenditure	838	923	1,098	1,131	1,514	1,67
Current	824	910	1,071	1,112	1,489	1,610
Capital	14	13	27	19	25	63
Current account balance	-8	-10	-88	37	86	62
Overall balance	-22	-23	-114	18	92	
	IV. Local C	Governments	8/			
Total revenue	565	624	1,079	1,663	1,926	2,89
Current	547	603	1,016	1,556	1,921	2,20
Of which						
Transfers 7/	359	391	451	738	1,308	99
Capital	19	21	63	106	5	69
Of which						
Transfers 7/	0	0	47	96	3	69

Table 19. Dominican Republic: Operations of the General Government

	1993	1994	1995	1996	1997	Prel. 1998
,	1993	1994	1995	1990	1997	1996
Total expenditure	593	775	893	1,303	1,444	1,694
Current	527	714	798	1,165	1,346	1,596
Of which						
Transfers 7/	0	0	333	575	778	982
Capital	66	61	95	138	98	98
Of which						
Transfers 7/	3	2	0	10	0	0
Current account balance	19	-112	217	391	576	605
Overall balance	-28	-152	186	359	482	1,198
V	. Decentralized Go	vernment Ag	encies 9/			
Total revenue	1,515	1,628	1,554	1,829	2,317	2,800
Current	605	700	774	997	1,541	2,212
Of which						
Transfers 7/	337	366	429	653	1,168	1,878
Capital	910	929	781	832	776	588
Of which					c= c	***
Transfers 7/	849	924	745	741	676	588
Total expenditure	1,533	1,608	1,762	1,889	2,371	3,211
Current	719	882	1,048	1,170	1,642	1,994
Of which						
Transfers 7/	7	10	. 22	15	5	2
Capital	814	7 27	714	719	729	1,217
Of which						
Transfers 7/	58	29	63	71	58	61
Current account balance	-114	-182	-275	-173	-101	218
Overall balance	-18	20	-208	-60	-54	-41 1
Memorandum items:						
Interest on the central bank's medium						
and long-term external debt	951	265	671	671	725	743
Foreign exchange sales commission	530	494	541	596	808	1,041

Sources: National Budget Office; Central Bank of the Dominican Republic; and Fund staff estimates.

- 1/ Refers to the income and property taxes and employees' contributions to social security.
- 2/ Includes the commission on foreign exchange sales collected by the central bank.
- 3/ Net of transfers between the central government, social security institute, local governments, and decentralized agencies.
- 4/ On accrual basis; includes interest on central bank's medium- and long-term debt.
- 5/ Refers to payments of the central government on account of the external debt service of the public enterprises.
- 6/ Includes interest arrears and rescheduling of interest on the central bank medium- and long-term external debt.
- 7/ Intrageneral government transfers.
- 8/ Includes the Municipal League.
- 9/ Includes the Dominican Export Promotion Center, the National Family and Population Council, the Hotel Promotion and Tourist Development Center, the Dominican Red Cross, the Civil Defense, the Dominican Sugar Institute, the Welfare and Housing Institute, the National House Institute, the Water Resource Institute, the Northeast and Southeast Development Institutes, the Special Fund for Agriculture Development, the Botanical Garden, the National Zoo, the Museum of the Royal Houses, the Community Development Office, the Malaria Eradication Service, the Superintendecy of Banks, the Superintendency of Insurance, and the University of Santo Domingo.

Table 20. Dominican Republic: Summary Operations of the Central Government

	1993	1994	1995	1996	1997	. Pro
· · · · · · · · · · · · · · · · · · ·		of Dominican	***			· ·
Total revenue	19,153	20,254	24,584	26,457	34,732	38,5
Current revenue	18,856	20,131	24,407	25,975	34,233	38.2
Tax revenue	17,793	18,729	22,070	24,006	31,516	36,1
Taxes on income and profits	3,097	3,212	4,121	4,605	5,906	6,8
Taxes on property	132	143	7178	205	301	3
Taxes on goods and services Of which	7,764	9,210	11,159	12,143	16,169	18,3
Oil price differential	2,440	3,144	3,401	3,372	5,229	6,2
Taxes on international trade	6,701	6,064	6,509	6,946	9,008	10,4
Other taxes	99	101	103	107	132	1
Nontax revenue	1,063	1,402	2,337	1,969	2,717	2,0
apital revenue	296	123	178	482	499	3
otal expenditure	20,084	23,526	23,940	29,049	36,316	41,1
urrent expenditure	9,478	10,776	13,452	16,568	24,616	29,7
Wages and salaries	3,562	4,241	5,636	6,537 2,357	10,951	11,2
Goods and services	2,213	2,927	2,033	2,357 2,384	3,263 2,410	2,
Interest Current transfers	1,224 2,479	1,461 2,146	2,424 3,002	4,508	7,139	8,
Other 1/	2,479	2,140	3,002 356	4,308 781	7,139 854	6,3
apital expenditure	10,606	12,750	10,489	12,481	11.700	11.4
Fixed investment 1/	6,518	8,299	7,647	9,906	8,126	7,
Capital transfers	3,383	3,774	2,667	2,457	3,493	3,
Other	706	678	175	119	82	- 7,
ther transfers payments 2/	-1,113	-1,039	-1,080	-943	-511	-:
tatistical discrepancies	694	-274	73 9	477	-967	-
verall balance	-1,350	-4,584	303	-3,058	-3,062	-3,
inancing	1,350	4,584	-303	3,058	3,062	3,
oreign	661	285	403	180	-570	
omestic	688	4,299	-706	2,879	3,632	3,
Banking system	653	3,139	-1,512	845	1,075	1,
Domestic arrears (net change)	35	1,160	522	2,124	1,261	4,
Private sector 3/	0	0	283	-91	1,296	-1,
	(In p	ercent of GDP	')			
otal revenue	15.7	14.7	15.1	14.4	16.1 15.9	1
urrent revenue	15.5	14.6	15.0	14.2	14.7]
Tax revenue Of which	14.6	13.6	13.6	13.1	14.7	,
Oil price differential	2.0	2.3	2.1	1.8	2.4	
Nontax revenue	0.9	1.0	1.4	1.1	1.3	
Capital revenue	0.2	0.1	0.1	0.3	0.2	
otal expenditure 1/	16.5	17.1	14.8	15.8	16.9	;
Current expenditure	7.8	7.8	8.3	9.0	11.4	
Capital expenditure	8.7	9.3	6.5	6.8	5.4	
Other transfers payments 2/	-0.9	-0.8	-0.7	-0.5	-0.2	
Statistical discrepancies	0.6	-0.2	0.5	0.3	-0.4	
Overall balance	-1.1	-3.3	0.2	-1.7	-1.4	
^F inancing	1.1	3.3	-0.2	1.7	1.4	
Coreign	0.5	0.2	0.2	0.1	-0.3	
Oomestic	0.6	3.1	-0.4	1.6	1.7	
Banking system	0.5	2.3	-0.9	0.5	0.5	
Other	0.0	0.8	0.5	1.1	1.2	
Memorandum items:						
Current account balance (In millions of Dominican pesos)	9,379	9,355	10,955	9,408	9,617	8
(In percent of GDP)	7,7,7	6.8	6.8	5.1	4.5	~

Sources: The National Budget Office (ONAPRE); the Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Includes extrabudget expenditure not reported by ONAPRE. 2/ Payments for external debt service of public enterprises. 3/ Reflects net payments deferred to the following year.

Table 21. Dominican Republic: Central Government Revenue

	1993	1994	1995	1996	1997	Prel. 1998
Total revenue 1/	19,153	20,254	24,584	26,457	34,732	38,566
Current revenue	18,856	20,131	24,407	25,975	34,233	38,219
Tax revenue	17,793	18,729	22,070	24,006	31,516	36,174
Taxes on net income and profits	3,097	3,212	4,121	4,605	5,906	6,893
Taxes on property	132	143	178	205	301	324
Death or gift taxes	20	23	29	36	35	6
Property transfers	93	98	129	138	201	258
Other	19	22	20	31	65	60
Taxes on goods and services	7,764	9,210	11,159	12,143	16,169	18,398
General sales taxes (value-added tax)	3,202	3,524	4,106	4,640	6,238	7,178
Domestic sales	1,484	1,820	2,069	2,445	3,241	3,698
Imports	1,718	1,705	2,037	2,195	2,997	3,481
Selective excises on goods	3,415	4,170	4,773	5,229	7,368	8,558
Cigarettes	113	135	262	359	358	387
Beer, alcoholic beverages	514	595	1,103	1,491	1,774	1,953
Gasoline, petroleum products	2,783	3,433	3,401	3,372	5,229	6,215
Other	5	7	7	8	8	3
Selective excises on services	865	1,163	1,868	1,722	2,028	2,429
Other taxes on goods and services	283	353	412	551	535	232
Business or professional licenses	220	266	314	363	366	0
Motor vehicle taxes	62	87	98	188	170	232
Taxes on international trade	6,701	6,064	6,509	6,946	9,008	10,404
Import duties	6,700	6,063	6,505	6,942	9,006	10,403
Customs duties	6,432	5,911	6,361	6,798	8,794	10,140
Other charges	269	152	144	144	212	263
Export duties	1	1	4	4	2	2
Other taxes	99	101	103	107	132	155
Stamp taxes	47	53	59	60	75	92
Other	51	48	44	47	57	64
Nontax revenue	1,063	1,402	2,337	1,969	2,717	2,045
Falconbridge company	86	449	725	417	510	170
Property income	449	392	338	324	535	336
From public enterprises and institutions	396	348	275	265	504	291
Other	53	45	64	59	32	46
Fees and charges	436	461	1,109	1,048	1,134	1,203
Other	92	99	165	181	538	336
Capital revenue	296	123	178	482	499	347

Sources: National Budget Office (ONAPRE); Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Includes extrabugetary revenue.

Table 22. Dominican Republic: Central Government Expenditure

<u> </u>	1993	1994	1995	1996	1997	Prel. 1998
		lions of Domin		1770		1330
By economic category:	(2		F /			
Total expenditure	20,084	23,526	23,940	29,049	36,316	41,179
Current expenditure	9,478	10,776	13,452	16,568	24,616	29,725
Wages and salaries	3,562	4,241	5,636	6,537	10,951	11,211
Goods and services	2,213	2,927	2,033	2,357	3.263	1,500
Interest	1.224	1,461	2,424	2,384	2,410	2,556
Foreign 1/	1.224	1,461	2,424	2,364	2,370	2,403
Domestic	0	0	0	21	40	153
Current transfers	2,479	2,146	3,002	4,508	7,139	8,133
Public sector	1,729	1,437	2,081	3,243	5.277	6,156
Private sector	734	707	921	1,247	1,856	1,976
Foreign sector	17	2	i	18	6	0
Other expenditures 2/	0	0	356	781	854	6,325
Capital current expenditure	10,606	12,750	10,489	12,481	11,700	11,454
Fixed investment	6,518	8,299	7,647	9,906	8,126	7,597
Capital transfers	3,383	3,774	2,667	2,457	3,493	3,715
Public sector	3,383	3,774	2,651	2,443	3,441	3,696
Private sector	0	0	16	14	51	14
Foreign sector	0	0	0	0	0	5
Other capital expenditures 2/	706	678	175	119	82	142
By function:						
Total	20,084	23,526	23,940	29,049	36,316	41,179
Health	1,720	1,905	1,936	2,408	2,980	•••
Education	2,007	2,606	3,019	3,537	4,778	
Welfare	1,592	1,662	1,740	1,987	2,359	•••
Defense	1,007	1,106	940	1,149	1,682	•••
Administration	2,264	2,597	2,685	3,221	6,721	
Financial services	1,224	1,461	2,424	2,384	2,410	•••
Other 3/	10,270	12,189	11,196	14,363	15,387	•••
		(In percent of C	GDP)			
By function:						
Total	16.5	17.1	14.8	15.8	16.9	17.0
Health	1.4	1.4	1.2	1.3	1.4	•••
Education	1.6	1.9	1.9	1.9	2.2	•••
Welfare	1.3	1.2	1.1	1.1	1.1	***
Defense	0.8	0.8	0.6	0.6	0.8	
Administration	1.9	1.9	1.7	. 1.8	3.1	•••
Financial services	1.0	1.1	1.5	1.3	1.1	•••
Other 3/	8.4	8.9	6.9	7.8	7.2	***

Sources: National Budget Office (ONAPRE); Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} On accrual basis.2/ Includes extrabudgetary expenditure not reported by ONAPRE.3/ Includes public works.

Table 23. Dominican Republic: Central Government Transfers

	1993	1994	1995	1996	1997	Prel. 1998
Total	5,862	5,920	5,669	6,965	10,631	11,847
Current transfers	2,479	2,146	3,002	4,508	7,139	8,133
Public sector	1,729	1,437	2,081	3,243	5,277	6,156
Consolidated	1,700	1,406	1,948	3,216	5,244	6,156
Social security	0	0	1	4	130	48
Local governments	359	391	451	738	1,308	990
Decentralized agencies	333	361	429	65 3	1,168	1,878
Public enterprises	1,007	654	1,066	1,822	2,638	3,240
Large enterprises	557	549	862	1,702	2,512	2,942
Electricity coporation	480	480	749	1,120	2,425	2,184
Sugar company	41	52	56	507	0	478
Price stabilization		_				•••
Institute	10	0	31	35	50	233
Water companies	26	17	26	40	38	47
Small enterprises	451	105	205	120	125	299
Extrabudgetary agencies 1/	29	31	134	27	33	0
Financial public sector	0	0	0	0	0	0
Private sector	734	707	921	1,247	1,856	1,976
Foreign sector	17	2	1	18	6	0
Capital transfers	3,383	3,774	2,667	2,457	3,493	3,715
Public sector	3,383	3,774	2,651	2,443	3,441	3,696
Consolidated	3,383	3,774	2,492	2,416	3,441	3,696
Social security	0	0	2	0	0	0
Local governments	28	48	47	96	3	691
Decentralized agencies	831	907	745	741	67 6	588
Public enterprises	2,351	2,787	1,699	1,580	2,761	2,416
Large enterprises	2,144	2,453	1,327	1,262	2,123	1,023
Electricity coporation	139	86	43	20	1	434
Sugar company	0	0	0	110	790	0
Price Stabilization						
Institute	298	315	0	0	160	29
Water companies	1,707	2,052	1,284	1,132	1,171	559
Small enterprises	206	335	371	318	638	1,393
Extrabudgetary agencies 1/	174	30	159	17	0	(
Financial public sector	0	0	0	10	0	(
Private sector	0	0	16	14	51	14
Foreign sector	0	0	. 0	0	0	. 5

Sources: National Budget Office; Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Includes affiliates of the state holding company.

