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Rwanda: Recent Economic Developments

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RWANDA

Recent Economic Developments

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Approved by African Department

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Rwanda: Basic Data

I. Social and Demographic Indicators
(1995, unless otherwise indicated)

Area	26,338 square kilometers
Population (1998)	
Total	7.9 million
Growth rate	3.6 percent
GDP per capita (1998)	US\$250
Total fertility rate (births per woman)	8
Infant mortality rate (per 1,000 births)	125
Life expectancy at birth (years)	42
Men	41
Women	43
Adult literacy rate (percent)	60
Net school enrollment ratio (in percent of relevant age group)	
Primary	70
Secondary	8
Population per doctor (1991)	38,902
Population per nurse (1991)	7,023
Access to safe water (percent; 1985)	
Urban	55
Rural	68

II. Economic Indicators, 1994-98

	1994	1995	1996	1997	1998 Est.
(In billions of Rwanda francs)					
Gross domestic product					
GDP at constant 1995 prices 1/	250.8	337.2	390.6	440.7	482.6
Primary sector	115.3	149.0	178.9	185.2	205.2
Secondary sector	36.5	55.7	68.6	84.2	93.8
Tertiary sector	99.0	132.5	143.1	171.3	183.6
GDP at current market prices	165.8	337.2	431.4	562.4	632.1
Private consumption	223.8	318.4	398.2	518.6	571.9
Public consumption	19.6	38.3	51.9	59.8	71.7
Gross investment	19.4	50.6	66.9	83.8	99.2
Exports 2/	10.4	17.5	25.6	43.5	34.3
Imports 2/	107.4	87.6	111.1	143.3	145.0
(Annual percent change)					
Price indices					
GDP deflator	17.2	51.3	10.4	15.5	2.6
Consumer price index (period average)	64.0	22.0	8.9	11.7	6.8
Export price index (in U.S. dollars)	19.6	29.2	-11.8	32.2	-23.6
Import price index (in U.S. dollars)	7.0	5.3	3.4	-9.0	-9.9

Rwanda: Basic Data (concluded)

	1994	1995	1996	1997	1998 Est.
(In billions of Rwanda francs)					
Government finance					
Total revenue and grants	7.5	61.5	70.8	95.9	99.0
Revenue	6.0	23.1	39.4	58.1	66.0
Grants	1.5	38.4	31.4	37.8	33.0
Total expenditure and net lending 3/	26.6	69.5	95.3	109.6	117.4
Current	22.2	42.1	55.9	64.0	75.3
Capital	4.4	27.4	39.4	46.1	42.3
Domestically financed	0.3	0.0	0.0	0.1	2.5
Externally financed	4.1	27.4	39.4	46.0	39.8
Net lending	0.0	0.0	0.0	-0.5	-0.2
Overall deficit, including grants 3/	-19.1	-8.0	-24.5	-13.8	-18.4
Domestic financing (including arrears)	13.0	-5.8	7.0	-3.6	-4.8
Of which:					
Banking system	5.4	-12.8	-1.8	0.7	0.5
External financing (net, including arrears)	6.1	13.8	17.5	17.4	23.2
Money and credit (end of period)					
Foreign assets (net)	1.7	27.7	37.6	46.1	48.2
Domestic credit	38.3	43.9	42.3	71.4	81.5
Claims on government (net)	26.8	14.2	12.4	25.3	25.4
Claims on the economy (including public enterprises)	11.5	29.8	29.9	46.0	56.1
Other items (including medium- and long-term loans)	-3.3	-7.7	-10.8	-15.6	-31.8
Balance of payments					
Exports, f.o.b.	32.2	50.4	62.0	93.0	62.4
Of which:					
Coffee	17.4	38.8	43.2	45.3	26.7
Imports, f.o.b.	367.4	194.1	213.3	277.4	255.7
Trade balance	-335.2	-143.7	-151.3	-184.5	-193.3
Services (net)	-108.7	-118.2	-142.0	-162.1	-166.1
Private transfers (net)	44.5	15.8	26.5	25.0	18.3
Official transfers (net)	354.1	300.7	263.6	262.6	243.8
Current account balance (including official transfers)	-399.4	-246.2	-266.8	-321.5	-341.1
Gross official reserves (end of period)	51.2	99.7	106.6	153.4	164.2
Exchange rate Rwanda franc per U.S. dollar (period average)	220.0	262.2	306.5	302.4	314.2
Nominal trade-weighted effective exchange rate (1990 = 100)	87.6	39.6	41.1	46.1	40.6
Real trade-weighted effective exchange rate (1990 = 100)	130.6	78.7	85.5	108.6	88.8

Source: Rwandese authorities; and Fund staff estimates.

1/ Including net indirect taxes (not included in the three sectors shown below).

2/ Goods and nonfactor services.

3/ Payment order basis.

I. RECONSTRUCTION AND ECONOMIC RECOVERY, 1995-98¹

A. State of the Economy After the 1994 War and Genocide

1. In 1994, after years of ethnic conflict and armed confrontation, Rwanda engaged in a civil war, which included a genocide in which one-half million to one million people, out of a total population of 7.9 million, lost their lives. About 2½ million people, including most of the skilled population, fled the country. Those who fled went mostly to the former Zaire,² but some also went to Tanzania and Burundi. By the end of 1994 about half a million of those who had left the country earlier in the year had returned. Another 0.6 to 0.8 million "old" refugees, who had fled the country during earlier conflicts between the late 1950s and the 1980s and had lived in exile in neighboring countries, also returned. Many people had not left the country but were displaced within it; at the end of the year, there were about 1.5 million citizens living in camps in the southwest of the country.

2. Any assessment of the impact of the war on Rwanda's productive capacity is hindered by weaknesses in the available data. Many statistical indicators of GDP, which had been deficient before the war, became nonexistent after the conflict, and much of the preconflict information that had been collected was lost. Some data could not be collected during the war, and methodological differences exist between data collected before and after the war. The urgent need for statistical information after the war meant that some data was assembled hastily.

3. In 1994, GDP is estimated to have fallen to about half of its level of the previous year. The losses were generally greatest in the more technologically advanced sectors. Output in the food crops sector is estimated to have declined by only about one-third, while output in the transport and communications sector is estimated to have declined by over three-fourths. Livestock herds, which had contributed about 5 percent of GDP before the conflict (but were disproportionately important to poorer families), were almost completely wiped out. They were replaced with herds brought in by "old" refugees, but these herds were considered to be of inferior quality. Public assets had also greatly deteriorated, as buildings had been damaged and equipment and vehicles had been stolen. Most public enterprises remained closed. The administrative system had collapsed and many institutions (including the National Bank of Rwanda (NBR)) had closed. Public services that were not altogether eliminated were cut back to minimal levels.

¹ Prepared by Joseph Crowley.

² Now the Democratic Republic of the Congo.

Rwanda: Output, Prices, and Aid, 1993–98						
	1993	1994	1995	1996	1997	1998
Real GDP (1993 = 100)	100.0	49.8	66.9	77.5	87.4	95.7
CPI (period average, 1993 = 100)	100.0	164.0	200.1	217.9	243.4	260.0
Aid in percent of 1993 GDP	12.6	18.3	18.1	16.2	16.6	16.2
Sources: Rwandese authorities; and IMF staff estimates and projections.						

4. Export-related sectors were disproportionately affected by the crisis, as export volume dropped by 60 percent. The coffee sector was particularly adversely affected since many coffee farmers fled the country;³ the coffee plants, which require careful attention, were neglected during and after the conflict, and many coffee plants were uprooted by new land tenants to make room for other food crops that they were more familiar with producing. Import volumes, however, rose by nearly 30 percent in 1994 as a result of the international humanitarian aid efforts to alleviate suffering after the conflict. In the second half of the year, most of this aid was financed by nonbudgetary humanitarian grants (about RF 350 billion for the year). The combination of the shortage of output and the inflows of humanitarian aid that enabled demand to remain buoyant led to a surge in consumer price inflation to 64 percent on a year-end basis, in spite of a modest contraction in broad money of about 7 percent. Public investment dropped dramatically in 1994 to below 3 percent of the reduced level of GDP.

B. Early Reconstruction Efforts

5. As soon as the conflict ended, both a new government and a new National Assembly, comprising representatives of all of the remaining political parties,⁴ were formed, based on the power-sharing priorities agreed under the 1993 Arusha peace agreement. While the attempt to restore as much of the preconflict production as possible was one priority, the government was also preoccupied with social issues—particularly reconciliation and the repatriation of refugees—that needed to be addressed in order to minimize the likelihood of further conflict. Many policies that could enhance output would also have social implications that needed to be considered, and vice versa. The national reconciliation strategy adopted after the war had four main objectives: (a) the provision of assistance to people hurt by the war; (b) the restoration of internal security; (c) the strengthening of the justice system; and (d) the repatriation and resettlement of refugees and displaced persons.

³ In 1995, only 38 percent of rural households produced coffee, compared with 54 percent before the war.

⁴ The MRDN, the party of the former government, went into exile.

6. The reestablishment of public services was regarded as an urgent priority, and already by the end of 1994 many ministries, the NBR, and two commercial banks reopened (although the staffs were greatly reduced), as well as over 1,500 primary schools. The manufacturing and construction sectors were producing at only half of their preconflict levels of output, while transport and communications output reached two-thirds of its preconflict level. Most businesses lost the larger part of their equipment, supplies, and records. Buildings were damaged, and many personnel, particularly skilled staff, had lost their lives or fled.

7. Programs to assist people hurt by the war were implemented and were aimed at the most vulnerable groups, particularly women who were heads of households and children. By end-1996, 12,000 of 20,000 unaccompanied children had been reunited with their families, 10,000 orphans had been provided with education, and 300,000 widows had been provided with shelter. Laws, including those pertaining to property rights, were modified, with a view to protecting the welfare of women and children. Special school curricula were developed, and counseling and other services were instituted.

8. The restoration of internal security was addressed by transferring authority from the military to civilian institutions. Increased levels of personnel were trained to work as police, and additional housing was built for them. The judicial system was severely strained by the flood of suspected war criminals. By end-July 1995, although even the greatly expanded prisons system still had only a total capacity of 30,000, some 80,000 people suspected of war crimes had been detained. For reasons of national unity as well as for practical reasons, urgent priority was given to the quick resolution of trials for war crimes. To speed up court proceedings, the National Assembly passed a special law in 1995 on "alternative justice," which facilitated plea-bargaining. To increase the capacity of the court system, training was provided for new court clerks, prosecution officers and secretaries, policy inspectors, and magistrates.

9. Refugees continued to return to the country after 1994. In 1995, 0.4 million new refugees returned. By mid-1996, about 0.8 million of the 1 million "old" refugees had returned, while only 1 million of the approximately 2 million new refugees had done so. To facilitate the return of refugees, transit centers were set up around the country. New arrivals stayed in these centers for short periods, after which the Organization for International Migration became responsible for ensuring that new refugees were resettled in their original homes. "Old" refugees, who were not allowed to reclaim their property which they had left many years before, were resettled in urban concentration points around Rwanda.⁵ Most "old" refugee families were settled in new, rural communes on mostly rural government land, which were designed to hold 25,000 families each and to offer access to small farming plots. The

⁵ This was a political compromise and part of the Aruba peace agreement of 1993. To address a frequently arising legal issue, a law was passed that "old" refugees who had returned to occupy houses left behind by new refugees would have no claim on properties abandoned fewer than 12 years earlier.

government provided support to ensure the resumption of traditional means of livelihood (seeds, fertilizers, and tools) and, where necessary, the construction of simple shelters. Several international agencies (in particular, the United Nations High Commission for Refugees) and nongovernmental organizations (NGOs) supplied assistance in rehabilitating and building houses and providing construction materials.

10. As part of the reconciliation effort, the government—in recognition of the fact that economic inequality was one of the main factors contributing to the social conflict—focused on policies that would create a more equitable distribution of income and employment opportunities. Returning refugees were awarded government-owned plots of land, contributing to the smaller contraction of the food crops sector and to its subsequent strong rebound.

11. In 1995, real GDP partly recovered, growing by about 35 percent, while inflation was brought down to 38 percent on a year-end basis and 22 percent on an annual average basis. While some sectors, including certain food crops (aided by good weather) and public administration (enhanced by continuing programs to address the hardship and dislocation caused by the war), attained their preconflict levels in this year, most others fell far short. Food crop production recovered significantly, but, as during the prewar period, there was a problem of excess resources in the sector. Years of government programs to discourage urbanization by subsidizing agriculture had resulted in an excessively large agricultural population, which worked on small, fragmented, and overfarmed land plots.

C. Economic Liberalization Strategy

12. The government recognized that economic development in most areas would have to be the responsibility of the private sector (particularly since military and civil service employment would be reduced), but that the public sector could still have a role in promoting economic equality by providing a social safety net, most importantly with a solvent social security system. While economic reforms would be essential to provide an environment conducive to the development of the private sector, it was also necessary to ensure that reforms were pursued carefully, so that they did not exacerbate social tensions by favoring or harming particular social groups disproportionately.

13. Before the conflict, the private sector accounted for only about 50 percent of employment in the formal sector, excluding the civil service. However, Rwanda also had an active informal sector, which included about 700 known microenterprises. By 1996, only about 60 percent of industrial enterprises had resumed operations. The Association of Industrialists of Rwanda, a private association that represented businesses in the manufacturing sector, had 51 members before the conflict, but only 35 in mid-1996. Moreover, many private establishments that had resumed business were being run by “old” refugees.

14. To help promote private sector development, the authorities undertook several steps to liberalize the economy during 1995–96. They introduced a market-determined exchange rate, removed controls on prices, liberalized domestic marketing, decontrolled interest rates,

and reduced tariffs on imports (the maximum rate was reduced from 100 percent in 1993 to 60 percent in 1995 and 40 percent in 1998; quantitative restrictions had been eliminated in 1992). The authorities liberalized the coffee sector by authorizing competition in all stages of the production process, from collection to exporting, and reduced the foreign exchange surrender requirements for coffee and tea in 1996 and eliminated them by end-1997. The increased external competition was genuine, as it led to reductions in, or even cessation of, production in several industries, including corrugated iron sheets, soap, and cosmetics.

D. Recent Real Sector Developments (1996-98)

15. The rebound in GDP abated in 1996, although overall growth was still strong at 10.4 percent. Growth in agriculture was high, at about 10 percent, and livestock production increased by over 27 percent. Growth in the secondary sector was at 12 percent, fueled by an increase in manufacturing production of almost 25 percent. The tertiary sector experienced more moderate growth of 5 percent, with services growing by only 3 percent.