Table 24. Dominican Republic: Consolidated Operations of the Public Enterprises

	1993	1994	1995	1996	1997	Prel 199
(In	millions of Do	minican pes	os)			
Current revenue	7,192	7,577	8,026	10,203	12,368	15,063
Operating revenue	6,200	6,920	6,960	8,381	9,730	11,84
Government transfers	992	657	1,066	1,822	2,638	3,21
Current expenditure	6,282	7,664	7,432	10,076	13,320	14,00
Wages and salaries Goods and services	1,714 3,693	1,886 5,173	2,110 4,764	2,335 6,386	2,879 8,700	3,38 8,91
nterest	765	503	428	539	468	45
Foreign 1/	573	266	171	286	262	26
Domestic	192	236	257	253	206	19
Current transfers Public sector	109 77	102 58	130 41	790 31	1,149 41	1,24 5
Private sector	32	44	89	759	1,108	1,19
Other	0	Ö	ő	27	123	*,**
Capital revenue	2,504	2,827	2,082	2,826	3,729	3,90
Of which Public sector transfers	•			-	•	-
	2,357	2,791	1,699	1,580	2,761	2,21
Capital expenditure Capital formation	4,296 3,610	3,915 3,426	3,345 2,862	3,814 2,390	4,204 2,520	6,8 4 4,5 0
Capital transfers	3,610	235	2,802 96	2,390 99	2,320 189	4,30
Public sector	332	229	96	99	189	18
Private sector	1	6	0	0	1	
Other	352	254	387	1,325	1,494	2,15
Other transfers received 2/	1,113	1,039	1,080	943	511	58
Residual 3/	-120	-377	-467	714	616	37
Overall balance	112	-514	-56	795	-300	-93
Financing 4/	-112	514	56	-795	300	93
oreign	-254	-409	-524	-560	-26	19
Domestic	142	922	580	-235	326	73
	(In percent	of GDP)				
Total revenue	8.0	7.6	6.2	7.1	7.5	7
Current revenue	5.9	5.5	4.9	5.6	5.8	6
Of which Government transfers	0.0	0.5	0.7	1.0	1.0	1
Capital revenue	0.8 2.1	0.5 2.1	0.7 1.3	1.0 1.5	1.2 1.7	1 1
Of which	2.1	4.1	1.5	1.5	1.7	
Government transfers	1.9	2.0	1.0	0.9	1.3	0
Total expenditure	8.7	8.4	6.6	7.6	8.1	8
Current expenditure	5.2	5.6	4.6	5.5	6.2	5
Capital expenditure	3.5	2.8	2.1	2.1	2.0	2
Other transfers payments 2/	0.9	0.8	0.7	0.5	0.2	0
Residual 3/	-0.1	-0.3	-0.3	0.4	0.3	0
Overall balance	0.1	-0.4	0.0	0.4	-0.1	-0
Financing 4/	-0.1	0.4	0.0	-0.4	0.1	(
oreign	-0.2	-0.3	-0.3	-0.3	0.0	Ö
Domestic	0.1	0.7	0.4	-0.1	0.2	0
Memorandum items:			•			
Operating balance	910	-87	594	126	-952	1,0
(In percent of GDP)	0.7	-0.1	0.4	0.1	-0.4 2.540	(
Operating balance net of government transfer (In percent of GDP)	-5 0.0	-686 -0.5	-431 -0.3	-1,665 -0.9	-3,548 -1.6	-2,1
Overall balance net of government transfers	-2,828	-0.5 -3,674	-0.3 -3,296	-0.9 -4,134	-1.6 -6,596	-0 -7,0
(In percent of GDP)	-2.3	-2.7	-2.0	-2.3	-3.1	-7,0 -2

Sources: National Budget Office (ONAPRE); Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Accrual basis.
2/ Refers to payments of the central government for external debt service of public enterprises.
3/ Includes overall balance of nonconsolidated public enterprises, whose operations above the line are not reported by ONAPRE.
4/ Includes domestic and external financing of the nonconsolidated public enterprises.

- 128 -

Table 25. Dominican Republic: Operations of the Public Enterprises

	enomm m)	or Dollininean	pesos			
	1993	1994	1995	1996	1997	Prel. 1998
	I. Al	l Enterprises				
Total revenue Current Of which	9,696 7,192	1 0,404 7,577	10,108 8,026	13,028 10,203	16,096 12,368	18,967 15,063
Transfers Capital <i>Of which</i>	992 2,504	657 2,827	1,066 2,082	1,822 2,826	2,638 3,729	3,215 3,904
Transfers	2,357	2,791	1,699	1,580	2,761	2,214
Total expenditure Current Of which	10,577 6,282	11, 579 7,664	10,777 7,432	13,891 10,076	1 7,523 13,320	20,853 14,008
Transfers Capital Of which	77 4,296	58 3,915	41 3,345	31 3,814	41 4,204	52 6,845
Transfers	332	229	96	99	189	183
Current account balance	910	-87	594	126	-952	1,055
Other transfers payments	1,113	1,039	1,080	943	511	580
Residual	-226	210	-467	714	616	376
Overall balance	6	74	-56	795	-300	-930
	II. Dominican Ele	ctricity Corpo	oration (CDE)	1		
Total revenue Current Of which	3,846 3,707	4,085 3,995	4,593 4,550	5,427 5,407	7,681 7,680	8,298 7,900
Transfers Capital Of which	480 139	480 90	749 43	1,120 20	2,425 1	2,167 398
Transfers	139	90	43	20	1	398
Total expenditure Current 1/ Of which	4,554 3,055	4,782 3,757	4,822 3,951	6,138 5,300	8,527 7,524	9,780 6,732
Transfers Capital Of which	3 1,499	0 1,025	0 871	5 838	0 1,003	0 3,048
Transfers	0	0	0	0	0	0
Current account balance	652	238	599	107	156	1,168
Overall balance	-708	-696	-229	-711	-846	-1,482
	III. State S	ugar Council	(CEA)			
Total revenue Current Of which	1,490 1,192	2,145 1,830	1,546 1,537	1,827 1,708	1,867 1,354	1,681 1,558
Transfers Capital Of which	0 298	0 315	56 9	507 119	0 512	474 123
Transfers	298	315	0	110	790	0
Total expenditure Current 1/ Of which	1,440 1,297	2,001 1,743	1,601 1,539	1,859 1,724	2,318 2,264	2,180 1,966
Transfers Capital Of which	1 143	1 258	0 61	0 135	0 54	1 213
Transfers	0	0	0	0	0	0
Current account balance	-105	87	-2	-16	-910	-409
Overall balance	50	144	-55	-32	-451	-499

- 129 -

Table 25. Dominican Republic: Operations of the Public Enterprises

(In millions of Dominican pesos)

	1993	1994	1995	1996	1997	Prel. 1998
	IV. Price Stabiliza		(INESPRE)			
Total revenue Current	334 334	235 235	130 130	46 46	262 101	2,046 2,019
Of which Transfers	41	52	31	35	50	231
Capital Of which Transfers	0	0	0	0	160 160	27 27
Total expenditure Current 1/	312 309	263 259	126 125	38 37	207	1,930
Of which Transfers	0	0	0	0	0	0
Capital Of which	3	4	ĭ	3	39	53
Transfers	0	0	0	0	0	0
Current account balance	25	-24	5	11	-67	143
Overall balance	22	-28	4	8	54	117
		r Companies				
Total revenue Current Of which	2,071 254	2,340 285	1,921 366	2,006 451	2,060 505	2,150 595
Transfers Capital Of which Transfers	26 1,817	18 2,055	26 1,555	40 1,555	38 1,555	47 1,555
	1,707	2,054	1,488	1,488	1,488	1,488
Total expenditure Current 1/ Of which	2,074 229	2,263 285	2,170 394	1,696 439	1,578 526	1, 433 628
Transfers Capital Of which	9 1,845	10 1,9 7 9	13 1,775	13 1,257	14 1,052	9 805
Transfers	0	0	0	0	1	0
Current account balance	25	0	-28	11	-21	-33
Overall balance	-3	77	-248	310	482	718
	VI. Sma	ll Enterprises	3/			
Total revenue Current Of which	1,955 1,705	1,599 1,232	2,189 1,444	4,137 2,590	4,604 2,728	5,498 2,990
Transfers Capital	445 251	107 366	205 745	120 1,547	125 1,877	296 2,508
Of which Transfers	213	332	371	318	638	1,277
Total expenditure Current 1/ Of which	1, 625 819	2,004 1,354	1,801 1,165	3,906 2,325	4,698 2,642	5,477 2,751
Transfers Capital Of which	64 806	47 650	29 636	12 1,581	27 2,056	42 2,725
Transfers	332	229	96	99	189	183
Current account balance	886	-122	279	266	86	239
Overall balance	330	-405	387	231	-94	22

Sources: National Budget Office (ONAPRE), Central Bank of the Dominican Republic; and Fund staff estimates.

1/ Excludes foreign interest payments.
2/ Includes the Water and Sewerage Corporations of Santo Domingo and Santiago and the National Water and

Sewerage Institute.

3/ Includes the Corporation of State Enterprises (CORDE), the Port Authority, the Airport Commission, the Workers' Saving Bank, the Cooperative Development and Credit Institute, the Industry Financing Corporation, the Agricultural Bank, the Cotton Institute, the Dominican Radio and Television, the National Lottery, and the Government Post Office.

Table 26. Dominican Republic: Private Sector Claims on the Financial System

······································	· · · · · · · · · · · · · · · · · · ·					Prel.
	1993	1994	1995	1996	1997	1998
	(In millions of Dom	inican pesos,	end of period)		
Total private sector claims	44,607	49,231	58,392	69,119	84,593	102,087
Money and quasi-money	34,321	37,638	44,046	51,260	62,842	76,319
Money	13,066	13,365	15,639	19,791	24,191	26,053
Currency in circulation	6,919	7,692	8,894	9,637	11,536	12,549
Demand deposits	6,147	5,673	6,745	10,154	12,654	13,504
Quasi-money	21,255	24,273	28,407	31,470	38,651	50,266
Specialized deposits	73	197	34	22	17	51
Time and savings deposits	18,727	21,061	25,176	28,668	35,433	45,916
Bonds	2,456	3,015	3,197	2,780	3,202	4,299
Other liabilities 1/	6,073	6,509	8,798	11,293	13,657	15,075
Private capital and surplus	4,213	5,084	5,549	6,566	8,095	10,693
	(Perce	ntage change)			
Total private sector claims	14.6	10.4	18.6	18.4	22.4	20.7
Money and quasi-money	19.0	9.7	17.0	16.4	22.6	21.4
Money	25.1	2.3	17.0	26.5	22.2	7.7
Currency in circulation	16.8	11.2	15.6	8.3	19.7	8.8
Demand deposits	36.1	-7.7	18.9	50.5	24.6	6.7
Quasi-money	15.5	14.2	17.0	10.8	22.8	30.1
Specialized deposits	-22.8	170.2	-82.9	-36.2	-23.3	210.9
Time and savings deposits	27.8	12.5	19.5	13.9	23.6	29.6
Bonds	-32.7	22.8	6.0	-13.1	15.2	34.3
Other liabilities 1/	1.0	7.2	35.2	28.4	20.9	10.4
Private capital and surplus	3.8	20.7	9.1	18.3	23.3	32.1
	(In per	cent of GDP)	2/			
Total private sector claims	34.3	34.1	33.2	34.7	35.7	38.6
Money and quasi-money	25.9	26.2	25.2	26.0	26.5	28.8
Money	9.6	9.6	8.9	9.7	10.2	10.4
Currency in circulation	5.3	5.3	5.1	5.0	4.9	5.0
Demand deposits	4.4	4.3	3.8	4.6	5.3	5.4
Quasi-money	16.3	16.5	16.2	16.3	16.3	18.4
Specialized deposits	0.1	0.1	0.1	0.0	0.0	0.0
Time and savings deposits	13.7	14.5	14.2	14.7	14.9	16.5
Bonds	2.5	2.0	1.9	1.6	1.4	1.6
Other liabilities 1/	5.0	4.6	4.7	5.5	5.8	5.9
Private capital and surplus	3.4	3.4	3.3	3.3	3.4	. 3.9

Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Includes deposits against certain letters of credit subject to prepayment, some private and public sector deposits for overdue drafts, and private funds administered by the investment companies.

^{2/} Numerator is the average of the stocks at the beginning and end of the year.