16. Real growth continued to be strong in 1997 as improvements in infrastructure and private investment led to large increases in the more advanced sectors, like manufacturing (20 percent), construction (29 percent), public administration (which benefited from a strong increase in public investment of 17 percent), and services (18 percent). Meanwhile, adverse weather conditions and the worsening security situation in the northwest caused weak growth in the primary sector, with food crops, the largest component of the sector, increasing by only 4 percent. The weak performance of the agricultural sector coincided with a massive return of refugees from Tanzania and Zaire at end-1996, resulting in a large increase in demand for food. Food price inflation, on a year-end basis, was 49 percent in 1997, while nonfood inflation was only 6 percent.

17. In 1998, growth remained strong at 9.5 percent, only slightly lower than the year before. While growth in the secondary and tertiary sectors was more moderate, the slowdown was partly offset by a resurgence of the food crops sector as the return of good weather and the improved security situation in the northwest allowed for growth of 12 percent. The tertiary sector areas (services, commerce and tourism, and transport and communications) all grew by 10 percent. Growth in the manufacturing sector was healthy at 9 percent, and production in the construction and public works sector increased by 16 percent, fueled by the continuing effort to rebuild Rwanda's infrastructure. Food prices fell by a cumulative 25 percent during 1998. Nonfood inflation also fell further to 2 percent, and, hence, overall end-period inflation dropped to a rate of -7 percent.

18. Public investment since 1996 has remained between 7 percent and 9 percent of GDP, approximately its prewar ratio. Private investment is more difficult to measure. In addition to officially budgeted capital expenditures (agreed, within the framework of the public investment program, among the authorities, the World Bank, the African Development Bank, and

donors), many NGOs have provided nonbudgetary support for their projects. However, public investment figures do not include nonbudgetary external support (which increased greatly after the war), although much of it is spent on public goods.

19. In spite of the progress that has been made toward recovery, the effects of the war are still felt strongly. Real GDP in 1998 was still below the 1993 level, and the composition of GDP has shifted toward the primary sector. While many returned refugees have been resettled and food production in the northwest has restarted, many others remain in need of permanent shelter, and more refugees are returning or are expected to return from the Democratic Republic of the Congo. The poverty level, which was 53 percent in 1993, has risen dramatically, reaching 70 percent in 1997. Poverty incidence is particularly serious among the households headed by children and women.

20. Although real per capita GDP in 1998 surpassed its prewar level for the first time, many people remain worse off than they were before the war. In order to increase productivity to alleviate the pervasive poverty in Rwanda, it will be necessary to further increase investment in physical and human capital, improve the efficiency of the public sector, ensure the health of the financial sector, and maintain an economy that is open to external trade and competition. In this regard, vigorous efforts are needed to fully implement foreign-financed investment projects, increase spending on health and education, effectively monitor and regulate financial institutions, eliminate inefficiencies through the privatization of public enterprises and the restructuring of the civil service, and consolidate the recent progress in trade reform.

II. RECENT TAX REFORMS⁶

A. The Situation at the End of the War (1994)

21. Revenue collection declined sharply during the genocide of 1994. Before the genocide, Rwanda's average revenue ratio was low, averaging 10.2 percent of GDP during 1990–91 compared with 12.3 percent for ten other countries in sub-Saharan Africa. Rwanda's low tax ratio was associated with (a) the relatively low per capita income; (b) the predominance of the subsistence and informal economic sectors; (c) the small size of the mining and manufacturing sectors, which are more amenable to taxation; (d) the widespread tax exemptions; and (e) the weak tax administration and general lack of enforcement, contributing to a climate in which people were not used to paying their taxes. Originating in a poorly conceived investment code and special conventions agreed between individual companies and the government, tax exemptions were perpetuated by public enterprises that avoided the payment of income taxes and the surrender of personal income taxes that were withheld from their employees. During 1992–93, Rwanda's revenue ratio fell further to 9 percent of GDP, reflecting the weakening tax collection during the ethnic conflict, and to 3.6 percent of GDP in the year of the genocide as tax administration capacity collapsed. The major components that contributed to this collapse were taxes on international trade and on goods and services, which fell from 2.5 percent of GDP to 1.3 percent and from 3.6 percent of GDP to 1.4 percent, respectively, from 1993 to 1994. At the same time, nominal GDP fell by about one-half in 1994 (Table 1).

22. Since 1994, revenue collection has gradually recovered, reaching 10.4 percent of nominal GDP in 1998 (Table 1). The recovery of revenue collection has been relatively slow because of the time needed to rebuild the tax administration capacity. This section recounts the measures that have been taken by the government to strengthen revenue performance since the end of 1994.

B. Tax Reforms 1995–97

23. In early 1995, the authorities aimed at rapidly restoring revenue through a number of temporary and structural measures, including rebuilding and strengthening the capacity for revenue administration and implementing a range of discretionary measures to increase revenue while strengthening the overall efficiency of the tax system. First, as a temporary measure, an export tax on coffee, at US\$950–US\$1,250 per ton,⁷ was introduced in light of the exceptionally high international prices. Second, in order to safeguard revenue collection, the Large Enterprise Unit was established, which became responsible for assessing and collecting taxes from the 150 largest taxpayers, accounting for 80 percent of all tax revenue.

⁶ Prepared by Koffie Ben Nassar.

⁷ The coffee export tax was based on the international price for coffee (f.o.b. Mombasa) and applied if the price exceeded the lower threshold of US\$0.95 per pound.

Third, the capacity of the customs and tax administration was restored through the provision of basic equipment and the reinforcement of mobile surveillance and antismuggling operations. Fourth, the sales tax, previously set at a rate of 5 percent for essential consumer goods and 10 percent for other goods and services, was standardized at 10 percent for domestically produced goods and imports; the collection of sales tax on imports was shifted to customs; and the specific sales tax on beer and soft drinks was increased by 70 percent. Fifth, in order to improve tax collection, the authorities initiated a comprehensive and coordinated program to reduce tax exemptions and combat tax evasion, including through a review of special conventions in the investment code, so as to streamline the incentives for investment and make them more transparent.⁸ These measures, coupled with an anticipated strong recovery in real GDP and the tax base, were envisaged to increase budgetary revenues by threefold in 1995.

Table 1. Budgetary Receipts, 1991-98
(In percent of GDP, unless otherwise indicated)

	1991	1992	1993 1/	1994	1995	1996	1997	1998 Est.
Total revenue	10.4	10.1	9.1	3.6	6.9	9.1	10.3	10.4
Tax revenue	9.1	8.9	8.4	3.6	6.4	8.4	9.8	9.9
Tax on income and profit	2.0	2.2	2.1	0.9	0.8	2.3	2.5	2.8
Companies	0.6	0.9	0.9	0.4	0.3	1.5	1.7	2.0
Individuals	0.9	0.7	0.7	0.2	0.5	0.6	0.8	0.6
Other	0.5	0.5	0.5	0.2	0.1	0.2	0.1	0.2
Property taxes	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.1
Taxes on goods and services	3.7	3.4	3.6	1.4	2.9	3.3	3.9	4.5
Excise taxes	2.2	1.9	2.1	0.7	1.7	1.8	2.2	2.2
Turnover tax	1.2	1.0	1.0	0.6	0.9	1.2	1.3	1.9
Road Fund	0.3	0.5	0.6	0.1	0.4	0.3	0.4	0.4
Taxes on international trade	3.2	3.1	2.5	1.3	2.6	2.7	3.3	2.5
Imports taxes	2.6	2.6	2.5	1.1	2.0	2.5	2.4	2.2
Exports taxes	0.5	0.5	...	0.1	0.5	0.1	0.8	0.3
Other taxes on international trade	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Nontax revenue	1.3	1.3	0.7	...	0.4	0.7	0.6	0.5
Memorandum items:								
Nominal GDP (in millions of Rwanda francs)	239.3	271.8	284.4	165.8	337.2	431.4	562.4	632.1
annual percent change	11.8	13.6	4.6	-41.7	103.4	27.9	30.4	12.4
Consumer prices (period average; annual percent change) 2/	19.6	9.5	12.4	64.0	22.0	8.9	11.7	6.8

Sources: Ministry of Finance and Economic Planning, and IMF staff estimates.
1/ GDP was revised upward by 33 percent in 1993.
2/ The consumer price index was reconstructed in 1995.

⁸ The program includes measures aimed at reducing exemptions on the importation of personal effects, as well as the privileges of the public enterprises, nongovernmental organizations, and religious entities.

24. In the event, this target was achieved in nominal terms (tax revenue increased by 263 percent in 1995, see Table 27, and its ratio to GDP almost doubled, rising to 6.4 percent). The improvement in taxes on goods and services was the most pronounced while taxes on income and profit decreased, owing to the losses incurred during the genocide of 1994⁹ and the destruction of financial records of most enterprises.

25. Significant further tax measures taken in 1996 included the imposition of a presumptive income tax of 3 percent of annual turnover on all enterprises; increases in specific consumption taxes on alcohol, petroleum, and soft drinks; a reduction in tax exemptions; and improvements in revenue administration.

26. In spite of some slippages in the implementation of the measures, revenue increased to 9.1 percent of GDP in 1996, helped by a strong economic recovery. Notwithstanding the delay in establishing the Large Enterprise Unit, company taxes increased significantly from 0.3 percent in 1995 to 1.5 percent of GDP in 1996. Taxes on goods and services also improved (from 2.9 percent in 1995 to 3.3 percent of GDP in 1996), while those on international trade stagnated, reflecting the sharp decline in international prices for coffee.

27. However, import tax collection was below potential, owing to the granting of a wide range of exemptions for imports by international governmental and nongovernmental organizations, and by diplomatic missions.¹⁰ As a result, almost 50 percent of imports (in value terms) were exempt from both import duties and turnover tax (Impôt sur le Chiffre d'affaires), also collected at the border,¹¹ and the effective rate of duty collection was only 13.6 percent (Table 14).

28. In 1997, the government embarked on an ambitious plan to reduce the primary fiscal deficit to 0.9 percent of GDP from the equivalent of about 2.2 percent in 1996. This improvement required efforts to increase revenue by about 26 percent (equivalent to about 1 percent of GDP). After the initial recovery in tax collection through ad hoc measures, the envisaged further improvement in revenue called for a more fundamental revision of the tax

⁹ A provision in the income tax law allows all companies to write off losses incurred during the genocide until end-1999.

¹⁰ The 1996 import duty schedule had four nonzero rates (10 percent, 20 percent, 40 percent, and 60 percent), with an average rate of about 25 percent. Imports amounted to 18.5 percent of GDP and customs duty collection to 2.5 percent of GDP.

¹¹ The majority of exempt products are consumer goods (52 percent), with other exemptions applying to capital goods (27 percent), intermediate goods (16 percent), and petroleum products (5 percent).

structure.¹² This revision included the following measures: (a) the conversion of specific excise taxes on soft and alcoholic drinks, cigarettes, and petroleum into ad valorem taxes at increased rates; (b) a revision of the Income Tax Law, including a reduction in the company and maximum personal income tax rates (from 50 percent to 40 percent) and the imposition of income taxes on public enterprises and military personnel; and (c) an increase in the turnover tax rate from 10 percent to 15 percent, in part to offset the revenue losses from the reduction in import tariffs planned for 1998.

29. These measures were implemented with significant delays, reflecting capacity constraints and the organizational changes within the government, which slowed the required preparatory work for the proposed tax legislation, as well as the strong resistance of the business community. For example, the new excise tax on soft drinks (at 35 percent), beer (at 60 percent), and wine, liquor, and cigarettes (all at 70 percent instead of the envisaged 120 percent) was implemented in July 1997 instead of end-July 1997; the petroleum excise tax was introduced in September 1997, rather than in July 1997 (at 25 percent, instead of the envisaged 16 percent); and the envisaged increase in the sales tax rate was postponed until February 1998. Nevertheless, overall revenue performance in 1997 improved as a result of higher international coffee prices, there were improvements in tax and customs administration and a better collection of tax arrears, and the revenue-to-GDP ratio climbed to 10.3 percent in 1997 from 9.1 percent in 1996 (Tables 1 and 14).

C. Tax Reforms 1998-99

30. **Tax measures in 1998.** The most recent phase in tax reform has been supported by the three-year Enhanced Structural Adjustment Facility (ESAF) arrangement approved in June 1998. The objective is to increase the revenue-to-GDP ratio by 0.5 percent per annum. The steps taken in the 1998 budget included: (a) a further **reduction in import duties**, with the maximum rate declining from 60 percent to 40 percent; (b) an upward **adjustment of the turnover tax** (from 10 percent to 15 percent in 1998, delayed from 1997) in order to offset the tariff revenue loss; (c) the establishment of the Rwanda Revenue Authority (RRA) to strengthen tax administration; (d) the strengthening of the Large Enterprise Unit; (e) the gradual inclusion of smaller enterprises in the tax net by offering self-employed persons or "enterprises" (with annual turnover of RF 60 million or less) the choice of paying a

¹² During 1997-98, the government benefited from a long-term Fund resident advisor in tax policy, legislation, and administration. Particular emphasis was placed on the establishment of the Large Enterprise Unit, taxpayer registration and identification, including the introduction of tax identification numbers, arrears collection, tax audits, and the introduction of presumptive taxation.

presumptive income tax of 4 percent of annual turnover or paying the regular income tax;¹³ (f) the curtailment of exemptions; and (g) the conversion of the coffee export tax into an ad valorem tax at a rate of 16 percent.

31. **1998 Outcome.** Revenue performance was weaker than expected, owing to lower production of those goods subject to excise tax (in particular, beer), lower-than-expected import volumes and coffee world prices, slippages in the implementation of the presumptive income tax for small and medium-sized enterprises, and difficulties in nontax revenue administration (related to a lack of control of local receivers). These revenue shortfalls were compensated for by a strong company tax revenue performance, as the RRA strengthened its capacity for assessment, collection (including of arrears), and auditing. As a result, total revenue as a percentage of GDP increased only marginally to 10.4 percent in 1998 (Tables 1 and 14). In the event, the revenue structure in Rwanda became less dependent on trade taxes. Taxes on international trade fell to 23.9 percent of total revenue from 31.8 percent in 1997; meanwhile, taxes on income and profit increased to 27 percent of total revenue from 24.4 percent in 1997, and those on goods and services to 43.2 percent of total revenue from 37.7 percent during the same period (Table 2).

	1991	1992	1993	1994	1995	1996	1997	1998 Est.
Total revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Tax revenue	87.2	87.7	92.3	100.0	93.9	91.9	94.7	94.8
Tax on income and profit	19.6	21.2	22.8	23.5	12.1	25.4	24.4	27.0
Companies	6.0	8.8	9.7	11.8	3.9	16.8	16.0	19.2
Individuals	8.4	7.3	8.1	6.7	6.9	6.9	7.4	6.1
Other	5.2	5.2	5.0	5.0	1.3	1.8	1.0	1.7
Property taxes	1.6	2.2	1.9	1.7	0.4	0.8	0.7	0.8
Taxes on goods and services	35.2	33.4	39.8	38.3	42.9	36.5	37.7	43.2
Excise taxes	20.8	18.5	22.8	18.3	24.7	20.1	21.2	20.9
Turnover tax	11.2	10.2	10.8	16.6	13.0	12.7	12.9	18.5
Road Fund	3.2	4.7	6.2	3.4	5.2	3.8	3.6	3.8
Taxes on international trade	30.8	30.9	27.8	36.6	38.5	29.2	31.8	23.9
Imports taxes	24.8	25.4	27.0	30.0	29.9	27.2	23.2	20.8
Exports taxes	5.2	4.7		1.7	7.8	0.8	7.4	2.4
Other taxes on international trade	0.8	0.7	0.8	5.0	0.9	1.3	1.2	0.8
Nontax revenue	12.8	12.3	7.7	0.0	6.1	8.1	5.3	5.2

¹³ As of January 1999, the presumptive income tax rate was reduced from 4 percent to 2 percent, with a view to improving compliance. For enterprises with annual turnover below RF 36 million, the presumptive tax became mandatory.

32. **1999 measures and preliminary outcome.** The tax reform program continued in 1999, with the emphasis placed on further reducing trade taxes, to be offset by an increase in consumption taxes and a further improvement of tax administration. First, in line with the objectives under the CBI, the maximum import tariff rate was reduced from 40 percent to 25 percent and the intermediate rates from 20 percent and 10 percent to 15 percent and 5 percent, respectively; most capital goods remained subject to a zero-rated. Second, the export tax on coffee was eliminated. Third, excise taxes were increased effective January 1999 (from 60 percent to 80 percent for beer, from 35 percent to 60 percent for soft drinks, from 25 percent to 60 percent for petroleum products,¹⁴ and from 70 percent to 80–90 percent for cigarettes and spirits). Fourth, the presumptive tax for small and medium-sized enterprises (with annual turnover of RF 36 million or more, but less than RF 60 million) was reduced from 4 percent to 2 percent of turnover and became obligatory for enterprises with annual turnover of up to RF 36 million. Furthermore, the government introduced the withholding of income tax from payments by the government to its suppliers, and a revised system of penalties for late payments. These actions were accompanied by a number of tax and customs administration measures, including the institution of preshipment inspections for all petroleum products and at least half of all other products, the tightening of the control of transit trade, the assignment of tax identification numbers (TINs) to all large enterprises and to about one-half of all small and medium-sized enterprises, and the strengthening of the recently established RRA.

D. Rwanda Revenue Authority (RRA)

33. **Organizational structure.** With the objective of creating a professional organization characterized by integrity and efficiency, and dedicated to upgrading the quality of service provided to the taxpaying public, the RRA was created as a legally separate entity with its own budget and an appointed Board of Directors.¹⁵ The staff of the existing tax and customs departments within the Ministry of Finance was reappointed or retrenched based on performance (inter alia, measured through entrance tests). About one-half of the “old” staff of 500 was retained, and about 200 new staff members were hired in the course of 1998; new pay and grading systems were implemented, with significantly higher salaries than in the civil service. Under the new organizational structure, the Commissioner General oversees the three Departments of Tax, Customs, and Audit and Investigation, each under its own Commissioner. The Commissioner General is responsible for the implementation of RRA policies, the appointment of commissioners and other senior personnel, and all the support and operational

¹⁴ Gasoline and diesel oil, kerosene (mostly for household use), and fuel oil/lubricants (mostly for industrial use) remained exempt from the consumption tax.

¹⁵ The RRA started operations in January 1998.

functions of the RRA. The operations of the RRA are financed by transfers from the central government budget. Large-scale technical assistance is being provided through various consulting arrangements, financed by the U. K. Department for International Development.

34. Although the RRA only became operational in the course of 1998, it made significant progress in improving tax audits, assessing taxes, and managing records. Prior to December 1998, the lack of a formal taxpayer registration process in Rwanda hampered interagency collaboration in assessment/audit and the control of late payments and evasion. In December 1998, the RRA introduced tax identification numbers (TINs) for all enterprises, to be used on all tax, customs, and payment documents, and as a basis for computerization. TINs were also assigned to small and medium-sized enterprises, most of which had never paid taxes.

35. The existing Large Enterprise Unit (**Unité des Grandes Entreprises—UGE**) was incorporated as a separate unit within the RRA. The UGE integrates all functions dealing with large taxpayers, including enforcement of filing, assessment, collection (including recovery of arrears), audit, and taxpayer education and registration statutes. The newly created **Collection Division** is responsible for the recovery of tax arrears. To facilitate the recovery of arrears, a number of steps were taken, including the revision of the regulatory framework, the introduction of standardized recovery procedures, improvements in staff training and motivation (through salary premiums based on arrears collected), and improved coordination between the Collection Division and the Brigade de Contrôle et Recherche (BCR),¹⁶ which is responsible for tax assessment.

Table 3. Tax Arrears of the 15 Largest Public Enterprises 1/	
(As of April 1999; in millions of Rwanda francs)	
Enterprise	Amount
1. Air Rwanda	470.5
2. Banque Nationale du Rwanda	6.4
3. CER	44.3
4. Electrogaz	3,939.7
5. INR	102.4
6. Imprisco	83.4
7. ORTPN	61.9
8. OCIR Thé	37.9
9. ONATRACOM	133.9
10. OPROVIA	22.4
11. ORINFOR	112.9
12. RAR	37.1
13. RWANDATEL	3,586.1
14. STIR	882.7
15. SORWAL	90.1
Total	9,611.8

1/ INR = Imprimerie Nationale de Rwanda; ORINFOR = Office Rwandaise d'information; for description of other public enterprises, see Statistical Appendix Table 33.

¹⁶ Total tax arrears as of April 1999 amounted to RF 11.4 billion, of which RF 9.6 billion were owed by 15 large enterprises (Table 3).

36. **Computerization and internal audit.** The RRA still lacks adequate computer facilities, and the development of a computerized system, which integrates data from the Internal Revenue Service (IRS) offices across the country for all taxpayers, and which is a high priority for the authorities. Such a system would greatly facilitate tax assessment, collection, reporting, follow-up analysis, and tax audits, as well as the installation of an internal audit system.

III. FINANCIAL SECTOR REFORM¹⁷

A. State of the Financial System After the 1994 War

37. Prior to the 1994 conflict, the financial system in Rwanda was already weak. Net foreign assets were declining, banks were increasingly burdened with nonperforming loans, and financial transactions were tightly controlled, including through administered interest rates. On the positive side, however, broad money growth was moderate, at under 5 percent in 1993, and inflation was subdued.

38. After the conflict, the situation worsened significantly. Many skilled officials of the National Bank of Rwanda (NBR), as well as of banks and other financial institutions, were no longer available to continue in their jobs. Accounts of the NBR were unreliable; among the difficulties encountered was that many transactions that had occurred during the war had not been recorded. Inflation picked up sharply from 12 percent in 1993 to 64 percent in 1994, and, as interest rates were still administered, real interest rates became strongly negative. In addition, it became known that a large amount of cash had been removed from the vaults of the NBR by the former government, which led to severe price uncertainty. There was a sharp decline in money velocity from over 7 to 4½ as GDP declined by half, while the money supply decreased by a much smaller proportion. Money demand was kept up by the rapid inflow of foreign assistance funds, amounting to over RF 350 billion in 1994, or about 140 percent of GDP. International reserves were at the equivalent of less than one month of imports.¹⁸

39. The amount of nonperforming loans, which had already been a problem before the conflict, increased significantly afterward. Some debtors had disappeared; others had had their means of repayment destroyed. In many cases, banks were faced with an additional burden as debtors who had lost their capital were asking for additional loans so that they could rebuild their businesses. Banks had to consider a number of factors, including whether some debtors who received new loans might be able to repay both the old and new loans, how important it might be to maintain relationships with the business community, and what social responsibilities might be expected of the banks. Meanwhile, people who had come from outside the country were asking to borrow money on the basis of collateral that appeared to be adequate but was more difficult to verify. Some banks became involved in legal conflicts regarding whether certain withdrawals, made during the conflict on behalf of enterprises by people with only minimal verification of their identity, were valid.

40. In early January 1995, steps were taken to address these problems and liberalize the financial sector, including through the elimination of most restrictions on interest rates, while strengthening the government's ability to guide the expansion of money and credit.

¹⁷ Prepared by Joseph Crowley.

¹⁸ See Appendix III for an empirical study of the stability of money demand in Rwanda.

A new currency was introduced. To address the banks' excess liquidity, which was caused by large emergency aid inflows (over RF 300 billion in 1995, equal to about 90 percent of GDP), the required reserve ratio was increased in January 1995 to 12.5 percent on all deposits. In May it was increased again to 16 percent; in August it was lowered to 14 percent. The government licensed 2 new commercial banks (making a total of 5) and 20 foreign exchange bureaus.

41. The government also took actions to stabilize macroeconomic aggregates. In 1994, broad money contracted by much less than nominal GDP, fueling high inflation. In 1995, the inflationary pressure was maintained in spite of a resurgence in output as broad money growth greatly exceeded the growth of nominal GDP. Most of this increase was due to the increase in net foreign assets as the efforts to rebuild and provide humanitarian assistance caused large inflows of donor funds and transfers to pour into the country. In 1996, however, money growth and output both stabilized, and inflation was brought down to 9 percent. Meanwhile, as freeing resources that could be used to provide the private sector with credit to promote construction was a priority, the government repaid the banking system in 1994 and engaged in a negligible amount of borrowing in 1995. The inflow of foreign funds allowed for an accumulation of the stock of net foreign assets equal to five months of imports in 1995. Meanwhile, commercial banks continued to suffer from a large portfolio of nonperforming loans. In addition, because of the uncertainty surrounding many of their past and current loans, they chose to maintain a large cushion of excess reserves. In 1996, the NBR conducted audits of the main financial institutions in the country: the three commercial banks, the development bank, and the people's savings and loans institution. This audit, the first since the end of the conflict, quantified the extent of the problem of nonperforming loans.

B. Overview of the Financial System

42. The financial system in Rwanda consists of five commercial banks, about ten savings and special and credit institutions/cooperatives, and four insurance companies (Box 1, Table 4). Only the five commercial banks are classified as money-creating banks in the monetary survey. The other financial institutions are classified differently because they do not accept transferable deposits. The BK and the BCR are the largest of the five commercial banks; together they held 70 percent of commercial banks' deposits in 1997. On the other end of the spectrum, BANCOR is much smaller, holding only about 1 percent of total deposits.

43. Since the end of the war and genocide in 1994, the operations of the CER and the CHR have been suspended; the government has decided to liquidate the CER and privatize or liquidate the CHR. The CHR has resumed operations but is experiencing difficulties; having been completely pillaged after the war, it is now unable to fulfill its objective of improving access to housing. The operations of the CCP, which were suspended after the war, have since resumed on a smaller scale.

Box 1. Main Financial Institutions in Rwanda

- A central bank (the National Bank of Rwanda, or NBR).
- Five commercial banks
 - Banque commerciale de Rwanda, or BCR;
 - Banque de Kigali, or BK;
 - Banque de commerce, de développement et de l'industrie, or BCDI;
 - Banque continentale africaine-Rwanda, or BACAR; and
 - Banque à la confiance d'or, or BANCOR).
- An association (about 150 rural) of savings and loan cooperatives (Union des banques populaires du Rwanda, or UBP).
- One development bank (Banque rwandaise de développement, or BRD).
- One government-owned savings bank (Caisse d'épargne du Rwanda, or CER), which is currently under liquidation;
- One mortgage bank (Caisse hypothécaire du Rwanda, or CHR; government owned), which is to be liquidated or privatized.
- Five credit cooperatives:
 - Cooperatives d'épargne et d'entraide pour salaires, or CEPES;
 - Duterimbere;
 - Tsimbura;
 - Gestion économique des missions catholiques, or GEMECA; and
 - Union des caisses des travailleurs, or UCT.
- Four insurance companies:
 - Compagnie générale d'assurance et de réassurance, or COGEAR;
 - Société nationale d'assurance du Rwanda, or SONARWA;
 - Société rwandaise d'assurances, or SORAS; and
 - Ingoboka.
- A postal checking center (Centre des chèques postaux du Rwanda, or CCP).

44. UBP has been in a difficult situation since 1994. It has not yet recovered fully from the war and genocide and has not resumed its normal operations. The last completed audit of the UBP was in 1992; subsequent audits, including of the 1995-97 accounts, were not completed because the figures collected were considered inadequate. A February 1997 report indicates that credits made to it by other commercial banks could not be verified because books had been lost, and record keeping was insufficient. In 1994, the UBP had about 400,000 clients, but by end-1996 this figure had dwindled to 42,000. Many of its clients had disappeared. Interest on accounts that have been inactive since 1994 have neither been calculated nor

credited. Because of the curtailment of its activity, and its uncertain state, UBP has reduced the size of its workforce. In 1996 the UBP had total assets of under RF 6 billion (equivalent to about 8 percent of the combined total assets of the commercial banks).

45. The Banque rwandaise de développement (BRD) was in a relatively favorable position after the war because, rather than seeking out deposits (which it legally could have done), it had financed many of its operations with own capital and external lines of credit. It resumed its operations in 1995, and in 1996 it extended RF 800 million of new credits.

Table 4. Rwanda: Summary Statistics for Five Commercial Banks, 1997-98		
(In billions of Rwanda francs)		
	1997 Dec	1998 Dec
Total reserves	16.1	12.2
Required reserve ratio	12.0	10.0
Excess reserves	1.5	2.3
Total credit	44.9	56.5
Non performing loans	10.4	16.9
Total assets	100.7	110.6
Total deposits at commercial banks subject to reserve requirement	78.0	75.0
Other liabilities	22.8	27.6
<i>Of which: capital</i>	2.4	1.1
Memorandum items: 1/		
Total assets of the UBP	5.4	
Total deposits with the UBP	4.8	
Total assets of the BRD	4.3	
Total deposits with the BRD	2.5	
Source: National Bank of Rwanda 1/ End-1994 figures.		