Table 27. Dominican Republic: Consolidated Accounts of the Financial System

						Prel.
	1993	1994	- 1995	1996	1997	1998
Net international reserves	6,942	600	3,046	3,089	4,260	3,975
Net domestic credit	35,687	41,931	48,638	59,453	73,348	91,252
Net claims on the public sector	-1,012	3,374	3,521	4,103	5,184	7,627
Central government (net)	-3,504	-1,334	-2,853	-2,008	-933	302
Other public sector (net)	2,493	4,708	6,373	6,111	6,117	7,325
Official capital and surplus	947	-301	805	2,145	3,152	5,260
Private sector	29,090	33,735	38,724	47,486	59,630	71,657
Nonmonetary international organizations	225	249	274	286	318	350
Net unclassified assets	4,928	4,655	4,293	5,070	4,942	5,762
Intrasystem float	1,509	219	1,022	363	122	595
Revaluation account	17,280	16,154	16,961	17,326	17,376	17,872
Counterpart unrequited foreign exchange	200	200	200	200	200	200
Medium- and long-term foreign liabilities	15,103	9,254	10,053	10,549	10,192	10,811
Liabilities to private sector	44,607	49,231	58,392	69,119	84,593	102,087
Currency in circulation	6,919	7,692	8,894	9,637	11,536	12,549
Demand deposits	6,147	5,673	6,745	10,154	12,654	13,504
Time and savings deposits	18,727	21,061	25,176	28,668	35,433	45,916
Specialized deposits	73	197	34	22	17	51
Other liabilities 1/	6,073	6,509	8,798	11,293	13,657	15,075
Private capital and surplus	4,213	5,084	5,549	6,566	8,095	10,693
Certificates issued by the central bank	197	578	974	1,077	1,374	1,624
Bonds issued by nonbank institutions	2,259	2,437	2,224	1,703	1,828	2,675

Source: Central Bank of the Dominican Republic.

1/ Includes deposits against certain letters of credit subject to prepayment, some private and public sector deposits for overdue drafts, and private funds administered by the investment companies.

Table 28. Dominican Republic: Summary Accounts of the Banking System

	1993	1994	1995	1996	1997	Prel. 1998
	I. Central Ban		1775	1330		
	i. Centrai Ban	K				
Net international reserves	5,473	-409	1,354	2,004	3,567	5,462
Assets	8,071	3,335	5,021	5,196	5,811	7,909
Liabilities	-2,599	-3,744	-3,667	-3,192	-2,245	-2,447
Net domestic credit	6,996	8,944	11,040	14,128	16,185	18,404
Net claims on the public sector	1,008	4,485	5,119	5,838	6,143	6,057
Central government (net)	-1,401	374	268	842	1,193	1,237
Claims 1/	843	525	612	1,242	1,541	1,637
Deposits (budgetary reserve)	-2,244	-151	-344	-400	-348	-400
Operating losses of the central bank	1,957	1,957	1,957	1,957	1,957	1,957
Payments of interest on external debt	1,502	2,620	3,298	4,014	4,729	5,482
Other central government (net)	-1,609	-2,103	-2,645	-3,241	-4,066	-5,267
Rest of public sector (net)	558	1,638	2,240	2,265	2,330	2,647
Official capital and surplus	2,019	804	1,977	3,434	4,867	7,078
Credit to rest of the financial system	1,144	1,146	1,064	906	853	749
Credit to commercial banks	1,109	1,541	1,614	2,761	1,820	2,404
Nonmonetary international organizations	225	249	274	286	318	350
Other assets (net)	1,492	718	991	904	2,184	1,766
Revaluation account	17,871	16,415	16,961	17,326	17,376	17,872
Counterpart of unrequited foreign exchange	200	200	200	200	200	200
Medium- and long-term foreign liabilities	15,084	9,233	10,052	10,546	10,188	10,790
Refinancing with foreign commercial banks	8,842	6,000	5,988	6,342	6,316	6,816
Other	6,242	3,233	4,065	4,205	3,873	3,973
Liabilities to commercial banks	7,402	6,663	8,581	10,815	12,028	14,713
Cash in vaults	1,192	1,274	1,600	2,187	2,576	3,110
Reserve deposits	6,206	4,791	6,098	6,079	7,291	9,864
Remunerated reserve deposits	0	472	0	168	0	369
Special deposits 2/	9	8	3	3	3	693
Stabilization bonds	0	120	882	2,381	1,828	673
Other	-5	-3	-3	-3	330	4
Liabilities to other financial institutions	479	532	599	1,112	1,683	1,789
Liabilities to the private sector	7,175	8,322	9,923	10,785	13,029	14,246
Currency in circulation	6,919	7,692	8,894	9,637	11,536	12,549
Demand deposits	57	49	39	50	² 87	66
Interest due on deposits	2	3	16	22	31	6
Central bank certificates	197	578	974	1,077	1,374	1,624

Table 28. Dominican Republic: Summary Accounts of the Banking System

	1006	1004	1005	1007	1005	Prel.
	1993	1994	1995	1996	1997	1998
	II. Reserves Bar	nk				
Net foreign assets	611	656	1,192	632	691	-85
Assets	611	656	1,192	633	691	440
Liabilities	0	0	0	-1	0	-525
Monetary reserves and currency holdings	2,314	1,116	1,783	3,024	2,856	3,315
Cash in vaults	356	267	390	520	600	822
Reserve deposits	1,929	820	1,097	1,540	1,541	1,934
Special deposits 2/	29	29	2	2	10	439
Stabilization bonds	0	0	295	961	705	120
Net domestic assets	1,544	2,783	2,583	4,040	5,251	7,276
Net claims on the public sector	-1,954	-1,047	-1,530	-1,939	-1,192	1,184
Central government (net)	-2,112	-1,717	-2,995	-2,775	-2,040	-956
Claims	229	280	171	173	1,537	1,541
Deposits	-2,341	-1,996	-3,166	-2,948	-3,578	-2,497
State and local governments (net)	-13	-16	-19	-37	-65	-88
Rest of public sector	171	686	1,484	873	913	2,227
Official capital and surplus	-912	-960	-1,016	-1,092	-1,180	-1,210
Credit to rest of the financial system	32	37	74	73	7 0	63
Credit to private sector	3,929	4,639	4,639	6,595	8,111	7,407
Net unclassified assets	449	121	375	225	-617	-190
Net interbank float	0	-7	41	178	59	22
Revaluation account	-256	-335	0	0	0	0
Liabilities to monetary authorities	157	173	208	196	467	1,181
Liabilities to the rest of the financial system	25	12	42	76	64	129
Liabilities to the private sector	4,030	4,036	5,308	7,424	8,268	9,196
Demand deposits	868	401	579	1,322	1,254	1,816
Time and savings deposits	2,846	3,368	4,077	4,821	5,421	6,470
Special deposits 2/	4	19	, 9	0	0	. 0
Other liabilities	312	249	643	1,281	1,593	910

Table 28. Dominican Republic: Summary Accounts of the Banking System

	1993	1994	1995	1996	1997	Prel. 1998
Ш	I. Private Commerci	al Banks				.,
Net international reserves	856	350	498	449	-1	-1,406
Assets	1,373	1,154	1,238	1,821	2,708	4,406
Liabilities	-517	-805	-740	-1,371	-2,710	-5,812
Monetary reserves and currency holdings	5,159	5,805	6,894	7,659	9,303	11,639
Cash in vaults	83 6	1,008	1,210	1,666	1,975	2,288
Reserve deposits	4,324	4,613	5,069	4,650	5,833	8,390
Special deposits 3/	4	22	31	43	86	408
Stabilization bonds	0	165	587	1,302	1,412	554
Other	-5	-3	-3	-3	-3	0
Net domestic assets	18,355	21,028	24,443	29,777	38,401	49,348
Net claims on the public sector	-66	-64	-69	204	233	386
Central government (net)	9	9	-126	-75	-8 6	20
Claims	9	9	7	5	19	127
Deposits	0	0	-133	-80	-106	-107
State and local governments (net)	-10	-8	-14	-11	-10	-10
Rest of public sector	-65	-65	70	290	329	376
Credit to rest of the financial system	479	470	219	211	207	128
Credit to private sector	15,513	17,527	21,990	27,331	35,664	45,337
Net unclassified assets	2,428	3,149	2,230	2,083	2,338	3,144
Net interbank float	0	-53	73	-51	-41	353
Revaluation account	-335	74	0	0	0	0
Liabilities to monetary authorities	738	1,162	1,128	1,011	1,083	1,081
Liabilities to the rest of the financial system	1,195	1,446	1,160	1,377	1,571	1,932
Liabilities to the private sector	22,101	24,649	29,546	35,497	45,048	56,569
Demand deposits	5,220	5,220	6,111	8,760	11,281	11,615
Time and savings deposits	13,202	14,985	18,111	20,321	25,839	34,782
Special deposits 3/	69	178	25	21	17	. 51
Other liabilities (net)	1,119	1,161	1,720	2,268	2,553	3,096
Private capital and surplus	2,491	3,105	3,580	4,126	5,359	7,024

Table 28. Dominican Republic: Summary Accounts of the Banking System

	1993	1994	1995	1996	1997	Prel. 1998
IV. Co	nsolidated Banki					
	6,939	597	3,043	3,085	4,257	3,971
Net foreign assets Assets	10,055	5,145	7,450	7,650	9,211	12,756
Assets Liabilities	-3,116	-4,548	-4,407	-4,564	-4,954	-8,785
Net domestic assets	26,069	31,679	36,825	46,606	58,418	73,007
Net claims on the public sector	-1,012	3,374	3,521	4,103	5,184	7,627
Central government (net)	-3,504	-1,334	-2,853	-2,008	-933	302
Claims	1,081	813	790	1,420	3,098	3,305
Deposits	-4,585	-2,147	-3,642	-3,428	-4,031	-3,003
Other central government (net)	-1,609	-2,103	-2,645	-3,241	-4,066	-5,267
State and local government (net)	-22	-24	-32	-48	-75	-98
Rest of public sector	664	2,258	3,794	3,428	3,572	5,250
Operating losses of central bank	1,957	1,957	1,957	1,957	1,957	1,957
Payments of interest on external debt	1,502	2,620	3,298	4,014	4,729	5,482
Official capital and surplus	1,106	-156	961	2,342	3,686	5,868
Credit to rest of financial system	1.655	1,653	1,356	1,190	1,130	940
Credit to private sector	19,442	22,166	26,629	33,926	43,775	52,74
Nonmonetary international organizations	225	249	274	286	318	350
Net unclassified assets	4,368	3,988	3,596	3,212	3,904	4,720
Net interbank float	284	404	488	1,548	421	758
Revaluation account	17,280	16,154	16,961	17,326	17,376	17,872
Counterpart unrequited foreign exchange	200	200	200	200	200	200
Medium- and long-term liabilities	15,084	9,233	10,052	10,546	10,188	10,790
Refinancing with foreign commercial banks	8,842	6,000	5,988	6,342	6,316	6,816
Other	6,242	3,233	4,065	4,205	3,873	3,973
Liabilities to rest of the financial system	1,699	1,989	1,801	2,565	3,318	3,850
Liabilities to the private sector	33,306	37,008	44,776	53,706	66,345	80,01
Currency in circulation	6,919	7,692	8,894	9,637	11,536	12,549
Demand deposits plus interest due on deposits	6,147	5,673	6,745	10,154	12,654	13,50
Time and savings deposits	16,049	18,354	22,187	25,142	31,260	41,25
Special deposits 2/	73	197	34	22	17	5
Other liabilities (net)	1,432	1,410	2,363	3,549	4,146	4,00
Private capital and surplus	2,491	3,105	3,580	4,126	5,359	7,02
Stabilization bonds	197	578	974	1,077	1,374	1,62
Memorandum item:						
Official exchange rate (end of period) 3/	12.50	12.87	12.87	13.86	14.02	15.43

Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Includes advances for the external debt service of the central government.

^{2/} Includes foreign exchange claims on the central bank to reimburse head offices of correspondent banks for payments on commercial letters of credit made abroad.

^{3/} Used to convert foreign currency stocks into Dominican pesos (RD\$ per US\$).

Table 29. Dominican Republic: Summary Accounts of the Nonbank Financial Institutions (In millions of Dominican pesos)

	1993	1994	1995	1996	1997	Prel 1998
I. Na	tional Hous	ing Bank	-			
Foreign assets	1	1	,1	1	1	1
Domestic assets	791	821	845	801	869	990
Liquid claims on banks	373	292	254	213	228	44
Deposits with savings and loan associations	155	227	265	243	216	20
Credit to savings and loan associations	137	120	148	187	459	46
Credit to private sector	263	274	289	442	261	22
Official capital and surplus	-159	-145	-157	-197	-534	-60
Other assets	22	53	45	-8 6	240	27
Medium- and long-term foreign liabilities	19	20	0	2	3	
Liabilities to banking system	70	82	74	74	74	4
Liabilities to savings and loan associations	229	203	199	263	388	45
Deposits	224	198	186	250	375	44
Other liabilities	4	4	13	13	13	1
Liabilities to private sector	474	517	571	464	406	49
Mortgage bonds	448	496	554	449	373	47
Other liabilities	26	21	18	15	33]
II. Savin	gs and Loar	Associati	ions			
Domestic assets	7,924	8,866	10,847	13,221	15,914	18,43
Liquid claims on banks	2,191	1,320	2,237	2,590	3,046	3,75
Credit to the National Housing Bank	4	4	13	13	13]
Deposits with the National Housing Bank	224	198	178	249	375	44
Credit to private sector	5,277	7,275	8,280	10,052	12,397	14,42
Other assets	228	69	139	317	83	-20
Liabilities to the National Housing Bank	266	265	385	350	408	4:
Liabilities to private sector	7,657	8,668	10,462	12,871	15,507	17,9
Savings deposits	2,596	2,638	2,917	3,457	4,105	4,59
Other liabilities	4,081	4,675	5,935	7,279	8,958	10,24
Private capital and surplus	981	1,355	1,611	2,135	2,444	3,13
ш.	Mortgage	Banks				
Foreign assets	3	3	3	3	3	
Domestic assets	1,312	1,185	1,138	623	568	50
Liquid claims on banks	160	127	122	83	67	- 1
Credit to private sector	1,120	1,016	1,012	548	484	5
Other assets	32	42	. 4	-9	17	
Liabilities to banking system	166	122	126	114	114	1
Liabilities to private sector	1,149	1,066	1,015	511	457	4
Time and savings deposits	766	863	822	438	410	4
Mortgage bonds	83	69	72	69	69	
Official capital and surplus	186	-14	-44	-109	-132	-12
Other liabilities	115	148	165	113	110	1

Table 29. Dominican Republic: Summary Accounts of the Nonbank Financial Institutions
(In millions of Dominican pesos)