46. The government is closely involved in the financial sector in Rwanda. In addition to being the only shareholder in the NBR, it has important minority shares in the two largest commercial banks, the BK and the BCR, as well as a modest share in the smaller BACAR; it does not, however, take an active part in the management of these commercial banks. However, it does take an active role in the management of the BRD in which it also owns a majority share.

47. The composition of deposits of the commercial banks during the period since the war is difficult to assess because of weaknesses and changes in their classification, especially regarding the deposits of the noncentral government public sector. Nevertheless, it appears that there has been some reduction in the share of foreign currency deposits and a moderate increase in the share of time deposits. Also the share of deposits that are held by the public sector fell from a peak of 18 percent at end-1996 to 12 percent at end-1998.

48. The commercial banks have been holding fluctuating amounts of deposits of the central government. Over the past decade, these deposits have accounted for as much as one-fourth of total deposits. In 1997, they represented just under 8 percent. In 1998, it was decided that all government deposits should be consolidated at the NBR, so all unrestricted

deposits were transferred from commercial banks to the NBR. However, the majority of deposits were restricted, usually because donors asked that project funds remain in nongovernment hands. As a result, less than 2 percent of these deposits were transferred.

49. The liquidity of the banking system has been unstable since 1994. Between 1994 and 1997, the ratio of banks' reserves to total deposits varied between 20 percent and 29 percent—well above the required reserve ratios—with large month-to-month fluctuations of as much as 5 percent. In July 1997, the authorities reduced the required reserve ratio from 14 percent to 12 percent, and then to 10 percent the following year. During 1997–98, banks' excess reserves continued to fluctuate but came down gradually to under 4 percent by end-1998 (Table 4). Although these excess deposits were not held evenly by all banks—some banks had very few excess reserves—there was little interbank lending as banks apparently do not regard one another as completely secure lenders and have concerns regarding the legal system. The persistence of excess reserves in the banking sector, combined with the fact that declines in the required reserve ratio have led to declines in total reserves, suggest that some banks may be holding a high level of excess reserves for precautionary reasons. The fluctuations in the levels of reserves may indicate that banks do not have tight control over these levels and may therefore have to hold excess reserves to guard against unexpected drops.

50. Foreign assets have become more prominent in the Rwandese economy since the war. In 1993, 10 percent of the assets of the financial sector were denominated in foreign exchange; by 1997, that figure was at 25 percent. This rise is partly accounted for by the increased reserves of the NBR, which in turn, resulted from the large inflows of foreign assistance,¹⁹ but it is also to the significant growth in foreign currency deposits at commercial banks since their introduction in late 1994. This growth has reflected the repatriation of savings by refugees who had been fleeing Rwanda in waves since the late 1950s and who returned after the war and genocide of 1994.

C. Bank Restructuring

1996 audits

51. In 1996, audits of all five commercial banks and the development bank were conducted by a major accounting firm (see Table below). Initially, the audit indicated that RF 5.5 billion of additional provisioning would be required for the system as a whole, but this figure was subsequently lowered to RF 3.9 billion after a review by the NBR. The audits found great differences in the level of difficulty that each bank was experiencing. The BK was considered healthy. Having recovered from the war, it had fully provisioned its bad loans and paid a substantial dividend to its shareholders. The BCR, however, was encountering serious

¹⁹ Many entrepreneurs eagerly entered the market for foreign exchange operations by opening foreign exchange bureaus, and entry into this field was quickly restricted to licensed operators.

difficulties. The BACAR was in an unclear situation because it had many loans that were backed by real estate that the auditors considered to be valueless, but which the NBR regarded as having substantial value. The two new banks, the BCDI and BANCOR, enjoyed a significant advantage over their competitors, but nevertheless performed poorly. The BCDI's weak loan approval policies quickly raised questions about the quality of its loans, the collateral behind them, and possible additional provisioning needs. BANCOR's operations concerned mainly foreign exchange, and it therefore had no trouble meeting its prudential ratios, but there were concerns about the quality of its management.

Indicators of Soundness of Commercial Banks, 1997-98 (In billions of Rwanda francs, unless otherwise indicated)		
	1997 end-Dec.	1998 end-Dec.
Nonperforming loans	10.4	16.9
In percent of private sector credit	23.1	31.4
Actual provisioning	4.3	7.9
In percent of required provisioning	78.7	65.1
Own capital and reserves 1/	2.4	1.1
In percent of risk weighted assets 2/	3.6	1.8
Source: National Bank of Rwanda		
1/ Before additional required provisioning.		
2/ The capital adequacy ratios for the five banks at end-1998 are -8.8, 6.2, 6.3, 6.9, and 17.3 percent.		

Restructuring plans

52. The BACAR and the BCR undertook three-year rehabilitation plans after the 1996 audits. The plans, covering the period 1997-99, aimed at improving capital adequacy ratios, loan-making practices, management, and computerization of financial data, and at adequately provisioning for bad loans. The BACAR was able to partially resolve its difficulties by selling mortgage-backed bonds in 1996 and increasing its capital from RF 200 million to RF 700 million by early 1997.

1998 audits

53. In 1998, all five commercial banks were audited by an international accounting firm. The audit looked at three main areas of bank operations as at end-1997; namely, the financial situation, management practices, and data management and information technology.

54. The main concern arising from the audit was that, for all banks, the correction of the significant underprovisioning of loans had resulted in low capital adequacy ratios (negative in some cases). Underprovisioning was estimated at over RF 5½ billion, and over RF 2½ billion of additional capital was needed to reach a solvency ratio of 5 percent. Nonperforming loans had become far more problematic since the onset of the conflict in 1994. The ratio of nonperforming loans to total credit to the private sector rose from 10 percent in 1993 to 20 percent at end-1997 and to over 60 percent by mid-1999. It is difficult to assess the evolution of the stock of nonperforming loans in recent years; however, the recent increases in the ratio may be attributable to an actual deterioration in loan portfolios, but it is also likely that they at least partly reflect the identification of previously undiscovered nonperforming loans through an improvement in investigative techniques, as well as a stricter application of the norms for loan classification.

55. Many faulty loan practices were revealed by the audits. Stipulated lending procedures had not been followed. Collateral had been misclassified, overvalued, uninsured, backed by expired guarantees, or could not be located. Accounts continuously exceeded overdraft limits. Loans were made without signatures. Lending was not spread across a variety of sectors. Loans in excess of 25 percent of individual bank's own capital were made to single borrowers or groups of borrowers. Loans were made to businesses on the basis of unaudited financial statements. Nonperforming loans had been issued to banks' shareholders, large temporary overdrafts were outstanding, deposit bases were concentrated, and some banks had not only unverifiable figures relating to transactions made before or during the 1994 war, but also irreconcilable figures as a result of bad data management practices. In some cases, the computerization of financial data was weak; in other cases, the staff did not have access to computerized information, resulting in a duplication of work, more time required to complete tasks, and limited opportunity to verify figures.

Follow-up by the NBR

56. To complement the audits of the accounting firm and to resolve any differences, the NBR carried out in early 1999 its own detailed audits of the five commercial banks. The report of these audits (which has not yet been completed) will provide a basis for a restructuring of the banks aimed at ensuring adequate provisioning for nonperforming loans, improving the banks' loan portfolios, providing adequate capital ratios, and maintaining prudent foreign currency exposures. The NBR audits covered both 1997 and 1998.

57. The results of these audits may also lead to additional legal initiatives to help banks recover larger shares of their nonperforming loans. Currently, banks cannot foreclose on properties that are collateral for bad loans unless the properties have title deeds, which many lack. The NBR therefore is pressuring the prefecture of Kigali to quickly issue deeds to properties that are disputed so that banks can foreclose. On May 7, 1999, an arbitration court was created to address this problem. Although it only has the power to require creditors and

debtors to discuss their disagreements in public, in many cases the court succeeds in embarrassing delinquent debtors into repaying. Also, a cabinet commission is considering a proposal for the accelerated sale of collateral (*voie parée*).

D. Regulatory Framework and Banking Supervision

Banking regulations

58. The activities of banks and financial institutions are currently governed by Decree-Law No. 07/81 of April 28, 1981 regulating financial institutions; the 1995 exchange regulations; and the law of 1997 establishing the charter of the NBR. In early 1999, the Rwandese parliament passed a new banking law, which was promulgated in August. The main provisions of the new 1999 banking law are (a) to define banks (distinguishing them from nonbank financial institutions), the activities that they may engage in, and the process for creating them; (b) to give the NBR explicit authority to determine capital requirements and associated accounting requirements; (c) to give the NBR power to enforce the banking law, including through the issuance of instructions to clarify the law and through the authority to impose penalties; and (d) to provide deposit insurance.

Bank inspections

59. Off-site and on-site inspections of commercial banks are managed by the General Supervision Directorate, which oversees the Financial Institutions Inspection Unit—the entity that performs the inspections—and the Internal Audit Unit of the NBR. A new structure has been adopted, whereby a Controller General and a deputy would supervise a Regulation Unit, an Off-site Supervision Unit, an On-site Supervision Unit, and the Internal Audit Unit. Since 1995, only four of the five banks have been inspected, and most inspections have been limited to assessing the riskiness of the loan portfolio.

Monitoring

60. Several main areas of the commercial banking sector are being closely looked at by the NBR and are subject to detailed regulations: reserve levels, accounting ratios, nonperforming loans, and foreign exchange holdings.

61. The NBR has been concerned about the persistently high level of excess reserves held by the commercial banks. It has continued to monitor these levels and make efforts to improve the efficiency of the financial sector in order to enable banks to more fully utilize their deposit base. Weaknesses in some commercial banks' accounting ratios were revealed in the audits of the 1997 and 1998 accounts. The NBR is currently assessing the audits in order to develop restructuring plans to address these weaknesses.

62. Nonperforming loans are divided into five categories of performance, according to specific guidelines, in order to calculate provisioning requirements. The first category represents loans that are completely current, while category 2 loans are ones that have been

delinquent for less than 3 months. Category 1 and 2 loans require no provisioning. Category 3 loans are ones that have been delinquent for 3 to 6 months; they require 20 percent provisioning. Category 4 loans are ones that have been delinquent for 6 to 12 months, and require 50 percent provisioning. Category 5 loans are ones that have been delinquent for more than 12 months, or have been taken to court, and have therefore been written off.

63. Banks are concerned about the tax treatment of deductions for provisioning. Currently, they are not allowed to deduct bad loans until the payments on the loan come due and are not paid. They argue, however, that as soon as a loan is provisioned for, they should be able to deduct the provisioned amount.

64. Commercial banks hold foreign exchange and have maintained a regular practice of holding assets in currencies other than those of the deposits that created them. Foreign exchange holdings are restricted to 20 percent of capital and reserves. Every day, at 4:00 p.m., any bank that holds more than this proportion in foreign exchange is required to contact the NBR in order to sell the excess. Similarly, net foreign exchange positions in excess of 20 percent of capital and reserves are forbidden, but this limit has been frequently violated; it is in fact not uncommon for a bank to have a net open position in foreign exchange of well over 100 percent. The NBR is committed to strictly enforcing this limit in the future, however, including by using its authorization under the new banking law to impose penalties for noncompliance.

E. Financial Markets

65. In 1996 and 1997, as GDP recovered from the war, money velocity increased rapidly, but slowed before reaching its 1993 level. This slowdown suggested a greater confidence in the currency, reflected in an increased willingness to hold money. Meanwhile, the base money multiplier, which in 1997 reached its 1993 level of $2\frac{1}{2}$, rose to nearly 3 in 1998, mainly as a result of a decline in demand for currency as a share of deposits. This ratio increased by over 10 points, from just under 40 percent in 1993 to just over 50 percent in 1994, as the chaos of the conflict caused a loss of confidence in commercial banks. Since that time, the ratio has steadily declined, falling to about 25 percent in 1998.

66. There is an interbank market, but it is limited, as banks generally do not trust one another. An interbank interest rate is reported. There is also a limited market in treasury bills. The authorities intend to encourage the expansion of the treasury bill market by taking the following steps: (a) converting the consolidated debt to the government into tradable securities; (b) asking commercial banks to hold part of their assets in the form of tradable securities, and (c) conducting treasury actions with improved prior dissemination of information on amounts, maturities, etc. In early 1999, banks also began participating in money market operations on the NBR's account.

IV. CIVIL SERVICE REFORM SINCE 1994²⁰

A. Introduction

67. Since 1994, one of the government's key priorities has been strengthening economic management and institutional capacity, and addressing the serious gaps caused by the genocide. To this effect, the authorities intend to establish a streamlined, qualified, and better-paid civil service in the context of an appropriate target for the government wage bill and the government's three-year adjustment program. This section describes the government's ongoing civil service reform efforts since 1994.

B. The Civil Service at the End of the 1994 War and Genocide

68. During 1991-93, the number of civil servants was estimated at about 41,000, of which about 60 percent were teachers (Table 5). During and shortly after the genocide in 1994, the size of the civil service fell by 40 percent to about 25,000, as many civil servants either lost their lives or fled the country. There was a virtual collapse of the administrative capacity at the central and local government levels, and the delivery of almost all social and financial services was paralyzed, owing to the critical shortage of skilled personnel.

69. Wages and salaries in the public sector, which had remained frozen since 1980,²¹ eroded considerably in real terms. Average wages at end-1994 were estimated at US\$61 per month (about half their prewar level in real terms), and the wages of many civil servants were below the poverty line (Table 6). This led to the departure of many qualified staff, who chose to work for nongovernmental organizations and other private sector employers who paid more than the government sector (Table 7). Those who remained suffered from low morale.

C. Developments in the Size and Structure of the Civil Service During 1995-97

Policy objectives. Shortly after the end of the war and genocide, the government's policy objectives for the reform of the civil service were to (a) limit the size of the civil service (excluding teachers) to less than 60 percent of the prewar level, that is, to about 10,000; (b) award a general wage increase of 20 percent, and an additional increase of the wage bill by 14 percent for regularization of pay for newly filled positions; (c) enhance the effectiveness of the civil service through training and progressive further improvements in pay; (d) rebuild the administrative capacity in both the central and local governments; and (e) reintegrate returning refugees who were qualified civil servants.

²⁰ Prepared by Koffie Ben Nassar.

²¹ In 1980, salaries had been raised by between 10 percent and 25 percent.

	1991	1992	1993	1994	1995	1996	1997	1998
Civil service employment 1/	41,529	40,153	42,027	25,389	31,794	34,882	40,622	40,204
Teachers	22,473	23,235	27,046	18,440	19,778	22,865	26,740	28,863
Nonteachers ("core")	19,056	16,918	14,981	6,949	12,016	12,017	13,882	11,341
Health	5,202	5,202	4,452	2,280	5,064	4,357	4,759	3,706
Other	13,854	11,716	10,529	4,669	6,952	7,660	9,123	7,635
In percent of population 2/	0.6	0.5	0.6	0.3	0.4	0.4	...	...
Memorandum item:								
Average for sub-Saharan Africa: in percent of population	1.3	1.2	1.2	1.1	1.0	1.0	...	...
Sources: Ministry of Finance; and IMF staff estimates.								
1/ Average number during the year.								
2/ Data are from Ian Lienert and Jitendra Modi, 1997, "A Decade of Civil Service Reform in sub-Saharan Africa," IMF Working Paper 97/179 (Washington: International Monetary Fund, 1997).								
3/ Unweighted average of 24 African countries for which data are available.								

	1992	1993	1994	1995	1996	1997	1998
Wage bill in percent of GDP 1/	5.4	5.7	4.0	4.0	4.4	5.1	4.6
Wage bill in percent of total revenue	53.3	67.8	110	62.7	52.8	52.3	43.8
Average wage per civil servant (in thousands of Rwanda francs per month)	22,622	23,199	13,457	15,988	24,368	27,899	25,495
Average wage per civil servant (in U.S. dollars per month, excluding military)	170	161	61	61	79	93	82
Per capita GDP (in Rwanda francs)	29,311	28,878	22,311	57,950	71,167	72,000	83,346
Per capita GDP (in U.S. dollars)	220	200	101	221	232	239	267
Average wage per civil servant in percent of per capita GDP	9.3	9.6	...	3.3	4.1	4.6	3.7
Memorandum items:							
Average for sub-Saharan Africa: wage bill in percent of GDP 2/	8.2	8.0	7.1	7.1	7.0	7.0	7.1
Average for sub-Saharan Africa: wage bill in percent of total revenue 3/	44.3	45.3	41.8	37.1	36.4	35.6	37.7
Average for sub-Saharan Africa: Average wage per civil servants in percent of per capita GDP 4/	...	...	...	...	5.7	...	...
Sources: Ministry of Finance; IMF, WEO/WETA database.							
1/ Includes military.							
2/ Includes the average for 47 African countries.							
3/ Includes the average for 46 African countries.							
4/ Includes the average for 21 African countries.							

Table 7. Comparison of Private and Public Sector Wages, 1997 (In thousands of Rwanda francs per month)				
Grade	Bralirwa 1/	USAID 2/	UN	Civil Service 3/
Director	228.5	249.0	337.2	45.5
Chief Accountant	116.1	240.0	...	36.3
Accountant	259.7	125.0	196.6	27.3
Secretary	91.4	...	132.5	14.4
Driver	53.3	75.0	62.0	11.3
Messenger	25.1	50.0	43.9	6.8

Source: Rwanda authorities.
 1/ Foreign-owned private enterprise.
 2/ U.S. Agency for International Development.
 3/ Excluding fringe benefits.

70. **Size.** In spite of policy intentions, the size of the civil service grew considerably after the war, owing to a lack of effective control of recruitment. By end-1997, the civil service (including teachers) had increased to 40,622 (from 25,389 in 1994), and the core civil service had increased to 13,882 from 6,949 over the same period (Table 5). Three main factors explain this phenomenon: (a) the line ministries were pressed to hire because the administrative capacity of the government was weak, and critical duties—especially in the health sector—were difficult to carry out; (b) the government provided jobs for social reasons; and (c) the continued reintegration of qualified former civil servants who returned from exile, including the reinsertion of about 7,000 former teachers between fall 1997 and early 1999.

71. **Level of qualifications.** Given that the ministries were pressed to hire, the qualifications of the civil service quickly deteriorated. Most of the staff, especially the new recruits, lacked the education and necessary experience. A census carried out in December 1995, financed by the United Nations Development Program (UNDP), showed that 79.4 percent of all public sector employees had not finished high school, 10 percent were high school graduates, and 10.5 percent had university education or equivalent (Table 8). In the Ministry of Health, other 1996 data show that out of 4,809 employees, only 2.3 percent were doctors, 0.02 percent were dentists (i.e., one person), 1.2 percent were qualified nurses, and 50 percent were without any qualifications or training in a health-related field. The census also revealed that more than half of all primary school teachers and 3 percent of all secondary school teachers were without any qualifications. The end-1998 census showed that, three years later, the situation had improved somewhat, reflecting in part the reinsertion of qualified returned refugees and the replacement of unqualified by qualified staff.

Table 8. Level of Education of the Civil Service in 1995 and 1998 (In percent of total; end of year)		
	1995	1998
Core civil service		
Less than four years, high school	49.4	39.2
Four years, high school	30.0	11.9
High school graduates	10.0	35.9
Above high school (A0-A1)	10.5	12.9
Health		
Doctors	2.3	
Dentists	0.0 1/	
Nurses	1.2	
With intermediary qualification/training	46.5	70.5 2/
Without any qualification/training 2/	50.0	19.6 3/
Primary school teachers		
With two years of teacher training	4.1	...
Without any qualification	55.9	...
Secondary school teachers		
With two years of teacher training	81.2	...
Without any qualification	2.9	...
Sources: Partial census for 1995 by UNDP; and full census in 1998 by Ministry of Civil Service and Labor.		
1/ 0.02 percent—i.e., one person.		
2/ Includes those with less than six years and six years of secondary education.		
3/ Includes those with primary education, no education, and nondeclared.		

72. **Status.** The lack of qualified applicants also contributed to the hiring of a large number of civil servants on a “contractual” basis (*sous-contrat*), who did not benefit from the hierarchical career track and were not subject to the career management practices of the public administration. The census results of 1995 put the share of core civil servants (excluding teachers) on a contractual basis at almost three-fourths of the total.²² The contractual basis (*sout statut*) was meant to be temporary and subsequently regularized to a statutory basis. Owing to administrative constraints, this process has taken much longer—many staff remained contractual for several years—but by fall 1999, most contractuels had been converted.

73. **Salaries.** After the end of the war and genocide in 1994, civil service salaries continued to fall in real terms. A 20 percent across-the-board wage increase during 1996 was not enough to offset the effects of the high inflation and devaluation in 1994–95 (Table 6). In

²² Teachers have a special, “full” status, comparable to that of “*sous-statut*.”

addition, wages and other benefits were insufficiently differentiated across skill levels, further contributing to poor incentives, lack of motivation, and difficulties in recruiting and retaining technical and professional staff. Moreover, these problems were exacerbated by the large salary differentials with private, parastatal, and international institutions (Table 7). These differentials were only partly offset—and only for the highest three civil service categories—by nonwage benefits in the form of housing and transportation allowances (Table 9). During the period 1995–97, Rwanda’s average wage per civil servant relative to per capita GDP was less than half the prewar level, and well below the average for sub-Saharan African (SSA) countries (Table 6).

Table 9. New and Old Salary Structure, 1995–99 (In Rwanda francs per month)			
Civil Service Employment	1995–98		From 1999
	Base salary	Including fringe benefits	Monetized salary
Secretary General	49,487	539,487	251,002
Director General	45,540	535,540	209,503
Director	39,924	330,757	157,615
Chief Supervisor	36,281	36,281	106,455
Supervisor	32,789	32,789	57,789
Administrative Secretary	28,538	28,538	53,538
Principal Civil Worker	27,332	27,332	37,332
Civil Worker	25,006	25,006	35,006
Principal Secretary	21,528	21,528	28,028
Secretary	20,203	20,203	26,703
Assistant Secretary	18,547	18,547	25,047
Third-Class Principal Officer 1/	16,934	16,938	20,934
Second-Class Principal Officer	15,379	15,379	19,379
First-Class Principal Officer	14,040	14,040	18,540
Principal Agent	12,420	12,420	16,420
Officer	10,620	10,620	15,120
Assistant Officer	9,000	9,000	13,000
Ratio: highest to lowest	5.5 to 1	60 to 1	19 to 1

1/ These categories include most teachers.

74. **Initial reform steps.** During 1995–97, the government initiated a civil service reform program to achieve an affordable civil service—one that is small, better trained, and better paid. In the process, a civil service census was carried out at end-1995 and updated at end-1997 that provided a basis for streamlining and rationalization, including a reduction in the number of ministries from 22 to 18. However, the structure was still characterized by excessive layers of management, duplication, and centralization. Qualification requirements were not specified, grades for most posts were not indicated, and certain posts with

completely different functions were given the same titles. As a result, most employees did not know exactly where they stood in the hierarchy. In addition, lack of effective recruitment controls resulted in a larger-than-expected wage bill and size of the civil service.

75. During 1996–97, the public sector wage bill represented about 4½ percent of GDP. Although well below the average for SSA countries (Table 6), the wage bill in Rwanda represented a higher share of total revenue (50 percent) than the average for SSA (37 percent). Similarly, the size of the civil service (equivalent to 0.4 percent of the population) was much lower than the average for SSA (1 percent of the population) (Table 5). In view of Rwanda's small size and very high population density, a lower-than-average ratio of civil service size to population would seem justified. In this light, there was a clear need for accelerating the reform of the civil service.

D. Elements of Reform During 1998–99 Under the Government's Three-Year Adjustment Program Supported by ESAF

76. In the context of its three-year program supported by a three-year Enhanced Structural Adjustment Facility (ESAF) arrangement approved in mid-1998, the government accelerated its efforts to establish a leaner, better-qualified, and better-paid civil service. The objectives of the reform under the ESAF-supported program include (a) centralization of recruitment controls, with approval by both the Ministers of Civil Service and of Finance for all new appointments; (b) carrying out of a comprehensive (head count) census of the civil service and subsequent removal of "ghost" workers; (c) retrenchment of at least 2,850 unqualified staff, with appropriate severance payments and retraining arrangements, and a gradual hiring of 2,000 qualified staff; (d) development of a system of job description and classification; (e) development of a new wage structure that will provide for decompression of the salary scale and monetization of fringe benefits; and (f) carrying out of an expenditure review for the health and education sectors.

77. Since early 1998, the government has removed from the payroll some 3,000 unqualified workers and almost 4,000 "ghost" workers while recruiting/reinstating some 9,000 qualified workers, two-thirds of which are returning qualified teachers and one-tenth qualified health workers (Table 5). The ghost workers (mainly teachers) were identified through the requirement that inspectors of schools report those persons listed on the payroll who did not collect their pay. Severance payments for retrenched staff amounted to six months of gross salary for employees *sous-statut* and one month for employees *sous-contrat*.

78. In December 1998, a **physical census** of all civil servants (including teachers) was carried out with financing and technical support from the World Bank. This census identified all actual civil servants and teachers and collected information on qualifications, job experience, and current job characteristics. The census covered ministries while excluding public entities that receive block grants for wages and salaries, as well as the military. It also excluded about 2,500 nonqualified aid workers in prisons, hospitals, and schools who were no longer considered civil servants beginning in January 1999. The census, together with a

detailed comparison with monthly payroll data in early 1999 and follow-up surveys, identified about 38,000 civil servants, of which some 31,000 were found on the payroll; the about 7,000 remaining staff (most of them teachers) were working without a regularized contract and without pay. About 3,000 additional "ghost" workers were identified on the payroll and subsequently removed. The regularization of staff was completed in October 1999, bringing the total number of civil servants on the payroll to about 38,000 today.

79. **Control of recruitment.** Since early 1998, a system of centralized authorization of new recruitment has been in place that requires the approval of both the Minister of Finance (MOF) and the Minister of Civil Service (MCS) for each new appointment. Only positions that are budgeted for are sent for approval to the MOF, and all new employees become in principle *sous-statut*. In order to control quality, all vacant posts in each ministry have job qualification requirements and are advertised. All line ministries are required to send the qualifications and curriculum vitae of each applicant, with a cover letter, to the Public Administration Department of the MCS. This department matches the qualifications with the *cadre organique*²³ and sends the file of the applicant to be hired to the MOF for endorsement.

80. **The management of the payroll** has recently been centralized for all civil servants (*sous-statut* and *sous-contrat*) at the MCS. Its *centre de paie* (CNCS) maintains a master list of all staff, and ministries are required to inform the MCS of any departures of staff members so that they may be removed from the payroll. New recruits can be added to the master list only if they have received the requisite approval of the MOF and the MCS. At the end of every month, the MCS provides the list of payees to the MOF, which arranges for payment of their salaries into their bank accounts. In order to improve payroll management, a centralized and computerized payroll system was put in place in the second half of 1998. The system, which has been in effect since September 1998 for teachers and since early 1999 for all ministries, currently covers all *sous-statut* and *sous-contrat* employees and helps prevent the emergence of new "ghost" workers. Furthermore, a computer-based civil service data system is under preparation and expected to become effective by early 2000. The system manages the entry and exit of personnel from the civil service and payroll and follows career and training needs of each civil servant.

81. **Revised pay structure.** In early 1999, the government significantly increased civil service wages, while introducing a **revised pay structure**. The new salary structure replaces all the existing fringe benefits (that is, car and fuel allowances and housing benefits in kind) by monetary allowances and provides for a more decompressed salary scale at the subtop level, but a more compressed top-bottom ratio (Table 9). Under the old structure, the ratio of the salary (excluding fringe benefits) of the Secretary General (the highest-paid public employee) to that of the lowest-paid was 5.5:1 (including fringe benefits, the ratio was 60:1). Under the

²³ The *cadre organique* describes the organizational size and structure of each ministry, as well as the posts held by, and qualifications of, its staff.

new structure, all fringe benefits were monetized, and a new scale with a top-bottom ratio of 19:1 was adopted. Accordingly, salary increases ranged from fivefold for top government officials to about 40 percent for the lowest categories. The elimination of housing and transportation allowances provided for the whole of the increase and the base salary remained the same.

82. According to existing regulations for all employees, income tax is levied on 115 percent of the base salary (to the extent that the housing allowance is at least 15 percent of the base salary), while the transportation allowance is not taxed. In addition, for those who, for a transitional period, continue to live in government houses, imputed rent is deducted at source, at a rate of 30 percent of net pay.