	1993	1994	1995	1996	1997_	Prel. 1998
IV. Priv	ate Develo	pment Ban	ks			
Foreign assets	0	0	0	0	0	0
Domestic assets	3,337	3,262	2,735	2,742	2,938	4,312
Liquid claims on banks	381	308	219	215	215	538
Credit to private sector	2,989	3,005	2,514	2,519	2,713	3,754
Other assets	-33	-50	2	8	´ 9	20
Medium- and long-term foreign liabilities	1	1	1	1	1	17
Liabilities to banking system	1,316	1,289	1,166	1,175	1,058	1,134
Liabilities to private sector	2,020	1,972	1,568	1,567	1,879	3,161
Bonds	1,046	1,079	848	816	1,046	1,801
Other liabilities	420	255	317	337	409	697
Private capital and surplus	555	639	403	414	424	663
V. Consolidated	d Nonbank	Financial 1	Institutions	3		
Foreign assets	3	3	3	3	3	3
Domestic assets	12,868	13,734	14,980	16,775	19,494	23,386
Liquid claims on banks	3,104	2,047	2,833	3,101	3,556	4,796
Credit to private sector	9,648	11,569	12,095	13,560	15,855	18,914
Official capital and surplus	-159	-145	-157	-197	-534	-608
Other assets	249	114	190	231	350	81
Net float	26	149	19	80	267	203
Medium- and long-term foreign liabilities	19	21	1	2	4	21
Liabilities to banking system	1,551	1,493	1,366	1,363	1,246	1,292
Liabilities to private sector	11,300	12,224	13,616	15,413	18,248	22,076
Time and savings deposits	2,678	2,707	2,988	3,526	4,173	4,664
Bonds	2,259	2,437	2,224	1,703	1,828	2,675
Other liabilities	4,641	5,099	6,435	7,744	9,511	11,069
Private capital and surplus	1,722	1,980	1,969	2,440	2,736	3,669

Table 30. Dominican Republic: Stock of Domestic Credit of the Financial System by Origin, Destination, and Financing

	1993	1994	1995	1996	1997	Prel. 1998
	(In millions of	Dominican pe	esos)			
Fotal domestic credit	35,687	41,931	48,638	59,453	73,348	91,252
			·	ŕ		,
Origin Central bank	35,687 5,054	41,931	48,638 8,869	59,453 12,089	73,348 14,199	91,25 2
central bank Reserves bank	5,054	6,809 2,753	2,469	3,789	5,122	7,19
Private commercial banks	1,511 17,875	20,612	24,151	29,617	38,234	48,86
Private commercial banks Nonbank financial intermediaries	9,738	11,538	12,128	13,594	15,671	18,38
ntrasystem float and valuation changes	1,509	219	1,022	363	122	59:
Destination	35,687	41,931	48,638	59,453	73,348	91,25
Net claims on the public sector	-1,012	3,374	3,521	4,103	5,184	7,62
Central government (net)	-3,504	-1,334	-2,853	-2,008	-933	30
Other public sector (net)	2,493	4,708	6,373	6,111	6,117	7,32
Official capital and surplus	947	-301	805	2,145	3,152	5,26
Private sector	29,090	33,735	38,724	47,486	59,630	71,65
Nonmonetary international organizations	225	249	274	286	318	35
Net unclassified assets	4,928	4,655	4,293	5,070	4,942	5,76
Intrasystem float	1,509	219	1,022	363	122	59
Financing	35,687	41,931	48,638	59,453	73,348	91,25
Liabilities to private sector	44,607	49,231	58,392	69,119	84,593	102,08
Net international reserves	-6,942	-600	-3,046	-3,089	-4,260	-3,97
Medium- and long-term foreign liabilities	15,103	9,254	10,053	10,549	10,192	10,81
Revaluation account	-17,280	-16,154	-16,961	-17,326	-17,376	-17,87
Counterpart unrequited foreign exchange	200	200	200	200	200	20
	(In percent of to	otal domestic	credit)			
Total domestic credit	100.0	100.0	100.0	100.0	100.0	100.
Origin	100.0	100.0	100.0	100.0	100.0	100
Central bank	14.2	16.2	18.2	20.3	19.4	17
Reserve bank	4.2	6.6	5.1	6.4	7.0	7
Private commercial banks	50.1	49.2	49.7	49.8	52.1	53
Nonbank financial intermediaries	27.3	27.5	24.9	22.9	21.4	20
Intrasystem float	4.2	0.5	2.1	0.6	0.2	0
Destination	100.0	100.0	100.0	100.0	100.0	100
Net claims on public sector	-2.8	8.0	7.2	6.9	7.1	8
Central government (net)	-9.8	-3.2	-5.9	-3.4	-1.3	0
Other public sector (net)	7.0	11.2	13.1	10.3	8.3	8
Official capital and surplus	2.7	-0.7	1.7	3.6	4.3	70
Private sector	81.5	80.5	79.6	79.9	81.3	78
Nonmonetary international organizations Net unclassified assets	0.6	0.6	0.6	0.5	0.4	(
Net unclassified assets Intrasystem float	13.8 4.2	11.1 0.5	8.8 2.1	8.5 0.6	6.7 0.2	(
Financing	100.0	100.0	100.0	100.0	100.0	100
Liabilities to private sector	125.0	117.4	120.1	116.3	115.3	111
Net international reserves	-19.5	-1.4	-6.3	-5.2	-5.8	
Medium- and long-term foreign liabilities	42.3	22.1	20.7	17.7	13.9	11
Revaluation account	-48.4	-38.5	-34.9	-29.1	-23.7	-19
Counterpart unrequited foreign exchange	0.6	0.5	0.4	0.3	0.3	

Table 31. Dominican Republic: Changes in Domestic Credit of the Financial System, by Origin, Destination, and Financing

	1993	1994	1995	1996	1997	Prel. 1998
()	n millions of I	Dominican pe	sos)			
Total domestic credit	3,576	9,376	7,435	10,642	13,837	17,797
Origin	3,576	9,376	7,435	10,642	13,837	17,797
Central bank	457	4,888	2,787	3,048	2,052	1,908
Reserve bank	201	1,242	-285	1,321	1,333	2,068
Private commercial banks	2,228	2,736	3,539	5,467	8,617	10,633
Nonbank financial intermediaries	149	1,800	591	1,466	2,076	2,716
Intrasystem float and valuation changes	541	-1,290	804	-659	-241	472
Destination	3,576	9,376	7,435	10,642	13,837	17,797
Public sector (net)	634	5,097	586	582	1,081	2,444
Central government (net)	1,567	2,530	-1,079	845	1,075	1,236
Other public sector (net)	-932	2,567	1,665	-263	6	1,208
Private sector	3,945	4,645	4,989	8,762	12,144	12,027
Other 1/	-1,003	-366	1,860	1,297	612	3,326
Financing	3,576	9,376	7,435	10,642	13,837	17,797
Liabilities to private sector	5,700	4,624	9,161	10,727	15,474	17,494
Net international reserves (increase -) 2/	-2,163	6,517	-2,564	190	-1,152	703
Medium- and long-term foreign liabilities 3/	40	-1,765	838	-275	-486	-40 0
	(Annual percen	ntage change)	4/			
Net domestic credit	9.2	21.0	15.1	18.2	20.0	21.0
Public sector	1.6	11.4	1.2	1.0	1.6	2.9
Private	10.1	10.4	10.1	15.0	17.6	14.2
Liabilities to private sector	14.6	10.4	18.6	18.4	22.4	20.7
(In pero	ent of change	in total dome	stic credit)			
Total domestic credit	100.0	100.0	100.0	100.0	100.0	100.0
Origin	100.0	100.0	100.0	100.0	100.0	100.0
Central bank	12.8	52.1	37.5	28.6	14.8	10.
Reserve bank	5.6	13.2	-3.8	12.4	9.6	11.0
Private commercial banks	62.3	29.2	47.6	51.4	62.3	59.
Nonbank financial intermediaries	4.2	19.2	7.9	13.8	15.0	15.3
Intrasystem float and valuation changes	15.1	-13.8	10.8	-6.2	-1.7	2.
Destination	100.0	100.0	100.0	100.0	100.0	100,
Public sector (net)	17.7	54.4	7.9	5.5	7.8	13.
Central government (net)	43.8	27.0	-14.5	7.9	7.8	6.
Other public sector (net)	-26.1	27.4	22.4	-2.5	0.0	6.5
Private sector	110.3	49.5	67.1	82.3	87.8	67.0
Other 1/	-28.0	-3.9	25.0	12.2	4.4	18.
Financing	100.0	104.0	92.5	103.7	100.0	100.
Liabilities to private sector	159.4	49.3	123.2	100.8	111.8	98.
Net international reserves (increase -)	-60.5	69.5	-34.5	1.8	-8.3	3.
Medium- and long-term foreign liabilities	1.1	-14.8	3.8	1.2	-3.5	-2.

Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} Includes official capital and surplus, nonmonetary international organizations, net unclassified assets, intrasystem

float, and valuation changes.

2/ Based on period average official exchange rate.

3/ Based on period average official exchange rate. Includes changes in stocks resulting from debt reduction and a restructuring agreement with foreign commercial banks in 1994.

^{4/} Changes in relation to the outstanding stocks of liabilities to the private sector at the beginning of the period.

Table 32. Dominican Republic: Stock of Commercial Bank Credit to the Private Sector by Economic Activity 1/

	· · · · · · · · · · · · · · · · · · ·					Prel.
	1993	1994	1995	1996	1997	1998
	(In millions	of Dominica	n pesos)			
Total	19,442	22,166	26,629	33,926	43,775	52,744
Productive sectors	6,988	7,539	8,050	9,768	12,922	13,431
Agriculture	2,244	2,434	2,610	2,260	2,945	2,814
Manufacturing and mining	3,771	3,947	4,187	5,631	7,382	7,891
Construction	971	1,149	1,229	1,786	2,420	2,559
Electricity, water and gas	2	8	24	90	175	167
Other	12,454	14,628	18,579	24,158	30,853	39,313
Trade	6,091	7,199	8,464	10,177	13,237	17,950
Installment credit	3,883	4,918	7,140	8,570	11,596	16,081
Miscellaneous 2/	2,480	2,511	2,975	5,411	6,021	5,282
	(In pe	rcent of total	1)			
Total	100.0	100.0	100.0	100.0	100.0	100.0
Productive sectors	35.9	34.0	30.2	28.8	29.5	25.5
Agriculture	11.5	11.0	9.8	6.7	6.7	5.3
Manufacturing and mining	19.4	17.8	15.7	16.6	16.9	15.0
Construction	5.0	5.2	4.6	5.3	5.5	4.9
Electricity, water and gas	0.0	0.0	0.1	0.3	0.4	0.3
Other	64.1	66.0	69.8	71.2	70.5	74.5
Trade	31.3	32.5	31.8	30.0	30.2	34.0
Installment credit	20.0	22.2	26.8	25.3	26.5	30.5
Miscellaneous 2/	12.8	11.3	11.2	16.0	13.8	10.0

^{1/} Includes the Reserves Bank.

^{2/} Includes tourism and unclassified loans made by the Investment Fund for Economic Development.

Table 33. Dominican Republic: Nominal Interest Rates of Commercial Banks 1/

	Mar.	Jun.	Sep.	Dec.
1994				
Lending rates				
0-90 days	24.9	26.2	28.7	30.3
91-181 days	26.1	27.6	29.0	29.9
181-360 days	27.1	28.5	30.0	31.0
Over 360 days	28.9	27.8	33.0	33.0
Deposit rates 2/				
30-day	11.9	14.0	16.9	19.2
90-day	12.5	12.5	14.2	16.7
180-day	10.7	12.3	11.7	17.9
360-day	10.0	11.0	15.7	18.0
1995				
Lending rates				
0-90 days	30.3	30.4	29.6	28.0
91-181 days	31.2	30.4	30.8	30.0
181-360 days	31.2	31.2	30.1	28.4
Over 360 days	33.2	32.8	31.9	31.5
Deposit rates 2/			.	
30-day	18.7	17.6	16.6	16.1
90-day	16.9	15.7	15.4	14.5
180-day	14.7	14.8	14.5	13.1
360-day	14.0	17.7		0.0
1996				
Lending rates				
0-90 days	23.5	24.0	24.1	21.3
91-181 days	25.1	26.3	25.8	23.7
181-360 days	21.8	23.7	23.5	22.1
Over 360 days	23.7	24.2	24.3	22.0
Deposit rates 2/	12.0	14.2	141	12.6
30-day	12.9	14.3	14.1	13.6
90-day	14.1	14.0	13.0	13.2 13.9
180-day 360-day	13.3 14.3	13.6 15.2	11.6 14.8	13.9
•				
1997 Lending rates				
0-90 days	22.5	19.6	18.4	19.6
91-181 days	22.8	20.7	20.0	20.2
181-360 days	20.8	20.9	19.1	19.8
Over 360 days	24.2	23.3	22.0	21.5
Deposit rates 2/				
30-day	13.7	14.0	12.9	13.9
90-day	12.7	14.1	12.9	13.7
180-day	11.1	11.8	11.9	12.0
360-day	10.5	12.6	13.2	14.7
1998				
Lending rates				
0-90 days	22.4	27.0	28.4	27.5
91-181 days	23.5	28.3	29.6	26.5
181-360 days	23.4	28.9	26.6	25.0
Over 360 days	23.7	26.4	26.2	25.1
Deposit rates 2/				
30-day	15.4	19.8	19.1	18.1
90-day	15.4	18.1	18.3	17.4
180-day	14.6	16.7	16.9	15.4
360-day	14.9	16.5	18.2	18.1

^{1/} Monthly weighted average rates.2/ Rates paid on certificates of deposit.