Preparation of new structures. The current structure of the civil service is full of anomalies and provides little motivation for employees. First, the current system of job classification categorizes all civil servants solely on the basis of education and without consideration to the task to be performed; moreover, the number of categories and grades differs in each ministry. Second, the organizational structure has no established administrative hierarchy based on tasks and responsibilities, and there are no well-defined job responsibilities based on job descriptions. Third, there is no transparent promotional system for career advancement, annual performance appraisals are not systematically undertaken, and there are no motivational programs for personnel management. Finally, the salary structure and levels corresponding to the categories and grades are inconsistent, as a Director may receive the same salary as an Administrative Secretary. The government has recently introduced a streamlined job classification system, which has only 11 grades, and 3 levels per grade, for all public service staff (including teachers). Furthermore, in order to improve efficiency, effectiveness, transparency, and accountability, the government has recently revised the organizational structure of all ministries to be implemented in late 1999. Meanwhile, a major cabinet reshuffle took place in February 1999, through which the number of ministries was increased from 16 to 18, and 2 new ministries created for "local administration" and "land, human resettlement, and environment protection" (Table 10).²⁴ The new functional organization under implementation aims at reorganizing the structures of all ministries, redistributing and streamlining functional responsibilities to limit duplication of work, and reducing the number of departments within ministries and public sector institutions.

²⁴ The 21 ministries comprise 18 ministries and 3 ministries at the presidency without portfolio.

Table 10. Organizational Structure of Central Government, 1997 and 1999	
1997	1999
Presidency (PRESIREP) Vice Presidency (VISE PRESIREP) 1. Prime Minister (PRIMATURE)	Presidency (PRESIREP) Vice Presidency (VISE PRESIREP) 1. Prime Minister (PRIMATURE)
Ministries with national responsibilities (7) 2. Ministry of Defense and National Police (MINADEF) 3. Ministry of Internal Affairs 4. Ministry of Finance and Economic Planning (MINECOFIN) 5. Ministry of Foreign Affairs (MINAFFET) 6. Ministry of Justice and Supreme Court (MINJUST) 7. Ministry of Civil Service, Labor, Training (MIFOTRA) 8. Ministry of Information 9. Minister in the President's Office 1/	Ministries with national responsibilities (8) 2. Ministry of Defense and National Security (MINADEF) 3. Ministry of Internal Affairs and Community Development 4. Ministry of Finance and Economic Planning (MINECOFIN) 5. Ministry of Foreign Affairs (MINAFFET) 6. Ministry of Justice (MINJUST) 7. Ministry of Civil Service and Labor 8. Ministry of Information 9. Minister in the President's Office 1/ 10. Ministry of Local Administration 11. Minister in the President's Office for Institutional Relations 1/
Ministries with sectoral responsibilities: economic (5) 10. Ministry of Commerce, Industry, and Mines (MINICOM) 11. Ministry of Agriculture, Animal Husbandry and Forestry (MINAGRI) 12. Ministry of Transport and Communications and Tourism (MINITRACOM) 13. Ministry of Works, Energy and Water Resources (MINISTRAPE) 14. Ministry of Mines and Tourism	Ministries with sectoral responsibilities: economic (4) 12. Ministry of Commerce, Industry, and Tourism (MINICOM) 13. Ministry of Agriculture, Animal Husbandry and Forest (MINAGRI) 14. Ministry of Public Works, Transport and Communications (MINITRACOM) 15. Ministry of Energy, Water and Natural Resources (MINITRAPE)
Ministries with sectoral responsibilities: social (4) 15. Ministry of Education (MINEDUC) 16. Ministry of Health (MINISANTE) 17. Ministry of Women and Social and Cooperative Affairs (MIGESCA) 18. Ministry of Youth, Sports and Culture Affairs	Ministries with sectoral responsibilities: social (6) 16. Ministry of Education (MINEDUC) 17. Ministry of Health (MINISANTE) 18. Ministry of Social Affairs (MIGESCA) 19. Ministry of Youth, Sports and Culture Affairs 20. Ministry of Lands, Human Resettlement and Environment Protection 21. Ministry of Gender, and Women in Development
1/ Not a Ministry, Minister without portfolio.	

83. **Training/capacity building.** For those who were removed from the civil service with a retrenchment package, funding has yet to be identified for their retraining. In the education sector, in-service training is being provided for all underqualified teachers to enable them to become qualified. In order to improve the quality of services in the health sector, the government began training nurses and laboratory technicians in the 1997/98 academic year at a newly established health college. With the expected number of graduates per year, the number of doctors and nurses would double in three to four years.

84. **Governance.** A code of conduct for all civil servants is currently being prepared that will redefine the rules and regulations for all government employees. In addition, the Office of the Auditor General (AG) became operational in mid-1999. The AG has investigative powers vis-à-vis all government entities and can propose to the Attorney General the prosecution of officials for corruption or noncompliance with the law or regulations.

85. **Decentralization.** Rwanda's current administrative structure is strongly centralized, with 12 *préfectures* and 155 *communes*, that are governed by centrally appointed officials (*préfets* and *bourgemestres*, respectively) and depend almost entirely on transfers from the central government. However, the government is committed to decentralization; in February 1999, a new Ministry of Territorial Administration was created, and elections were held for representatives at the sector and cell levels.²⁵ In due course, the elected governors (responsible to sectoral councils) will replace the communes and bourgemestres.

86. In 1999, the government, with financial support from the UNDP and other donors, has started to implement a two-phased approach to coordinating and piloting its decentralization program. The first phase of the program aims at strengthening the government's capacity to coordinate community development and participation activities, and the second phase aims at conceptualizing and developing a decentralization policy, including the development of a tax policy that gives autonomy to local authorities. Postelection training is also being provided for trainers and elected officials (a total of 160,000 elected local officials) at the sector and cell levels.

²⁵ There are about 1,500 sectors (small communes), with an average about 5,000 people per sector. A "cell" consists of about 100 people.

V. TRADE LIBERALIZATION AND REGIONAL INTEGRATION²⁶

A. Introduction

87. Shortly after the end of the war, in 1994, Rwanda embarked on a comprehensive liberalization of its foreign trade regime and adhered to the regional integration targets under the Cross-Border Initiative (CBI) and Common Market for Eastern and Southern Africa (COMESA). Progress in the first years was gradual. Like many low-income countries, Rwanda traditionally depended to a great extent on trade taxes for its government revenue,²⁷ and revenue considerations explain in some measure the slow pace of trade liberalization. The more rapid reduction of trade barriers originally envisaged, in particular for cross-border trade, was also hampered by the pressure to maintain protection for local industries and the lack of reciprocity on the side of some of its regional partners. In 1997, the authorities accelerated the trade reform by stepping up the implementation of the CBI objectives. In three stages, Rwanda reduced its average tariff rate by two-thirds and eliminated all export taxes and nontariff barriers.

88. As a result, Rwanda's rating on the IMF trade restrictiveness index²⁸ improved from 8 in 1997 to 2 in 1999, and its reliance on international trade taxes fell from one-third to one-fifth of total revenue, without an accompanying decline in the overall revenue level. This outcome was achieved by improvements in revenue collection, an increase in domestic indirect taxes, and improved coverage of direct taxes. Overall, Rwanda's progress in trade liberalization has been faster than that of most sub-Saharan African countries. Its experience shows that a rapid liberalization of trade need not result in large revenue losses if the trade policy reform is implemented as part of a comprehensive tax reform, combined with increased efficiency of revenue collection.

B. Openness of the Economy, Composition, and Direction of Trade

89. Rwanda is a relatively closed economy as measured by its exports-to-GDP ratio (Table 11). This seems to be as much related to its underdevelopment as to its geographical location; Burundi and Uganda, two other landlocked countries in the region, feature very

²⁶ Prepared by Jaroslaw Wieczorek.

²⁷ Before the war, trade taxes accounted for more than one-third of fiscal revenue.

²⁸ The methodology of the IMF trade restrictiveness index is described in *Trade Liberalization in IMF-Supported Programs*, World Economic and Financial Surveys, Appendix I (Washington: International Monetary Fund, 1998).

similar exports-to-GDP ratios. Rwanda's imports-to-GDP ratio is higher than that for the other two countries, but this appears to be mainly due to the surge in the foreign aid inflows during the post-1994 period.

	1992	1993	1994	1995	1996	1997	1992-97 Average
Exports, f.o.b.							
Rwanda	9.6	4.9	7.4	4.5	11.1	5.2	7.1
Burundi	6.8	6.4	11.1	8.5	3.3	7.1	7.2
Congo, Dem. Rep. of the	19.8	15.0	19.6	22.8	21.1	18.6	19.5
Kenya	16.3	22.2	23.5	21.4	23.2	21.1	21.3
Tanzania	9.7	10.3	12.5	13.8	13.0	10.4	11.6
Uganda	6.3	4.2	9.2	9.3	9.3	8.2	7.8
Imports, c.i.f.							
Rwanda	14.1	13.8	31.7	23.6	27.0	18.9	21.5
Burundi	20.6	20.3	21.8	18.9	11.0	10.0	17.1
Congo, Dem. Rep. of the	10.8	11.5	14.5	19.6	19.1	15.5	15.2
Kenya	22.3	30.3	39.0	40.8	40.0	38.3	35.1
Tanzania	31.0	30.8	33.5	34.9	28.0	28.0	31.0
Uganda	13.9	14.2	13.0	13.0	11.8	11.6	12.9

Sources: IMF, *Direction of Trade Statistics*; and IMF staff estimates.

90. Rwanda's export base is narrow, with coffee and tea accounting for 80 percent of total exports during the 1992-98 period. Coffee alone accounted for almost two-thirds of the total, although the importance of tea has increased in recent years. The remaining 20 percent of exports included artisanal products, skins and hides, small amounts of minerals (cassiterite and tin), and products of vegetal origin (pyrethrum and chincona). This pattern of specialization puts Rwanda in direct competition with many of its regional partners. The bulk of Rwanda's exports are directed outside sub-Saharan Africa, and Rwanda trades only 5 percent of its exports with other sub-Saharan African countries (Table 12). Industrial countries absorbed nearly 80 percent of Rwanda's exports, while the economies in transition and non-African developing countries accounted for the remainder.

Table 12. Geographical Distribution of Trade, 1997		
A. Exports of Goods		
Partner	In percent of total exports f.o.b.	In millions of U.S. dollars
Belgium	39	36
Germany	22	20
Pakistan	8	7
Turkey	4	4
United States	4	4
Spain	3	3
Italy	2	2
France	2	2
United Kingdom	2	2
Netherlands	1	1
Memorandum items:		
World	100	93
Industrial countries	77	72
<i>Of which:</i> European Union	73	68
Developing countries	23	21
<i>Of which:</i> Africa	5	5
COMESA	5	5
CBI	4	4
B. Imports of Goods		
Partner	In percent of total imports c.i.f.	In millions of U.S. dollars
Kenya	19	65
Tanzania	15	52
United States	11	39
Belgium-Luxembourg	9	30
Germany	5	18
Japan	5	17
France	4	13
Thailand	3	10
The Netherlands	3	9
United Kingdom	3	9
Memorandum items:		
World	100	343
Industrial countries	51	175
<i>Of which:</i> European Union	41	140
Developing countries	41	140
<i>Of which:</i> Africa	39	135
COMESA	49	168
CBI	31	108
Sources: IMF, <i>Direction of Trade Statistics</i> , and IMF staff estimates.		

91. On the import side, although sub-Saharan African countries top the list of Rwanda's main trading partners, this mainly reflects a large volume of reexports from Kenya and Tanzania. While detailed information on these reexports is not available, most of the consumption goods imported from these countries appear to be of non-African origin.

Consumption goods accounted for more than one-half of total imports during 1992–98. Capital goods, mainly related to foreign-financed investment projects,²⁹ and intermediate goods accounted for about one-sixth each, and energy products for about one-tenth of total imports. In 1994, in the direct aftermath of the genocide, humanitarian aid accounted for nearly three-fourths of all imports. During 1995–98, its share fell to about one-third of total imports and—with the restoration of food and shelter security in most of the conflict zones—it declined to below one-fourth of total imports in the first half of 1999.

92. There are some indications of informal trade, but its magnitude is unknown. Leakage of coffee exports through Uganda (estimated at about 5-10 percent of total coffee exports) and cross-border trade in agricultural produce and industrial food products are the most commonly quoted examples (e.g., anecdotal evidence suggests that Uganda's share in imports is much larger than the officially reported 0.5 percent). With the abolition of the export tax on coffee as of January 1, 1999, the leakage of coffee is presumed to have fallen significantly.

C. Progress in Trade Reform

93. Trade policy reform in Rwanda has proceeded in stages that have varied in pace and depth. In 1993, prior to adopting the CBI objectives, Rwanda had a very protectionist trade regime. The simple average tariff was 35 percent, and tariff bands ranged from 10 percent to 100 percent, with no zero tariff band in the tariff schedule (Table 13). The state held a monopoly on exports of coffee and tea, and levied a variable export tax on coffee for the purpose of stabilizing producer prices, and all export revenue was subject to surrender requirements. The government relied on international taxes for almost one-third of its revenue (Table 14).

94. The adoption of the CBI objectives at its launch in 1993 played a key role in setting out the agenda for Rwanda's trade reform including, inter alia, the reduction of the maximum most-favored-nation (MFN) tariff to 25 percent over five years and the full liberalization of intraregional trade. Delayed by the 1994 genocide, the first stage of trade reforms was implemented only during 1995–96. In March 1995, the maximum tariff rate was reduced from 100 percent to 60 percent. At end-1995, the state monopoly on the marketing of coffee and tea was abolished, and the price stabilization mechanism for coffee prices was replaced by a progressive export tax. At end-1996, the surrender requirements on proceeds from exports of coffee and tea were reduced to 50 percent.

²⁹ On average, about 90 percent of imports of capital goods in 1992–98 were project related.

Table 13. Evolution of Trade Regime, 1993–99
(In percent, unless otherwise indicated)

	1993–94	1995–97	1998	1999
Tariff regime				
Tariff bands 1/	(10–100)	(0, 10, 20, 40, 60)	(0, 10, 20, 40)	(0, 5, 15, 25)
Average tariff rate by six-digit HS lines 2/	34.8	31.9	18.1	11.3
Tariff dispersion (standard deviation)	33.2	19.7	12.9	8.6
Trade restrictiveness index 3/	10	8	3	2
Tariffs	Restrictive	Restrictive	Moderate	Relatively open
Nontariff barriers	Restrictive	Moderate	Open	Open
Surrender requirements for export proceeds from coffee and tea 4/	100	50	0	0
Sources: Rwanda Revenue Authority; and IMF staff estimates				
1/ The maximum rate was reduced from 100 to 60 percent in March 1995. A zero rate on capital goods has been in force since June 1998.				
2/ Simple average in 1993. "HS" is the Harmonized Commodity Description and Coding System (Harmonized System).				
3/ At end-period. The rating was 2 during the first half of 1999. In July 1999, the imposition of temporary surcharges of 10–15 percent on final and intermediate goods raised the index back to 3.				
4/ State monopoly of coffee and tea exports was abolished in 1995.				

95. The second stage of trade reforms was effected in two steps during the 1997–99 period, with the reduction in the maximum tariff rate to 40 percent in early 1998 and to 25 percent in early 1999.³⁰ On the export side, the surrender requirements on export proceeds from coffee and tea were eliminated in December 1997. The progressive export tax on coffee was replaced with a 16 percent ad valorem tax in mid-1998 and abolished in early 1999. With these reforms, Rwanda's trade regime was brought in line with the CBI objectives, except for the introduction of the zero intra-CBI tariff, which is expected to be implemented in late 2000.

96. Following the changes to the tariff code passed under the 1999 budget, Rwanda's trade regime became one of the most open in sub-Saharan Africa. It is rated 2 on the IMF's 10-point trade restrictiveness index. With three nonzero tariff rates (5, 15, and 25 percent), the average tariff calculated on the basis of six-digit Harmonized System (HS) tariff lines is 11.3 percent (Table 13). The zero rate has been applied to most capital goods since

³⁰ The CBI target date for reducing the maximum tariff to 25 percent was October 1998.

Table 14. Rwanda: Revenue Impact of Trade Reforms, 1993-99

	1993	1994	1995	1996	1997	1998 Est.	1999 Proj.
(In billions of Rwanda francs)							
Taxes on international trade 1/	7.2	2.2	8.9	11.5	18.5	15.8	13.0
Import taxes	7.0	1.8	6.9	10.7	13.5	13.7	10.5
Export taxes 2/	...	0.1	1.8	0.3	4.3	1.6	...
Other taxes on international trade 3/	0.2	0.3	0.2	0.5	0.7	0.5	2.5
Estimated revenue loss from tariff reduction	...	...	...	...	...	3.5	4.5
Import taxes in percent of imports, c.i.f. 4/	14.0	1.8	11.0	13.6	13.0	13.5	10.5
(In percent of GDP)							
Memorandum items:							
Total revenue	9.1	3.6	6.9	9.1	10.3	10.4	10.5
Taxes on international trade 1/	2.5	1.3	2.6	2.7	3.3	2.5	1.9
Import taxes	2.5	1.1	2.0	2.5	2.4	2.2	1.6
Export taxes 2/	...	0.1	0.5	0.1	0.8	0.3	...
Other taxes on international trade 3/	0.1	0.2	0.1	0.1	0.1	0.1	0.4
Domestic indirect taxes	3.6	1.4	2.9	3.3	3.9	4.5	5.3
Other domestic revenue	3.0	0.9	1.3	3.1	3.1	3.4	3.3
(In percent of total revenue)							
Total revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Taxes on international trade 1/	27.8	36.5	38.5	29.2	31.9	23.9	18.3
Import taxes	27.1	29.8	29.8	27.1	23.2	20.8	14.8
Export taxes 2/	...	1.7	7.8	0.8	7.4	2.4	...
Other taxes on international trade 3/	0.8	5.0	0.9	1.3	1.2	0.8	3.5
Domestic indirect taxes	39.7	37.7	42.9	36.5	37.7	43.2	50.3
Other domestic revenue	32.4	25.8	18.6	34.3	30.5	32.9	31.4

Sources: Rwanda Revenue Authority; and Fund staff estimates.

1/ Export and import taxes, and other duties and charges, including the 4 percent warehouse (Magerwa) tax.

2/ The export tax on coffee was abolished in January 1999.

3/ Magerwa tax and other duties and charges, including the import surcharge, introduced in July 1999.

4/ Given the scope of exemptions on aid and public investment-related imports, the effective collection rate on nonexempted imports is about twice as high.

103. Apart from manmade obstacles to trade, a landlocked country, like Rwanda, faces significant natural barriers to trade. Thus, beyond the liberalization of trade in goods and movements of factors of production, the development of trade-related infrastructure is essential for regional cooperation. The damage inflicted by heavy rains associated with El Niño on the road systems in Tanzania and Kenya in 1998 and the enforcement of maximum truck weight rules in Kenya (starting in late 1998) have imparted a new sense of urgency to

this issue. In response to a significant adverse impact on transport costs and capacity, Rwanda recently initiated the rehabilitation of the railroad connection to Dar es Salaam, which would offer a sizable cost advantage compared with transportation by trucks.

F. The Remaining Agenda

104. Rwanda has successfully liberalized its trade during the last three years. The major pending change to the trade regime is the application of the zero rate for imports from COMESA and CBI countries scheduled for October 2000. Further policy commitments in the trade area include conversion of the warehouse (Magerwa) tax into a statistical tax; improved control and administration of exemptions for diplomats, nongovernmental organizations, and government imports, including the effective use of treasury checks. The success of these reforms, while increasing the revenue-to-GDP ratio, will at the same time depend on further improvements in customs administration and the effectiveness and coverage of domestic direct and indirect taxes (including the introduction of a value-added tax envisaged for mid-2000). In addition, the further enhancement of intraregional trade will require improvements in the institutional environment for the private sector, including through the effective implementation of the new investment code, a further liberalization of the exchange regime, and the simplification of procedures for customs declaration and for setting up new businesses.

VI. RECENT EXPORT PERFORMANCE AND POLICIES³⁵

A. Introduction

105. Rwanda's export pattern has reflected its unique geographical location and its natural endowments. Owing to its high-quality soils, abundant rainfall, and climate (moderate by African standards) combined with a very high population density, Rwanda has enjoyed a comparative advantage in the production of high-value-added, labor-intensive crops, such as coffee and tea, which have traditionally accounted for 80–90 percent of its export revenue. Rwanda's geological environment features several rare minerals, including high-purity ores of tin (cassiterite), tantalum, niobium (coltan), and wolfram, as well as recently discovered deposits of natural gas.

106. Rwanda's natural conditions are also favorable for the production of other high-value-added exportable goods, such as extracts of pyrethrum and cinchona (used in agribusiness and the pharmaceutical industry), and the production of decorative plants and fresh-cut flowers. Despite long-term efforts in those areas, exports of these products have been hampered by a lack of expertise and logistic infrastructure. Similarly, Rwanda has a significant export potential in skins and hides (constrained by limited processing capacity), textiles, and artisanal products.

107. The distance that separates Rwanda from the international markets is a major constraint on its ability to export its agricultural surplus in bulky crops, staple foodstuffs, and other perishable items, which Rwanda produces in quantities exceeding its domestic demand. The route to Dar-es-Salaam, the nearest ocean port, is more than 1,500 kilometers long. The more frequently used route to Mombassa via Uganda is even longer (about 1,800 kilometers). At present, the transport costs are additionally raised by the poor state of infrastructure in the entire East African subregion. As a result, only limited quantities of potatoes, tomatoes, green beans, bananas, and other crops produced in Rwanda are sold mainly in informal cross-border trade.

B. Export Developments During 1983–94

108. Rwanda's exports in U.S. dollar terms peaked in 1986 following the hike in international coffee prices in 1984–85 (Figures 1–3). In that year, coffee receipts exceeded 80 percent of total export revenue. With the subsequent rapid decline of coffee prices on the world market, the share of coffee in Rwanda's exports dropped to nearly 50 percent in 1992. The relative decline in coffee receipts was offset partly by the rise of tea receipts to about 30 percent of export revenue in 1992 that closely followed the rapid increase in the international prices of tea in the early 1990s. In volume terms, the exports of coffee peaked twice above 45,000 tons in 1987 and again in 1990 and declined rapidly to their normal level

³⁵ Prepared by Jaroslaw Wiczorek.

The 5 percent rate is applied to most intermediate goods and certain essential foodstuff, such as rice. The 15 percent applies to the majority of consumption goods including most categories of motor vehicles. The maximum rates is applied to nonessential consumption goods, such as cigarettes, alcoholic beverages, and luxury vehicles. The dispersion of tariffs is very low (standard deviation by six-digit HS tariff line is 8.6 percent). There are no quantitative restrictions and virtually no other nontariff barriers. Other duties and charges include the 4 percent warehouse fee on imports, of which 1 percent accrues to the warehouse agency (Magerwa) and 3 percent to the government.

D. The Fiscal Impact of Trade Reform

97. The revenue impact of the 1995–97 trade reforms was more than offset by the improvement in tariff collection and the expansion of the tax base. Helped by the postwar recovery and, to a smaller extent, by a temporary peak in the international coffee prices, the revenue from taxes on international trade as a share of GDP increased by some 50 percent during that period. Under the 1998 tariff reform, which included a substantial reduction in the average tariff, the revenue from tariffs remained broadly unchanged compared with 1997 (Table 14) as the estimated loss of tariff revenue (RF3.5 billion) was largely offset by improved collection, a reduction in tariff exemptions, and the increase in the sales tax from 10 percent to 15 percent.

98. From the fiscal perspective, the effectiveness of the current regime remains to be tested. Further improvements in customs administration were expected to make up for at least half of the expected revenue loss from the 1999 tariff reform (projected at RF 4.5 billion). However, during the first half of 1999, imports fell below the 1998 level on account of the increase in transportation costs on the Kenyan route and the lifting of the embargo on exports to Burundi. As a result, the revenue from tariffs fell short of the originally envisaged level by almost one-fourth.

99. The improvement in the effectiveness of tariff collection during 1997–98 was achieved chiefly through the reduction of exemptions and an improvement in tax administration that followed the establishment of the Rwanda Revenue Authority at end-1997. The administrative measures included the overhaul of the customs and tax departments (including through the removal of fraudulent staff, training, and improvements in salaries); the extension of pre-shipment inspections; the adoption of reference pricing with respect to certain categories of typically underinvoiced imports, such as petroleum products; and a tightening of controls of transit trade. The reduction of tariff rates made collection enforcement easier by reducing incentives for tax evasion and tax avoidance. The more effective customs collection is also evident from the improvement in the Magerwa tax collection (from 1 percent of imports, c.i.f. in 1997 to 1.6 percent in 1998).

E. Regional Integration

100. While liberalizing its external trade regime on an MFN basis, Rwanda also made significant advances in regional integration. A World Trade Organization (WTO) member since May 22, 1996,³¹ Rwanda is a party to the CBI, and a member of COMESA, the Economic Community of Central African States (ECCAS), and several smaller, largely inactive organizations.³² It has also been invited to join the Commission for East African Cooperation (EAC)³³ and is expected to become a member in the near future. Integration with CBI and COMESA partners is at the core of Rwanda's regional policy. In late 1998, Rwanda adopted a preferential tariff schedule vis-à-vis its COMESA partners,³⁴ with the maximum rate of 10 percent on selected consumption items (60 percent reciprocal COMESA preference). Under Rwanda's 1998 COMESA tariff schedule, most of the intra-COMESA trade is subject to 1–4 percent tariffs. Importers have the liberty of choosing between a COMESA rate or the rate applicable under the general tariff schedule if the general provisions are more favorable (e.g., in the case of certain capital goods).

101. With the new investment code (in force since early 1999), Rwanda is complying with the CBI provisions on foreign investment, including through the establishment of a one-stop investment agency. The code regulates, among other things, the functioning of export processing zones. The tariff regime under the code includes a preferential 5 percent tariff rate (including sales tax) on all production inputs other than capital goods, which are subject to zero tariff under the general tariff regime. By adopting the COMESA visa protocol in early 1999, Rwanda also allowed for a limited liberalization of cross-border movements of labor with its CBI and COMESA partners.

102. Restoration of durable peace in the Great Lakes region remains a prerequisite for deeper regional cooperation. Other obstacles to further regional integration include protectionist pressures from domestic industry and the perceived need for tax concessions stemming from tax competition among neighboring countries, (e.g., the company income tax is 40 percent in Rwanda, compared with a range of 25–30 percent in Kenya, Uganda, and Tanzania). In addition, the difficulties in obtaining certificates of origin hamper the application of the existing preferential tariff rates for intra-CBI and intra-COMESA imports.

³¹ Rwanda has the status of a least-developed country in the WTO.

³² Such as the Kagera Basin Organization and Communauté Economique des Pays des Grand Lacs (CEPGL)

³³ Comprising Kenya, Tanzania, and Uganda.

³⁴ Democratic Republic of the Congo is the only non-CBI COMESA member that has significant trade relations with Rwanda.