Table 34. Dominican Republic: Reserve Requirements of Financial Institutions

(As of March 31, 1999)

		Reserve			
Financial	Liability Subject	Requirement	Eligible	Remuneration	Period
Institution	to Reserves	Rate 1/	Assets		of Calculation
					44
Commercial and	Deposits in national currency:	20	Deposits with the central bank	Regular account: none	Weekly
multiservice banks	Demand 2/		Cash in vault 3/	Special account:	-
	Time and savings			2 percent on 50 percent of	
	Special			required reserves 4/	
	Financial certificates	20			
	Deposits in foreign currency:	30	Deposits with the central bank		
	Time and savings 5/		in U.S. dollars		Weekly
Mortgage banks	Financial certificates	10	Deposits with the central bank	2 percent on 50 percent of	Every 15 days
	Mortgage bonds	0		required reserves 3/	
	Certificates of participation	10			
	Time deposits				
	Domestic	20			
	Foreign	50			
Development	Financial certificates	10	Deposits with the central bank	2 percent on 50 percent of	Every 15 days
banks	Certificates of participation	10	Up to 45 percent of required	required reserves 3/	
	Bonds in circulation		reserves in public sector bonds		
	Short term	20	-		
	Long term	10			
Financial institutions	Investment certificates	10	Deposits with the central bank	2 percent on 50 percent of required reserves 3/	Monthly
Agricultural bank	Financial certificates	10	Deposits with the central bank		Weekly
1	Savings deposits	10	-		
	Time deposits	10			
Savings and loan	Financial certificates	0	55 percent in deposits with the	6 percent on deposits in the NHB	Every 15 days
associations	Savings deposits	10	National Housing Bank (NHB)	14 percent on central bank	
	Time deposits	10	45 percent in central bank	certificates	
	Participation contracts	0	certificates		

Sources: Central Bank of the Dominican Republic; and Fund staff estimates.

^{1/} In percent.

^{2/} Excludes checks in transit.

^{3/}Up to 5 percent of the liabilities subject to reserve requirements.

^{4/} Only when the institution complies with reserve requirements. Excess reserves are not remunerated.

^{5/} Applied only to the excess of deposits in foreign currency of over three times the capital and reserves of banks.

Table 35. Dominican Republic: Liabilities and Reserves of Commercial and Multiservice Banks 1/
(In millions of Dominican pesos)

	1993	1994	1995	1996	1997	1998
I. Res	serves Ban	k				
Liabilities subject to legal reserve requirements 2/	6,953	5,488	7,029	9,777	11,323	12,286
Demand deposits	3,690	1,541	2,472	3,850	4,477	5,053
Time and savings deposits	1,561	1,605	1,969	2,338	3,206	3,587
Financial certificates	1,703	2,342	2,588	3,588	3,640	3,646
Required reserves	1,391	1,104	1,406	1,955	2,265	2,457
Actual reserves	1,884	947	1,365	2,621	2,546	3,325
Cash in vault 3/	0	0	0	467	647	975
Deposits in the central bank	1,884	947	1,365	2,155	1,899	2,350
(In percent of liabilities sub	ject to lega	ıl reserve r	equiremer	nts)		
Memorandum items:						
Actual reserves	27.1	17.3	19.4	26.8	22.5	27.1
II. Pr	ivate Bank	cs				
Liabilities subject to legal reserve requirements	18,767	20,651	25,198	28,946	36,262	45,225
Demand deposits	7,131	7,328	8,566	10,587	13,231	14,573
Time and savings deposits	4,576	5,387	6,906	7,295	8,962	11,651
Financial certificates	7,060	7,937	9,726	11,064	14,070	19,002
Required reserves	3,579	3,992	5,037	5,789	7,252	9,045
Actual reserves	4,231	4,067	5,156	5,636	7,129	9,714
Cash in vault 3/	0	0	0	1,396	1,959	2,299
Deposits in the central bank	4,231	4,067	5,156	4,240	5,170	7,416
(In percent of liabilities sub	ject to lega	al reserve	requiremen	nts)		
Memorandum items:						
Actual reserves	22.5	19.7	20.5	19.5	19.7	21.5

^{1/} December average for each year.

^{2/} Includes public sector deposits.

^{3/} Starting January 1996, cash in vault was again counted toward required reserves. The line shows the total amount of cash in vault, but for the reserve requirement calculations it is only included up to 5 percent of total liabilities.

Table 36. Dominican Republic: Financial Indicators

(End of period)

		Reserv	es Bank		Priv	rate Comr	nercial B	anks		Saving	s and Loa	ns	Other	r Financia	1 Instituti	ons		Tota	1	
-	1995	1996	1997	1998	1995	1996	1997	1998	1995	1996	1997	1998	1995	1996	1997	1998	1995	1996	1997	1998
							(In billions	of Dominic	n pesos)	-		٠							
Assets	13.8	16.7	20.1	20.0	34.4	38.2	52.1	68.0	11.2	13.7	16.6	19.5	10.9	11.0	11.7	14.5	70.3	79.6	100.4	121.9
Cash	4.9	4.7	5.3	5.8	9.2	9.2	11.4	15.9	0.8	0.8	0.8	0.8	0.9	1.2	1.2	1.5	15.9	15.9	18.6	24.1
Loan portfolio	5.9	6.9	9.2	10.0	19.5	22.9	32.8	42.1	6.5	7.7	9.8	12.4	6.6	6.7	7.2	8.8	38.5	44.2	59.0	73.3
Of which	0.2	0.2	0.2	0.1	1.1	1.0	0.9	1.2	0.3	0.3	0.3	0.3	0.9	0.9	0.8	1.0	2.4	2.4	2.1	2.6
Overdue								•												
Provisions	-0.1	-0.2	-0.2	-0.3	-0.3	-0.5	-0.7	-1.3	-0.1	-0.1	-0.1	-0.2	-0.3	-0.4	-0.4	-0.5	-0.8	-1.2	-1.4	-2.3
Investments 1/	0.6	1.7	1.4	0.7	2.0	2.4	2.9	2.8	3.0	4.0	4.7	5.0	0.9	1.0	1.2	1.7	6.5	9.0	10.1	10.3
Fixed assets 2/	0.6	0.6	0.7	0.8	1.9	1.7	2.5	3.4	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.3	3.0	2.9	3.7	4.7
Other assets	1.8	2.8	3.7	3.0	2.0	2.6	3.2	5.0	0.8	1.1	1.2	1.2	2.5	2.3	2.2	2.7	7.2	8.9	10.3	11.9
Total liabilities and capital	13.8	16.7	20.1	20.0	34.4	38.2	52.1	68.0	11.2	13.7	16.6	19.5	10.9	11.0	11.7	14.5	70.3	79.6	100.4	121.9
Liabilities	12.9	15.7	18.9	18.8	30.8	34.3	47.0	61.0	9.9	11.9	14.4	16.8	8.8	9.2	9.5	11.8	62.4	71.2	89.8	108.4
Deposits in domestic currency	6.2	7.6	8.8	8.9	15.9	17.4	22.3	25.6	3.1	3.6	4.2	4.8	0.7	0.8	1.0	1.5	25.9	29.3	36.3	40.7
Demand	4.1	5.1	5.4	5.2	7.3	9.4	12.2	13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	14.5	17.6	18.6
Savings	2.0	2.4	3.1	3.4	5.2	4.7	6.3	7.0	2.7	3.3	4.0	4.5	0.2	0.3	0.4	0.5	10.2	10.7	13.7	15.5
Time	0.0	0.1	0.3	0.3	3.3	3.3	3.8	5.1	0.4	0.3	0.3	0.2	0.4	0.5	0.6	1.0	4.2	4.1	4.9	6.6
Deposits in foreign currency	0.0	0.1	0.3	0.0	0.5	1.1	2.5	5.7	0.0	0.0	0.0	0.0					0.5	1.1	2.8	5.8
Bonds	2.6	3.5	4.3	3.5	9.9	10.6	14.9	19.6	6.2	7.7	9.3	10.7	4.5	4.5	5.1	5.8	23.3	26.3	33.6	39.6
Other domestic funds	0.5	0.5	0.5	1.0	2.4	2.0	2.1	2.3	0.0	0.0	0.1	0.3	1.9	2.1	1.9	2.2	4.8	4.7	4.6	5.8
Funds raised abroad	1.2	1.5	1.4	0.9	1.3	2.3	3.8	6.0	0.0	0.0	0.0	0.0					2.5	3.9	5.3	7.1
Other liabilities	2.3	2.6	3.7	4.5	0.9	0.9	1.4	2.0	0.5	0.6	0.8	1.0	1.7	1.8	1.5	2.3	5.5	6.0	7.3	9.3
Capital	0.9	0.9	1.2	1.2	3.5	3.9	5.0	6.9	1.4	1.8	2.2	2.7	2.1	1.8	2.2	2.7	7.9	8.5	10.6	13.6
Paid capital	0.3	0.3	0.3	0.3	2.2	2.3	3.1	4.6	0.0	0.0	0.0	0.0	1.5	1.5	1.6	2.1	4.0	4.1	4.9	7.0
Legal reserve	0.0	0.0	0.0	0.0	0.5	0.5	0.6	0.9	0.0	0.0	0.0	0.0	0.2	0.3	0.3	0.2	0.7	0.7	1.0	1.2
Other capital accounts	0.6	0.7	0.9	1.0	0.8	1.1	1.3	1.4	1.4	1.8	2.2	2.7	0.4	0.1	0.3	0.3	3.2	3.7	4.7	5.5
			,					(I)	n percent)											
Indicators																				
Overdue loans/total loans portfolio	3.6	3.1	1.9	1.5	5.5	4.3	2.6	2.9	4.3	4.2	2.7	2.4	12.9	13.8	10.6	10.8	6.3	5.5	3.5	3.6
Provisions/total loan	3.0	3.1	1.7	1.5	0.0	,,,,	2.0													
portfolio	2.5	` 3.0	2.6	3.0	1.6	2.0	2.0	3.1	1.3	1.4	1.5	1.8	4.3	6.3	5.7	5.5	2.2	2.7	2.4	3.1
I ·	68.4	99.0	138.2	206.8	29.6	47.3	75.4	104.9	30.6	34.2	55.2	74.5	33.3	45.6	53.6	50.5	34.4	49.4	69.9	87.5
Provisions/overdue loans	00.4	22.0	130.2	200.0	2 /.0	17.5	,	10 115												
Overdue loans less provisions	7.8	0.2	-5.5	-12.9	21.5	13.2	4.2	-0.9	14.0	11.8	5.4	2.8	26.9	27.4	16.2	17.6	20.1	14.6	5.9	2.4
(percent of capital)	7.0	0.2	-5.5	-14.7					*		•									
Loan portfolio																				
(in percent of total loans	15.3	15.7	15.5	13.7	50.7	51.7	55.6	57.5	16.8	17.3	16.6	16.9	17.2	15.2	12.2	12.0	100.0	100.0	100.0	100.0
of the financial sector)	15.5	13.7	13.3	13.7	50.7	21.7	22.0	51.5	10.0	2	10.0									
Liabilities																				
(in percent of total liabilities	-0-			17.2	40.4	40.0	52.4	56.3	15.8	16.7	16.1	15.5	14.1	12.9	10.5	10.9	100.0	100.0	100.0	100.0
of the financial sector	20.7	22.1	21.0	17.3	49.4	48.2	52.4	20.3	12.0	10.7	10.1	13.3	17.1	14./	10.5		100.0			

Sources: Superintendency of Banks; and Fund staff estimates.

^{1/} Net of provisions.2/ Net of depreciation and provisions.

Table 37. Dominican Republic: Summary Balance of Payments

(In millions of U.S. dollars, unless otherwise indicated)

				· · · · · · · · · · · · · · · · · · ·		Prel.
	1993	1994	1995	1996	1997	1998
Current account	-533	-283	-183	-213	-163	-352
Trade balance	-1,443	-1,451	-1,391	-1,674	-1,995	-2,609
Exports, f.o.b.	602	736	872	946	1,017	889
Imports, f.o.b.	-2,795	-2,992	-3,164	-3,581	-4,192	-4,897
Net exports of free trade zones	750	805	901	961	1,180	1,400
Services balance (net)	713	867	985	1,019	1,275	1,189
Of which				•	•	
Tourism receipts	1,224	1,429	1,571	1,781	2,099	2,142
Income (net)	-697	-682	-769	-725	-795	-901
Transfers (net)	894	983	992	1,168	1,352	1,969
Of which				-,	- 3	,
Insurance claims	24	33	16	37	37	330
Capital and financial account	-182	274	208	90	449	717
Direct investment	189	207	414	97	421	691
Portfolio investment	0	-39	-3	-7	-8	-21
Medium- and long-term loans	-4 40	-78	27	-8	-32	22
Of which	116	112	147	97	109	190
Disbursements to public sector 1/	116 69	184	-231	97	69	26
Other, including short-term capital	09	184	-231	9	09	
Errors and omissions	562	-598	75	109	-194	-303
Overall balance	-154	-607	100	-14	93	63
Financing	154	607	-100	14	-93	-63
Net international reserves (increase -)	-438	470	-137	-39	-110	-100
Net change in arrears 2/-	-351	-971	31	24	-192	-37
Debt relief	16	588	5	8	79	2
Net exceptional financing 3/	926	520	0	22	130	72
Memorandum items:						
Current account (in percent of GDP)	-5.5	-2.6	-1.5	-1.6	-1.1	-2.2
Gross reserves	646	259	390	375	415	513
In months of imports of goods and services 4/5/	1.9	0.7	1.0	0.8	0.8	0.9
In percent of M2	27.8	10.5	13.3	11.6	10.5	11.8
Net international reserves	438	-32	105	145	254	354
Net use of Fund resources	64	-8	-34	-60	-63	27
External public sector debt	4,562	3,946	3,999	3,807	3,509	3,541
In percent of GDP	46.8	36.6	32.9	28.3	23.3	22.3
Scheduled external public sector debt service 6/	942	589	476	460	451	398
In percent of exports of goods and services 5/	32.0	17.3	12.6	11.2	9.5	8.2
Interest on external public sector debt 6/	268	219	223	210	188	177
Amortization of public sector debt 6/	674	370	253	251	263	221
GDP (millions of U.S. dollars)	9,750	10,785	12,158	13,463	15,058	15,900
Official exchange rate 7/	12.50	12.62	12.87	12.97	14.11	14.82
Market exchange rate 7/	12.49	12.81	13.49	13.80	14.33	15.31
Weighted average exchange rate 7/	12.49	12.76	13.35	13.63	14.28	15.21

^{1/} In 1998 disbursements include refinancing of debt service (US\$20 million) owed to Venezuela and a US\$34 million net credit for an electricity generation facility.

2/ Includes net payment of past due obligations paid within the grace period.

^{3/} In response to Hurricane Georges, Paris Club creditors informally agreed to tolerate arrears for up to six months on debt service due from September 22, 1998 to December 31, 1999.

^{4/} In relation to imports of goods and services during the upcoming year.

^{5/} Net of imports of the free-trade zones.

^{6/} Refers to interest and amortization due on medium- and long-term debt, including Fund credits.

^{7/} Period average, in Dominican pesos per U.S. dollar.

Table 38. Dominican Republic: Balance of Payments

(In millions of U.S. dollars)

	-	1994			1995			1996			1997			1998	
	Credit	Debit	Balance	Credit	Debit	Balance									
Current account	6,400	-6,683	-283	6,891	-7,074	-183	7.576	-7,789	-213	8,643	-8,806	-163	9,692	-10,043	-352
Merchandise	3,453	-4,903	-1,451	3,780	-5,170	-1,391	4,053	-5,727	-1,674	4,614	-6,609	-1,995	4,989	-7,597	-2,609
Merchandise, f.o.b.	736	-2,992	-2,255	872	-3,164	-2,292	946	-3,581	-2,635	1,017	-4,192	-3,175	889	-4,897	-4,008
Free-trade zones, f.o.b.	2,716	-1,912	805	2,907	-2,006	901	3,107	-2,146	961	3,596	-2,417	1,180	4,100	-2,701	1,400
Services	1,863	-997	867	1,990	-1,005	985	2,222	-1,204	1,019	2,534	-1,259	1,275	2,575	-1,386	1,189
Freight and insurance	3	-486	-483	3	-488	-486	3	-532	-529	3	-558	-555	3	-642	-640
Other transport	35	-90	-54	39	-96	-57	55	-117	-63	58	-121	-63	62	-121	-59
Tourism	1,429	-145	1,284	1,571	-173	1,398	1,781	-198	1,582	2,099	-221	1,879	2,142	-254	1,888
Communications	238	-56	182	247	-76	171	191	-70	121	159	-63	95	145	-45	100
Government, n.i.e.	51	-10	42	57	-10	48	62	-21	41	74	-12	62	79	-13	67
Other services	108	-212	-104	73	-162	-89	131	-265	-134	141	-285	-143	144	-311	-166
Investment and labor income	101	-783	-682	128	-897	-769	130	-855	-725	140	-936	-795	156	-1,057	-901
Transfers	983	0	983	994	-1	992	1,171	-3	1,168	1,355	-3	1,352	1,971	-3	1,969
Private	912	0	912	930	-1	929	1,099	0	1,099	1,289	0	1,289	1,846	0	1,846
Official	71	0	71	64	0	64	72	-3	69	66	-3	63	125	-3	123
Capital and financial accounts	910	-1,233	-324	994	-711	283	859	-660	199	1,283	-1,027	256	1,762	-1,347	415
Direct investment	207	0	207	414	0	414	97	0	97	421	0	421	691	0	691
Portfolio investment	0	-39	-39	0	-3	-3	0	-7	-7	0	-8	-8	0	-21	-21
Other	703	-1,195	-492	580	-708	-128	762	-652	110	863	-1,020	-157	1,071	-1,326	-255
Commercial credits	0	-23	-23	0	-8	-8	0	-137	-137	158	0	158	0	-205	-205
Loans	425	-355	70	458	-437	21	582	-515	67	702	-600	102	901	-818	82
Public sector	183	-322	-139	317	-338	-21	375	-470	-95	505	-557	-52	673	-773	-100
Medium and long term	112	-255	-143	147	-218	-71	97	-193	-95	109	-188	-79	190	-263	-74
Nonfinancial public sector 1/	105	-174	-69	132	-173	-41	94	-174	-80	109	-170	-62	190	-214	-25
Financial public sector	7	-81	-74	16	-45	-29	3	-18	-15	0	-18	-18	0	-49	-49
Short term	71	-67	5	170	-120	50	278	-278	1	396	-369	27	483	-510	-26
Private sector	242	-33	209	141	-99	42	207	-45	162	197	-43	154	228	-45 202	182 -132
Other (including errors and omissions)	278	-817	-539	122	-263	-141	180	0	180	3	-420	-418	170	-303	-132
Overall balance	•••	***	-607	•••	***	100	***	•••	-14	•••	•••	93	***	***	63
Financing	***	•••	607	•••		-100	•••	•••	14	•••	***	-93	•••	•••	-63
Net international reserves (increase -)	•••	•••	470	•••	•••	-137	•••	•••	-39	•••	•••	-110	•••	•••	-100
Gross reserves (increase -)	•••		387		•••	-131	•••	•••	15	•••	•••	-40 70	•••	•••	-98
Liabilities	•••	•••	83	***	•••	-6	•••	•••	-55	•••	•••	-70	•••	•••	-2
Use of Fund credit (net)		•••	-8	***	***	-34	•••	•••	-60		•••	-63	•••	•••	27
Other liabilities		***	91	•••	•••	28	•••	•••	5	•••		-8	•••	•••	-29
Arrears (reduction -) 2/	•••		-971	***	•••	31		***	24	•••	•••	-192	•••	***	-37
Debt relief			588	•••		5		***	8	•••	•••	79	•••	•••	2
Exceptional financing (net) 3/			520		•••	0	•••		22	•••	•••	130	•••	•••	72

^{1/} In 1998 disbursements include refinancing of debt service (US\$20 million) owed to Venezuela and a US\$34 million net credit for an electricity generation facility. 2/ Includes net payment of past due obligations paid within the grace period.
3/ In response to Hurricane Georges, Paris Club creditors informally agreed to tolerate arrears for up to six months on debt service due from September 22, 1998 to December 31, 1999.

Table 39. Dominican Republic: Exports by Principal Commodity Groups

	1993	1994	1995	1996	1997	Prel 1998
(Value in millions	s of U.S. dollars; ounces; and unit			netric tons o	r	
Fotal exports, f.o.b.	3,211.0	3,452.5	3,779.5	4,052.8	4,613.7	4,988.7
Major agricultural exports	229.7	284.8	304.3	356.4	423.9	365.5
Major agricultural exports Raw sugar	227.1	204.0	304.3	230.4	749.7	505
Volume (U.S. quota)	225.4	309.6	196.2	313.9	383.6	229.:
Unit value (US\$/100 lbs.)	19.0	16.8	20.1	20.5	20.6	20.
Value	94.2	114.6	87.0	141.8	174.4	102.
Volume (free market)	94.5	8.4	46.2	-0.2	2.7	32.
Unit value (US\$/100 lbs.)	8.4	13.1	15.0	-943.3	19.1	19.
Value	17.4	2.4	15.2	4.1	1.2	14.
Total volume (metric tons)	319.8	318.0	242.4	313.7	386.4	261.
Total value	111.7	117.1	102.3	145.9	175.6	116.
Refined sugar and by-products	31.4	26.9	29.8	29.9	28.2	26.
Unprocessed coffee						
Volume	20.6	20.3	27.6	27.5	17.0	20.
Unit value (US\$/100 lbs.)	58.2	140.4	134.0	104.0	177.4	138
Value	26.4	62.7	81.4	63.0	66.4	63
Processed coffee	0.2	0.5	0.8	1.1	1.5	2
Raw cocoa						
Volume	45.0	51.1	49.8	51.1	42.4	54
Unit value (US\$/100 lbs.)	33.1	46.1	49.5	51.7	58.0	67
Value	32.8	51.9	54.3	58.2	54.1	81
Processed cocoa	3.3	3.8	5.3	6.5	6.9	8
Tobacco leaf						
Volume	12.5	7.1	8.8	14.2	15.0	10
Unit value (US\$/100 lbs.)	54.8	74.5	80.7	86.0	117.3	170
Value	15.0	11.6	15.7	27.0	38.7	39
Tobacco products	8.9	10.3	14.7	24.8	52.5	26
Major mineral products Ferronickel	132.3	201.7	286.9	267.5	243.8	150
Volume	65.3	81.7	79.6	77.3	84.4	74
Unit value (US\$/ton)	1,962.9	2,238.1	3,040.0	2,831.6	2,565.5	1,795
Value (OS\$/ton)	1,302.9	182.8	242.1	2,831.0	2,303.5	133
Gold	120.2	102.0	2-12.1	210.0	210.5	100
Volume (troy ounces)	11.8	44.9	107.1	118.1	75.5	52
Unit value (US\$/troy ounce)	331.0	387.8	385.7	386.9	336.3	294
Value	3.9	17.4	41.3	45.7	25.4	15
Silver alloy	5.7	17.4	71.5	45.7	20.1	**
Volume (troy ounces)	53.5	282.9	647.0	576.9	400.1	241
Unit value (US\$/troy ounce)	3.7	5.3	5.4	5.2	4.7	27,
Value (SSS, 40) cance)	0.2	1.5	3.5	3.0	1.9	j
Other national exports	149.0	156.1	177.6	205.3	216.8	232
Goods sold in ports	91.1	93.8	103.3	116.3	132.8	140
Exports of free trade zones	2,608.9	2,716.1	2,907.4	3,107.3	3,596.4	4,100

Table 39. Dominican Republic: Exports by Principal Commodity Groups

	1993	1994	1995	1996	1997	Prel. 1998
	(In percent o	f total expor	ts)			
Total exports, f.o.b.	100.0	100.0	100.0	100.0	100.0	100.0
Major agricultural exports	7.2	8.2	8.1	8.8	9.2	7.3
Raw sugar	3.5	3.4	2.7	3.6	3.8	2.3
Value (U.S. quota)	2.9	3.3	2.3	3.5	3.8	2.1
Value (free market)	0.5	0.1	0.4	0.1	0.0	0.3
Refined sugar and by-products	1.0	0.8	0.8	0.7	0.6	0.5
Unprocessed coffee	0.8	1.8	2.2	1.6	1.4	1.3
Processed coffee	0.0	0.0	0.0	0.0	0.0	0.1
Raw cocoa	1.0	1.5	1.4	1.4	1.2	1.6
Processed cocoa	0.1	0.1	0.1	0.2	0.1	0.2
Tobacco leaf	0.5	0.3	0.4	0.7	0.8	0.8
Tobacco products	0.3	0.3	0.4	0.6	1.1	0.5
Major mineral products	4.1	5.8	7.6	6.6	5.3	3.0
Ferronickel	4.0	5.3	6.4	5.4	4.7	2.7
Gold	0.1	0.5	1.1	1.1	0.6	0.3
Silver alloy	0.0	0.0	0.1	0.1	0.0	0.0
Other national exports	4.6	4.5	4.7	5.1	4.7	4.7
Goods sold in ports	2.8	2.7	2.7	2.9	2.9	2.8
Exports of free trade zones	81.2	78.7	76.9	76.7	78.0	82.2
	(Percentage of	change in val	lue)			
Total exports, f.o.b.	21.8	7.5	9.5	7.2	13.8	8.1
Major agricultural exports	3.8	24.0	6.8	17.1	18.9	-13.8
Raw sugar	-2.8	4.8	-12.6	42.7	20.3	-33.4
Value (U.S. quota)	-1.9	21.7	-24 .1	62.9	23.0	-41.0
Value (free market)	-7.3	-8 6.1	528.1	-73.0	-71.9	1,108.7
Refined sugar and by-products	12.1	-14.3	10.7	0.2	-5.5	-5.7
Unprocessed coffee	4.9	137.9	29.7	-22.6	5.4	-3.9
Processed coffee	-76.9	104.2	73.2	31.0	34.0	95.4
Raw cocoa	2.5	58.2	4.6	7.1	-7.0	49.1
Processed cocoa	2.7	14.9	39.4	23.9	5.8	17.5
Tobacco leaf	33.0	-22.7	34.9	72.3	43.6	1.9
Tobacco products	53.2	16.0	43.3	68.4	111.4	-4 9.0
Major mineral products	-35.5	52.5	42.2	-6.8	-8.9	-38.
Ferronickel	-28.5	42.6	32.4	-9 .6	-1.1	-38.4
Gold	-84.0	346.2	137.4	10.7	-44.4	-39.8
Silver alloy	-88.2	650.0	133.3	-14.3	-36.7	-26.3
Other national exports	9.7	4.8	13.8	15.6	5.6	7.:
Goods sold in ports	18.4	3.0	10.1	12.6	14.2	5.9
Exports of free trade zones	31.2	4.1	7.0	6.9	15.7	14.6

Table 40. Dominican Republic: Exports by Destination

	1993	1994	1995	1996	1997	Prel. 1998
	(In millions of	U.S. dollars)				
Total exports, f.o.b. 1/	511.0	642.6	768.8	829.2	884.6	747.9
North American free trade area	312.1	395.4	455.4	509.2	564.2	491.9
United States	242.9	334.2	370.4	419.2	476.7	390.0
Puerto Rico	42.7	40.5	48.8	52.2	61.9	70.7
Canada	24.8	17.8	34.7	34.8	20.6	21.6
Mexico	1.7	2.9	1.6	2.9	5.0	9.7
Latin American and Caribbean	45.6	36.1	54.8	86.5	83.7	64.1
Europe	118.8	161.1	188.3	181.2	164.8	147.3
Belgium	28.9	34.8	25.4	61.9	105.4	82.8
France	1.6	3.2	3.6	3.0	4.4	4.2
Germany	3.0	3.9	7.2	10.8	7.8	13.2
Italy	8.4	8.1	13.4	12.7	15.1	18.0
Netherlands	54.0	88.3	108.0	66.6	13.2	8.7
Spain	12.1	12.3	12.3	12.8	12.7	15.1
Other	10.8	10.5	18.3	13.5	6.3	5.3
Asia	34.0	48.9	68.4	51.5	69.0	43.9
Japan	13.7	18.7	31.2	17.6	23.6	18.6
Other	20.3	30.2	37.3	33.9	45.4	25.4
Africa	0.5	0.7	1.8	0.6	2.6	0.6
Rest of the world	0.0	0.3	0.1	0.2	0.3	0.1
	(In percent of t	otal exports))			
Total exports, f.o.b. 1/	100.0	100.0	100.0	100.0	100.0	100.0
North American free trade area	61.1	61.5	59.2	61.4	63.8	65.8
United States	47.5	52.0	48.2	50.6	53.9	52.1
Puerto Rico	8.4	6.3	6.3	6.3	7.0	9.5
Canada	4.9	2.8	4.5	4.2	2.3	2.9
Mexico	0.3	0.4	0.2	0.4	0.6	1.3
Latin American and Caribbean	8.9	5.6	7.1	10.4	9.5	8.6
Europe	23.2	25.1	24.5	21.9	18.6	19.7
Belgium	5.7	5.4	3.3	7.5	11.9	11.1
France	0.3	0.5	0.5	0.4	0.5	0.6
Germany	0.6	0.6	0.9	1.3	0.9	1.8
Italy	1.7	1.3	1.7	1.5	1.7	2.4
Netherlands	10.6	13.7	14.0	8.0	1.5	1.2
Spain	2.4	1.9	1.6	1.5	1.4	2.0
Other	2.1	1.6	2.4	1.6	0.7	0.7
Asia	6.7	7.6	8.9	6.2	7.8	5.9
Japan	2.7	2.9	4.1	2.1	2.7	2.5
Other	4.0	4.7	4.8	4.1	5.1	3.4
Africa	0.1	0.1	0.2	0.1	0.3	0.1
Rest of the world	0.0	0.1	0.0	0.0	0.0	0.0

^{1/} Excludes exports of the free-trade zones and goods sold in ports.

Table 41. Dominican Republic: Imports, f.o.b.

	Est. 1/					Prel.
	1993	1994	1995	1996	1997	1998
	(In millions of U.	.S. dollars)	-			
Total imports	4,654	4,903	5,170	5,727	6,609	7,597
Consumption goods	1,288	1,389	1,415	1,722	2,026	2,168
Consumer durables	484	518	347	381	425	541
Refined petroleum products	222	285	341	470	520	454
Other _	804	587	728	872	1,081	1,174
Intermediate and raw materials	933	989	1,148	1,300	1,469	1,646
Crude oil and reconstituted fuel 2/	231	237	264	298	294	194
Other	702	752	884	1,003	1,176	1,452
Capital goods	574	614	601	558	696	1,082
Imports of free trade zones	1,859	1,912	2,006	2,146	2,417	2,701
	(In percent of tot	al imports)				
Total imports	100.0	100.0	100.0	100.0	100.0	100.0
Consumption goods	27.7	28.3	27.4	30.1	30.7	28.5
Consumer durables	10.4	10.6	6.7	6.6	6.4	7.1
Refined petroleum products	4.8	5.8	6.6	8.2	7.9	6.0
Other	17.3	12.0	14.1	15.2	16.4	15.4
Intermediate and raw materials	20.1	20.2	22.2	22.7	22.2	21.7
Crude oil and reconstituted fuel 2/	5.0	4.8	5.1	5.2	4.4	2.6
Other	15.1	15.3	17.1	17.5	17.8	19.1
Capital goods	12.3	12.5	11.6	9.7	10.5	14.2
Imports of free trade zones	39.9	39.0	38.8	37.5	36.6	35.5
	(Annual percenta	nge change)				
Total imports	9.1	5.4	5.4	10.8	15.4	15.0
Consumption goods	•••	7.8	1.9	21.7	17.7	7.0
Consumer durables		7.0	-33.0	9.7	11.7	27.2
Refined petroleum products	-8.2	28.3	19.7	38.1	10.7	-12.8
Other	***	-27.1	24.1	19.7	24.0	8.6
Intermediate and raw materials	***	5.9	16.1	13.3	13.0	12.0
Crude oil and reconstituted fuel	-6.8	2.6	11.5	12.5	-1.2	-34.0
Other	***	7.0	17.6	13.5	17.2	23.5
Capital goods	•••	7.0	-2.2	-7.1	24.7	55.4
Imports of free trade zones	31.2	2.8	5.0	7.0	12.6	11.8
Memorandum items:						
Petroleum and derivatives				a		,,,,,
Value (millions of U.S. dollars)	453.0	521.7	604.9	767.6	814.2	647.9
(annual percentage change)	-7.5	15.2	15.9	26.9	6.1	-20.4
Volume (millions of barrels)	26.4	32.1	33.8	35.4	40.4	44.2
(annual percentage change)	3.0	21.8	5.2	4.8	14.1	9.4
Price (US\$/barrel)	17.2	16.2	17.9	21.7	20.2	14.7
(annual percentage change)	-10.1	-5.4	10.2	21.1	-7.1	-27.3

^{1/} Distribution of non-petroleum imports for 1993 are Fund staff estimates.

^{2/} Figure for 1993 includes refined petroleum products.

Table 42. Dominican Republic: Imports of Petroleum and Derivatives

(Value in millions of U.S. dollars; volume in millions of barrels; and unit value in U.S. dollars per barrel)

						Prel.
	1993	1994	1995	1996	1997	1998
Total						
Value	453.0	521.7	604.9	767.6	814.2	647.9
Volume	26.4	32.1	33.8	35.4	40.4	44.2
Unit value	17.2	16.2	17.9	21.7	20.2	14.7
Reconstituted crude petroleum						
Value	231.2	237.2	264.4	297.5	293.9	184.3
Volume	15.3	16.1	16.2	15.0	16.3	16.0
Unit value	15.1	14.7	16.3	19.8	18.0	11.6
Bunker fuel oil						
Value	12.5	46.7	55.5	61.1	72.0	52.3
Volume	1.2	3.6	3.6	3.5	4.3	4.5
Unit value	10.8	13.2	15.4	17.6	16.4	11.6
Other derivatives 1/						
Value	209.3	237.8	285.0	409.0	448.3	411.3
Volume	9.9	12.4	14.0	16.9	19.8	23.7
Unit value	21.1	19.2	20.4	24.2	22.6	17.4
Memorandum item:						
Coal (value)	10.3	4.1	5.2	7.8	8.3	3.5

^{1/} Includes diesel oil, gasoline, propane, asphalt, and lubricants.

Table 43. Dominican Republic: External Public Sector Debt and Official Reserve Liabilities

1993	1994	1995	1996	1997	Prel. 1998
I. End of Period	l Debt Stocks				
(In millions of V	U.S. dollars)				
4,562	3,946	3,999	3,807	3,509	3,541
208	291	285	230	160	159
	190	160	96		56
22	101	125	135		103
4,354	3,656	3,714			3,382
3,137	2,850				2,61
					73: 70:
					2
		25 40	43 40	39	3
	-		e.		
` •	ŕ	32.9	28.3	23.3	22.
			1.7	1.1	1.
44.7	33.9	30.5	26.6	22.2	21.
(In millions of	U.S. dollars)				
II. Annuai I	Debt Flows				
125	-698	58	-137	-227	3
163	-288	4	-114	-224	9
112	-262	5	-114		
102	101	139			11
-211	-247				-1′
221					9
51	-26	0	0	U	
-26	-415	53	-23	-2 -30	-4 -7
					-
				28	-
			153	202	2
				-175	-2
ŏ	-2	ő	0	. 0	
-12	4	1	0	-1	
3	4				
-1	-1				
-14	1	0	0	. 0	
III. Schedule	d Debt Service				
944	592	484	471	462 263	4
					1
				177	
of goods and nonfa	actor serivces, p	olus net private	transfers) 3/		
24.8	13.7	10.3 5.4	9.0 4.8	7.7 4.4	
7.1	8.6 5.1	3. 4 4.9	4.2	3.3	
	of U.S. dollars)				
			40.40	1.5.050	1.6
9,750	10,785	12,158			15,
10	8	34			
10	12	12	8	3	
2.000	4016	4.600	\$ 229	6 020	6,
3,800	4,316	4,692	3,228	0,020	0,
	I. End of Period (In millions of) 4,562 208 186 22 4,354 3,137 1,182 1,178 4 35 (In percent 46.8 2.1 44.7 (In millions of) 11. Annual) 125 163 112 102 -211 221 51 -26 -26 -26 -452 399 0 0 0 -12 3 -1 -14 III. Schedule 944 674 270 of goods and nonfa 24.8 17.7 7.1 (In millions of) 9,750	I. End of Period Debt Stocks (In millions of U.S. dollars) 4,562 3,946 208 291 186 190 22 101 4,354 3,656 3,137 2,850 1,182 767 1,178 760 4 7 35 39 (In percent of GDP) 46.8 36.6 2.1 2.7 44.7 33.9 (In millions of U.S. dollars) II. Annual Debt Flows 125 -698 163 -288 112 -262 102 101 -211 -247 221 -115 51 -26 -26 -415 -26 -417 26 27 -452 -113 399 -331 0 3 0 11 0 -6 0 -2 -12 4 3 4 -1 -1 -14 1 III. Scheduled Debt Service 944 592 674 370 270 222 of goods and nonfactor serivces, part of the service of the servi	I. End of Period Debt Stocks (In millions of U.S. dollars) 4,562 3,946 3,999 208 291 285 186 190 160 22 101 125 4,354 3,656 3,714 3,137 2,850 2,854 1,182 767 820 1,178 760 795 4 7 25 35 39 40 (In percent of GDP) 46.8 36.6 32.9 2.1 2.7 2.3 44.7 33.9 30.5 (In millions of U.S. dollars) II. Annual Debt Flows 125 -698 58 163 -288 4 112 -262 5 102 101 139 -211 -247 -172 221 -115 38 51 -26 0 -26 415 53 -26 417 35 26 27 70 -452 -113 48 399 -331 12 0 3 18 0 11 102 0 -6 -84 0 -2 0 -12 4 1 3 4 3 -1 -1 -2 -14 1 0 III. Scheduled Debt Service 944 592 484 674 370 253 270 222 231 of goods and nonfactor serivces, plus net private 24.8 13.7 10.3 17.7 8.6 5.4 7.1 5.1 4.9 (In millions of U.S. dollars)	I. End of Period Debt Stocks (In millions of U.S. dollars) 4,562 3,946 3,999 3,807 208 291 285 230 186 190 160 96 22 101 125 135 4,354 3,656 3,714 3,576 3,137 2,850 2,854 2,740 1,182 767 820 797 1,178 760 795 754 4 7 25 43 35 39 40 40 (In percent of GDP) 46.8 36.6 32.9 28.3 2.1 2.7 2.3 1.7 44.7 33.9 30.5 26.6 (In millions of U.S. dollars) II. Annual Debt Flows 125 -698 58 -137 163 -288 4 -114 112 -262 5 -114 102 101 139 92 -211 -247 -172 -171 221 -115 38 -36 51 -26 0 0 -26 -415 53 -23 -26 417 35 -41 26 27 70 27 -452 -113 -48 -21 399 -331 12 -46 0 13 -848 -21 399 -331 12 -46 0 0 3 18 18 0 11 102 153 0 -6 -84 -135 0 -2 -1 -1 -2 -2 -2 -14 1 0 0 III. Scheduled Debt Service 944 592 484 471 674 370 253 251 270 222 231 220 of goods and nonfactor serivces, plus net private transfers) 3/ 24.8 13.7 10.3 9.0 17.7 8.6 5.4 4.8 7.1 5.1 4.9 4.2 (In millions of U.S. dollars)	I. End of Period Debt Stocks (In millions of U.S. dollars) 4.562 3.946 3.999 3.807 3.509 208 291 285 230 160 186 190 160 96 29 21 101 125 135 132 4.354 3.636 3.714 3.576 3.349 3.137 2.850 2.854 2.740 2.515 1.182 767 820 797 795 1.178 760 795 754 724 4 7 25 43 71 35 39 40 40 39 (In percent of GDP) 46.8 36.6 32.9 28.3 23.3 2.1 2.7 2.3 1.7 1.1 44.7 33.9 30.5 26.6 22.2 (In millions of U.S. dollars) II. Annual Debt Flows 125 -698 58 -137 -227 163 -288 4 -114 -224 112 -262 5 -114 -224 112 -262 5 -114 -224 112 -262 5 -114 -224 112 -262 5 -114 -224 112 -262 5 -114 -224 112 -262 5 -114 -224 112 -262 5 -114 -224 112 -262 5 -114 -224 102 101 139 92 109 -211 -247 -172 -171 -181 221 -115 38 -36 -152 51 -26 0 0 0 0 -20 0 0 0 -26 -417 35 -41 -30 26 27 70 27 2 -452 -113 -48 -21 -21 399 -331 12 -46 -11 0 3 18 8 34 -11 0 11 Scheduled Debt Service 944 592 484 471 462 674 370 253 251 263 270 222 231 220 of goods and nonfactor serivces, plus net private transfers) 3/ 24.8 13.7 10.3 9.0 7.7 1.7 8.6 5.4 4.8 4.4 7.1 5.1 4.9 4.2 3.3 (In millions of U.S. dollars)

 ^{1/} Includes reclassifications, valuation effects, changes in stocks of arrears, and reschedulings.
 2/ Includes interest on reserve liabilities and Fund repurchases, but not amortization of other reserve liabilities.
 3/ Includes net exports of the free-trade zones.

Table 44. Dominican Republic: Outstanding External Public Sector Debt by Creditor

	1000	1004	1005	1006	1997	Prel. 1998
	1993	1994	1995	1996	1997	1996
	(in millions	of U.S. dolla	is)			
Total	4,562	3,946	3,999	3,807	3,509	3,541
Multilateral	1,172	1,228	1,293	1,194	1,071	1,136 819
DB .	673	708 279	798 282	802 244	784 208	204
World Bank	259 19	18	17	17	16	15
IDA Dago	186	190	160	96	29	56
IMF OPEC	21	20	20	19	17	16
Other Other	14	14	15	17	18	26
Bilateral	2,012	1,927	1,874	1,793	1,696	1,709
Paris Club creditors	1,732	1,705	1,670	1,607	1,520	1,597
France	33	43	54	49	43	77
Germany	75	78	82	74	62	78 54
Italy	61	60	59 225	58 197	55 161	179
Japan	245 301	253 286	235 279	282	290	321
Spain United States	1,015	280 980	956	944	907	885
Office States Other Paris Club	1,013	4	4	3	2	2
Other bilateral	280	222	204	186	176	113
Argentina	24	0	0	0	0	0
Brazil	0	0	0	0	0	0
Colombia	17	13	10	7	5	2
Mexico	26	0	0	0	0	0
Peru	6	6	6	6	6	6
Taiwan Province of China	8	8	9	0	0	120
Venezuela Other	198 1	194 1	179 0	173 0	165 0	138 -34
Commercial banks	1,261	613	662	651	686	606
Suppliers and others	116	178	170	169	57	90
	(In per	cent of GDP)				
Total	46.8	36.6	32.9	28.3	23.3	22.3
Multilateral	12.0	11.4	10.6	8.9	7.1	7.1
Bilateral	20.6	17.9	15.4	13.3	11.3	10.8
Paris Club	17.8	15.8	13.7	11.9	10.1	10.0
Other bilateral	2.9	2.1	1.7	1.4	1.2	0.7
Commercial banks	12.9	5.7	5.4	4.8	4.6	3.8
Suppliers and others	1.2	1.6	1.4	1.3	0.4	0.6
•	(In perce	nt of total del	ot)			
Total	100.0	100.0 31.1	100.0 32.3	100.0 31.4	100.0 30.5	100.0 32.1
Multilateral Bilateral	25.7 44.1	31.1 48.8	32.3 46.9	47.1	48.3	48.3
Paris Club	38.0	43.2	41.8	42.2	43.3	45.1
Other bilateral	6.1	5.6	5.1	4.9	5.0	3.2
Commercial banks	27.6	15.5	16.5	17.1	19.5	17.1
Suppliers and others	2.5	4.5	4.3	4.4	1.6	2.5
tI)	n millions of U.S. doll	ars, unless of	herwise indic	ated)		
Memorandum items:	2 104	2 155	2 167	2,987	2,767	2,846
Total debt to official creditors	3,184	3,155	3,167 79.2	2,987 78.5	78.8	80.4
(In percent of total debt) Total debt to private creditors	69.8 1,377	80.0 791	832	78.3 820	742	695
GDP	9,750	10,785	12,158	13,463	15,058	15,900

Table 45. Dominican Republic: Past-Due Payments on External Public Sector Debt Service 1/

(In millions of U.S. dollars)

	1993	1994	1995	1996	1997	Prel. 1998
Total past-due payments	1,259	226	247	262	64	28
Central bank reserve liabilities	26	. 1	0	0	0	0
Medium- and long-term liabilities	1,233	225	247	261	63	28
Multilateral creditors	20	20	10	10	10	10
OPEC 2/	20	20	10	10	10	10
Bilateral creditors	120	113	138	150	39	3
Paris Club creditors	75	85	118	149	25	2
On previously rescheduled debt	41	55	90	121	18	0
On debt not previously rescheduled	34	30	28	29	6	2
Other bilateral	46	29	21	0	15	. 1
Commercial banks	1,024	3	0	0	1	1
Suppliers and others	69	89	99	102	13	13

^{1/} Includes past-due payments that are still within the grace period and debt service in dispute
Figures for 1998 do not include arrears tolerated by Paris Club members as part of the relief effort
for Hurricane Georges. As of December 1997, all outstanding arrears had been regularized or cleared.

^{2/} Refininancing of outstanding arrears granted by OPEC in 1996, was not approved by the Dominican congress until 1999.

Table 46. Dominican Republic: Net International Reserves

(In millions of U.S. dollars, end of year)

	*******					Prel.
	1993	1994	1995	1996	1997	1998
Total	555.4	46.5	229.6	222.2	303.6	257.4
Central bank	437.9	-31.8	105.2	144.6	254.4	354.0
Assets	645.7	259.1	390.1	374.9	414.4	512.6
Gold	7.0	6.9	7.1	6.8	5.6	5.3
Sight deposits and currency	323.2	114.2	197.5	175.8	202.4	259.6
Time deposits	298.8	134.3	185.0	191.9	206.1	. 247.5
SDR holdings	16.7	3.7	0.5	0.4	0.3	0.2
Liabilities	-207.8	-290.9	-284.9	-230.3	-160.0	-158.6
Arrears	-0.3	-0.2	-0.2	-0.2	-0.2	0.0
Multilateral credit agreements	-0.6	-0.6	-0.6	-0.6	-0.6	0.0
Santo Domingo agreement	-5.4	-0.5	0.0	0.0	0.0	0.0
Use of IMF credit	-186.1	-189.6	-159.7	-95.6	-28.5	-55.9
Central banks	-13.0	0.0	0.0	0.0	0.0	0.0
Foreign commercial banks	0.0	0.0	-31.8	-20.0	-20.0	-20 .0
Central Bank of Venezuela	0.0	-16.0	0.0	0.0	0.0	0.0
Other 1/	-2.4	-84.0	-92.6	-113.9	-110.7	-82.7
Commercial banks 2/	117.5	78.3	124.4	77.6	49.2	-96.6
Assets	158.8	140.8	178.9	176.1	242.5	314.1
Liabilities	-41.3	-62.5	-54.5	-98.5	-193.3	-410.7

^{1/} Includes obligations to BLADEX and special deposits for the acquisition of foreign exchange.

^{2/} Includes the Reserves Bank.

Table 47. Dominican Republic: Exchange Rates

(In Dominican pesos per U.S. dollar)

	Official	Commercial Banks		Exchange Houses		Surcharge 2/	
	Rate 1/	Buy	Sell	Buy	Sell	(In percent)	
1994 January February March April May June July August September October October December	12.50 12.50 12.50 12.50 12.50 12.50 12.50 12.50 12.79 12.87 12.87	12.53 12.50 12.53 12.59 12.65 12.70 12.78 12.98 13.36 13.42 13.08	12.62 12.61 12.63 12.09 12.72 12.76 12.81 12.93 13.11 13.51 13.55 13.55	12.69 12.81 12.89 12.92 12.94 12.88 12.92 12.98 13.13 13.34 13.35 12.93	12.84 12.95 13.03 13.06 13.15 13.03 13.07 13.14 13.32 13.65 13.58 13.16	2.00 2.00 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1	
January February March April May June July August September October November December	12.87 12.87 12.87 12.87 12.87 12.87 12.87 12.87 12.87 12.87 12.87	13.09 13.34 13.48 13.54 13.61 13.66 13.69 13.61 13.59 13.58 13.20	13.17 13.46 13.55 13.59 13.65 13.71 13.77 13.79 13.75 13.67 13.67	13.07 13.26 13.39 13.42 13.53 13.59 13.65 13.65 13.56 13.55 13.53	13.26 13.43 13.56 13.58 13.70 13.74 13.79 13.78 13.67 13.65 13.35	1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	
1996 January February March April May June July August September October November December	12.87 12.87 12.87 12.87 12.87 12.87 12.87 12.87 12.87 12.87 12.87 12.87	13.37 13.63 13.58 13.64 13.78 13.83 13.77 13.73 13.71 13.69 13.50 13.47	13.44 13.73 13.70 13.73 13.88 13.92 13.90 13.86 13.82 13.80 13.68 13.51	13.42 13.59 13.53 13.64 13.75 13.84 13.72 13.71 13.66 13.67 13.47	13.59 13.73 13.67 13.78 13.91 13.87 13.84 13.78 13.78 13.62 13.75	1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	
1997 January February March April May June July August September October November December	13.91 13.96 14.02 14.02 14.02 14.02 14.02 14.02 14.02 14.02 14.02 14.02	13.99 14.08 14.17 14.24 14.21 14.20 14.14 14.05 14.14 14.26 14.27 14.27	14.12 14.27 14.32 14.32 14.30 14.28 14.23 14.13 14.21 14.34 14.36 14.35	14.00 14.11 14.18 14.19 14.15 14.15 14.06 14.03 14.11 14.21 14.23 14.21	14.21 14.28 14.32 14.31 14.26 14.26 14.17 14.13 14.22 14.35 14.37 14.33	1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	
1998 January February March April May June July August September October November December	14.02 14.02 14.02 14.02 14.02 14.02 15.22 15.33 15.36 15.44 15.49 15.48	14.32 14.41 14.61 14.87 15.09 15.16 15.35 15.34 15.42 15.68 15.78 15.78	14.41 14.49 14.69 14.97 15.123 15.42 15.41 15.48 15.48 15.86 15.86	14.30 14.40 14.55 14.87 15.02 15.12 15.31 15.30 15.41 15.62 15.76 15.70	14.46 14.58 14.73 15.06 15.21 15.26 15.46 15.45 15.55 15.77 15.89 15.85	1.50 1.50 1.50 1.50 1.50 1.75 1.75 1.75 1.75 1.75	
1999 January February March April May June	15.50 15.73 15.88 15.88 15.88 15.88	15.76 16.07 16.09 16.09 15.98 15.87	15.84 16.16 16.18 16.17 16.06 15.95	15.80 16.03 15.98 15.97 15.88 15.80	15.95 16.20 16.13 16.11 16.01 15.92	1.75 1.75 1.75 1.75 1.75 1.75	

^{1/} The central bank buys U.S. dollars at the official exchange rate. It sells U.S. dollars at the official exchange rate plus the surcharge.

2/ The surcharge applies to the sell rate.

Table 48. Dominican Republic: Effective Exchange Rates and Related Series

	Real Effective Exchange Rate 1/2/	Nominal Effective Exchange Rate	Relative Consumer Prices	Exchange Rate U.S. Cents per Dominican Pesos	Consumer Price Index (Seasonally) Adjusted)	Consumer Price Index (Not Seasonally Adjusted)
1004		(Indices: 1990 = 1	00)		
1994 January February March April May June July August September October December	107.0 108.1 109.4 111.2 112.0 112.1 110.6 111.0 108.6 108.4 109.0 112.6	89.0 89.4 89.9 90.9 91.3 91.9 91.2 91.2 88.6 87.6 87.9 88.8	116.5 117.3 117.9 118.6 118.9 118.3 117.6 118.0 118.8 119.9 120.2 123.0	69.3 69.5 69.5 69.5 69.5 69.5 67.5 67.5 67.5	163.1 165.9 168.7 171.5 173.7 175.0 175.5 176.9 178.4 180.3 181.4 185.9	165.0 166.8 168.6 170.5 172.3 173.8 174.1 176.1 178.5 180.6 182.2 187.3
1995 January February March April May June July August September October November	113.0 112.2 111.9 110.4 110.3 110.8 113.1 115.3 115.6 116.6 117.5	88.1 87.0 85.9 84.7 84.5 84.4 85.5 86.4 86.2 86.5 87.4	124.2 124.9 126.2 125.8 126.3 126.5 127.2 128.1 129.3 130.0 130.6 130.3	66.9 66.3 66.0 65.8 65.7 65.6 65.7 65.6	188.5 190.2 192.7 193.0 194.2 195.2 196.6 198.5 200.8 202.2 203.5 203.5	190.2 191.0 192.5 192.3 193.1 194.3 195.6 197.8 200.9 202.3 204.2 204.6
1996 January February March April May June July August September October November December	117.5 116.8 117.2 117.5 117.5 117.7 117.6 117.2 117.8 118.2 118.2 120.5	88.0 87.2 87.4 87.6 87.4 87.5 87.4 87.7 88.0 88.0 89.0	129.5 129.8 129.9 130.0 130.3 130.5 130.4 130.3 130.2 130.2 130.2	66.4 65.8 65.9 65.5 65.4 65.5 65.5 65.7 65.9 66.2	203.1 204.0 204.9 205.7 206.7 207.3 207.7 208.0 208.4 208.8 209.5 211.6	204.5 204.7 205.0 205.3 205.7 206.4 207.3 208.4 208.9 210.3 212.7
1997 January February March April May June July August September October November December	116.8 117.5 118.3 119.7 119.3 119.4 122.2 124.3 123.8 123.8 123.5 123.5	84.2 84.8 84.9 85.2 84.7 84.7 85.3 86.4 86.0 85.9 87.4	134.5 134.4 135.1 136.2 136.5 136.7 138.8 139.5 139.6 139.7 139.4 139.2	62.1 61.7 61.4 61.5 61.5 61.6 61.7 61.6 61.4 61.4	217.3 217.5 218.8 221.2 222.1 223.0 226.8 228.3 229.0 229.6 229.2 229.3	218.7 218.4 218.7 220.6 221.0 222.0 226.2 227.6 229.7 230.1 230.5
J998 January February March April May June July August September October November December	126.5 125.8 125.3 124.4 124.2 125.3 118.8 119.2 117.3 116.3 117.8 119.1	88.2 87.7 87.2 86.5 86.6 81.8 81.9 80.5 78.2 78.2	139.1 139.3 139.3 139.8 140.3 140.7 141.0 141.0 146.0 147.7	61.3 61.2 60.8 60.4 60.0 56.7 56.7 56.3 55.7 55.5	229.4 229.7 230.3 230.6 232.1 233.2 234.1 234.9 235.6 240.7 244.4 247.4	230.7 230.6 230.2 229.9 230.9 232.1 233.6 234.1 235.7 240.8 245.2 248.5
1999 January February 3/ March 3/ April 3/	118.5 118.1 119.0 119.4	78.3 78.1 78.2 78.2	146.7 146.6 147.5 148.0	55.6 54.7 54.2 54.3	246.0 246.2 248.1 250.1	247.2 246.5 247.8 248.5

Source: International Monetary Fund, Information Notice System.

^{1/} Increase denotes appreciation.
2/ Using seasonally adjusted price indices.
3/ Preliminary data.