Figure 1. Rwanda: Exports, 1982-98
(In millions of U.S dollars)

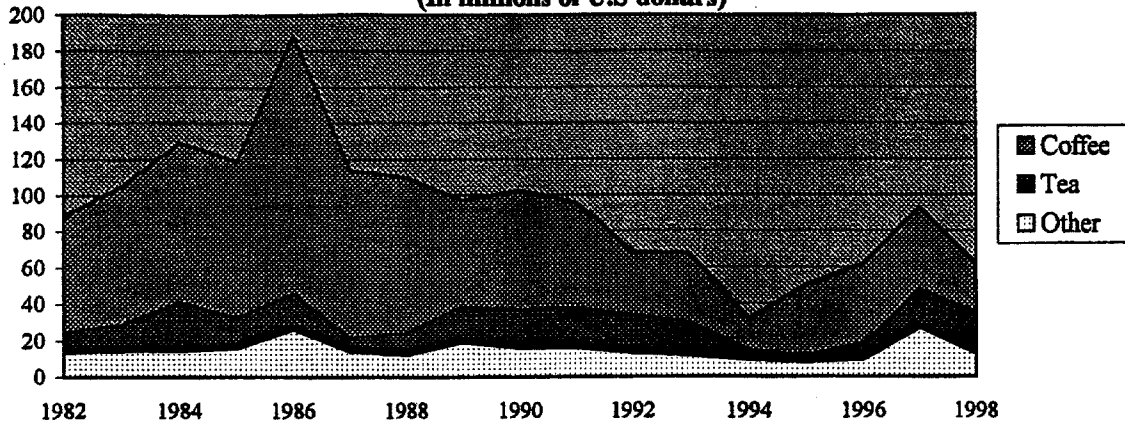


Figure 2. Rwanda: Coffee and Tea Export Volumes, 1982-98
(In tons)

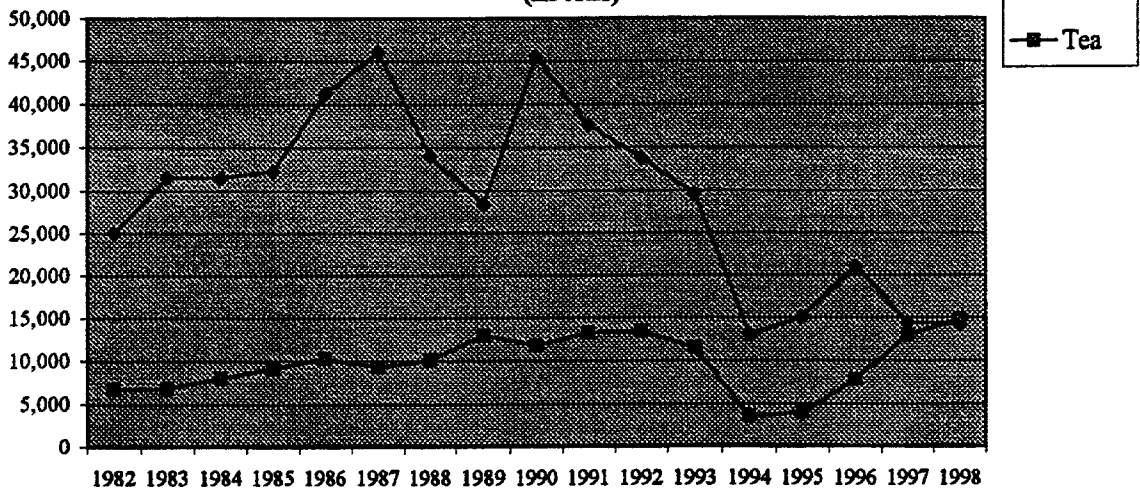
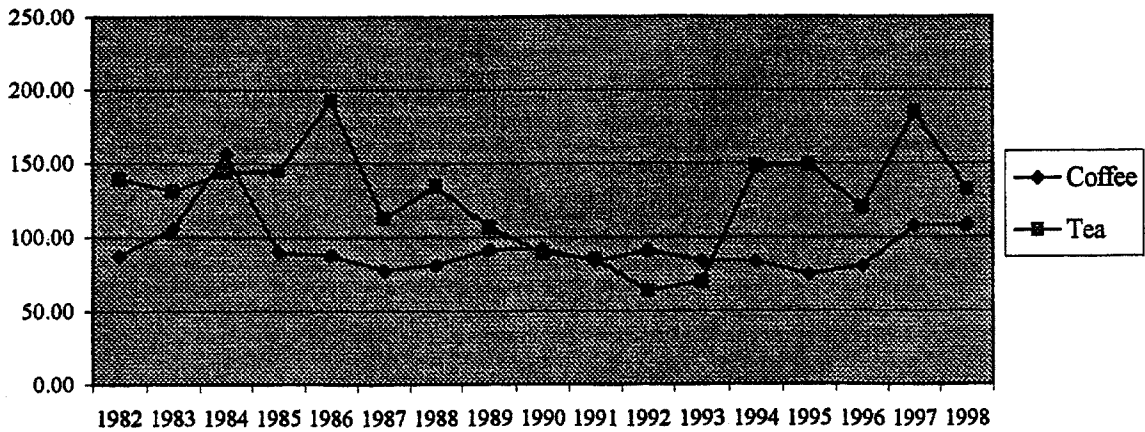


Figure 3. International Prices of Coffee (Arabica) and Tea, 1982-98
(In U.S. cents per pound)



of about 30,000 tons during the early 1990s. At the same time, exports of tea grew steadily in volume terms until peaking at 13,500 tons in 1992. Overall, the long-term trends in coffee and tea exports for Rwanda were similar to those for the entire sub-Saharan Africa during the postcolonial period (Box 2).

Box 2. Coffee and Tea Exports from Sub-Saharan Africa in Global Perspective		
Africa's share in OECD imports over the 30 years between the early 1960s and early 1990s declined by 11.1 percent. Although coffee (-7.2 percent) and tea (-6.7 percent) did better than average, sub-Saharan Africa lost its international market share in these two commodities to other coffee-and tea-producing regions.		
Coffee and Tea Exports from Sub-Saharan Africa, 1962-64 and 1991-93 (In percent, unless otherwise indicated)		
	1962-64	1991-93
Coffee		
Exports from sub-Saharan Africa (in million of U.S. dollars)	448	1,053
Share in world exports	12.9	6.9
Share in OECD imports	22.7	15.5
Global export growth rates 1/		4.4
Growth rate in exports from sub-Saharan Africa 1/		3.0
Tea		
Exports from sub-Saharan Africa (in million of U.S. dollars)	37	246
Share in world exports	1.1	2.8
Share in OECD imports	15.5	8.8
Global export growth rates 1/		10.7
Growth rate in exports from sub-Saharan Africa 1/		6.8
Source: Francis Ng and Alexander Yeats, "What Caused Africa's Marginalization in World Trade?" (World Bank, 1996). 1/ Annual average growth rate 1963-92.		

109. In 1992-93, export volumes declined to 90 percent of their level a decade earlier. This weak performance reflected interventionist policies that resulted in poor productivity growth and the absence of diversification in response to changing world market conditions. The pre-1994 government set producer prices for coffee and tea and exercised the monopoly of their processing and trading. Moreover, the government effectively prevented private investors from exploiting Rwanda's comparative advantage and export potential by raising protective barriers around its import-competing sectors.

110. The period of war and genocide, followed by a mass displacement of Rwanda's population, resulted in an extensive disruption of economic activity and led to a dramatic decline in coffee and tea crops, causing Rwanda's exports to drop to its historic lows. In 1994-95, exports of coffee plunged below 40 percent, and exports of tea below 30 percent, of the pre-1994 level.

C. Export Developments Since 1994

111. The postwar government faced three challenges: dealing with the direct economic consequences of the war and genocide; tackling the pervasive structural problems of the traditional export sectors; and promoting the development of nontraditional exports, based on Rwanda's natural endowments and regional opportunities.

112. Initially, the surge in international coffee prices and in the informal reexports of coffee beans from Burundi (at that time still engulfed by the ethnic conflict) boosted the revenue from coffee in 1995-97 to about 80 percent of its prewar average. However, coffee production continued to stagnate, owing to destruction and lack of maintenance, shortages of labor, and persistent security problems. Tea, on the other hand, fared much better, reflecting good progress in restoration of the prewar capacity. After an initial period devoted to the regeneration of tea plantations and rehabilitation of tea factories, tea exports reached the historic high of nearly 15,000 tons in 1998 and exceeded in volume terms in that year the exports of coffee. Also helped by relatively favorable world prices, the share of tea in total exports in U.S. dollars increased to 37 percent in 1998 (from the average of about 25 percent during the early 1990s), and the share of coffee fell from nearly 60 percent to slightly just over 40 percent during the same period. Most recently, the security situation has improved in the regions of Ruhengeri and Gisenyi, both prime coffee-growing locations, resulting in better incentives for investment in coffee and lower transportation costs.

113. The differences in the performance of the coffee and tea sectors in recent years can be largely attributed to three sets of factors. First, there are substantial differences in the technological aspects of coffee and tea cultivation. Tea plantations were fully regenerated in three years, and by end-1997 all the economically viable tea plantations were restored to their prewar capacity. The high concentration of tea plantations in the proximity of tea factories also facilitated the restoration process. Meanwhile, in the coffee sector, one-third of the plantations should be regenerated every seven to ten years. Moreover, the absence of proprietors and shortage of labor in key coffee-growing areas further delayed their regeneration.

114. Second, there are important differences in the market structure of the coffee and tea sectors. Coffee is grown by thousands of small planters, who sell the semiprocessed beans (*café parche*) to the intermediaries or directly to exporters. In the event, the transmission of world market signals and policy incentives (such as the abolition of the export tax in early 1999) to coffee producers is impeded by the exporters' disproportionate market power. The tea sector, on the other hand, with only one private company producing 25 percent of Rwandese tea, is dominated by a parastatal organization (accounting for the remaining 75 percent of tea production). This parastatal has benefited from the official foreign assistance extended for the rehabilitation of public sector enterprises, whereas no such assistance was offered to the coffee sector.

115. Third, the fluctuations of the international prices of coffee and tea have followed a markedly different pattern in recent years, with coffee prices fluctuating widely and tea prices following a gradual upward trend (Figure 1).

116. The nontraditional exports have remained weak. The liquidation of prewar stocks of pyrethrum contributed to the 1997–98 increase in exports. Some revival took place in the exports of skins and hides, textiles, and artisanal objects, but no clear trend can be discerned regarding these sectors. Despite the improved security conditions, mining activities have not yet resumed at a significant level, pending the return of investors' interest and the restoration of the marketing channels.

D. Policies Toward Reviving Coffee and Tea Exports

117. During the decades of independence, Rwanda has established itself as a reputable producer of coffee and tea. Rwandese coffee and tea are considered by many international experts to be of exceptionally high quality. Albeit produced in relatively small quantities compared with other African coffee- and tea-exporting countries, selected varieties of Rwandese tea (the so-called mountain tea from Mata) are particularly appreciated. It appears that tea growing has better prospects in Rwanda than coffee, which requires extensive investment in planting of high-yield varieties in order to ensure a sustained growth of production. Thus, although coffee still remains the primary source of revenue, tea could, under appropriate policies, become Rwanda's main export commodity. Tea production remains constrained by the limited processing capacity of the existing tea factories. It is estimated that if the processing bottlenecks were removed, exports of tea could triple even without an expansion of the presently cultivated areas.

Policies for the coffee sector

118. **Background.** The coffee cultivated in Rwanda is of the Arabica variety, grown at altitudes of about 800 meters. The yields, however, are much lower in Rwanda than in other Arabica-producing regions. For example, the average yield in Rwanda is 0.5–0.8 tons per hectare compared with 1.0–1.5 tons per hectare in Kenya. This partly reflects the poor state of the Rwandese plantations, the low use of fertilizers, and the prevalence of low-yield varieties. In 1997, the total acreage of coffee plantations was 53,000 hectares. Coffee plantations are on average small, do not differ much in size, and are cultivated exclusively by small coffee growers, who combine the cultivation of coffee with that of potatoes, bananas, and other subsistence crops. A plantation of 300 trees (grown on about one-fourth of a hectare) is already considered large.³⁶

³⁶ According to the recent census, some 400,000–600,000 households are involved in coffee growing. Under the old system, coffee growing was obligatory for peasants, and most of them only marginally depend on coffee for their income.

119. **The old system.** Under the old (prewar) system, OCIR-Café (Office des Cultures Industrielles du Rwanda-Café) was a key instrument of the government's control over the coffee sector. The government was also the largest shareholder and exercised effective control of the company RWANDEX, which benefited from a virtual monopoly of coffee exports. OCIR-Café was running a Coffee Stabilization Fund and fixing the producers' price of coffee. It was also responsible for the extension of coffee cultivation areas and development of new plants and varieties. It filled practically all the links in the chain of coffee processing: washing, fermentation, depulping, deparching, and storage. OCIR-Café financed its operations by charging exporters (RWANDEX) a handling fee of US\$48 per ton of green coffee (*café marchand*) retained during the obligatory certification of quality and origin. The bulk of the revenue was used for purchasing fertilizers, which were distributed to the producers free of charge. OCIR-Café maintained two large washing stations and a number of warehouses, and provided on a communal basis a variety of small equipment used by coffee producers for the initial processing of the harvested coffee berries.

120. OCIR-Café was very inefficient, which had a negative impact on the performance of the entire coffee sector. A secular decline in the international coffee prices beginning in 1991 led to the depletion of the stabilization fund, which undermined the entire price stabilization mechanism. The decline in coffee production and the impoverishment of the coffee producers undercut the economic viability of the washing stations, which were built with a view to taking advantage of the cost-efficiency and quality premium generated by the large-scale coffee processing.

121. **The reforms.** In late 1994, the new government launched major liberalization policies aimed at reviving the coffee sector. The principal steps consisted in the withdrawal of OCIR-Café from commercial activities and the liberalization of producer prices, the opening up of the export market for new entrants, and the privatization of the government-owned washing stations and warehouses.

122. **Entrance.** In January 1995, the government publicly announced a policy of free entry into the coffee export business, and thus ended the effective monopoly of RWANDEX. Several new companies entered the coffee export business, although several smaller companies (Salama Café, KAGERA-Coffee, Al Café, and CAFERWA) dropped out from the market within two years. In 1998, after the international coffee prices dropped by 40 percent and the third-largest company, COFFEX (15 percent of the market in 1997) withdrew from competition,³⁷ RWANDEX wound up sharing the Rwandese coffee export market, in nearly equal proportions, with RWACOF, the only remaining contender.

³⁷ In 1999, COFFEX's assets were taken over by a new company, SICAF.

123. The withdrawal of OCIR-Café from the coffee market has been gradual. In January 1995, the government decided to discontinue the Coffee Stabilization Fund³⁸ and replace the price fixing mechanism by a progressive export tax system. The government attempted to keep producer prices at RF 300 per kilogram by adjusting the tax rate depending on world coffee prices (taxing the exporters' profit margin). Starting in April 1998, the government switched to a fixed ad valorem export tax of 16 percent. At the same time, the handling fee charged by OCIR-Café was changed from the specific rate of US\$48 per ton of green coffee to 3 percent of the Mombassa f.o.b. price. In parallel, the surrender requirements on export proceeds were reduced from 90 percent to 50 percent in December 1996, and eliminated altogether in December 1997.

124. The anecdotal evidence suggests that the relatively heavy tax burden on coffee exports was a serious disincentive for coffee producers and exporters to sell coffee through the official channels, and a major incentive for them to smuggle coffee through neighboring countries. The combined 19 percent levy amounted to about 21.5 percent of the Kigali f.o.t. (free on truck) price. The government decided to abolish the export tax altogether under the 1999 budget law. To ensure that the benefit from the elimination of the export tax will be shared between exporters and producers, OCIR-Café began announcing weekly indicative producer prices of coffee during the coffee season, based on the Mombassa price after transportation costs, certification fees, and "normal" profit margins for the exporters. This practice met with the strong opposition of exporters, who have seen their profit margin shrink since 1997 (Table 15).³⁹

Table 15. Producer Prices for Semiprocessed Coffee (<i>Café Parche</i>), 1994-98						
	1994	1995	1996	1997	1998	1999
Producer prices (Rwanda francs/kg <i>café parche</i> 1/	300	300	300	350	300	270
International green coffee price (in US\$/kg)	1.3	2.6	2.1	3.1	1.9	1.6
Producer price (in percent of export price) 2/	146.2	63.6	68.2	52.8	72.9	72.6
Sources: OCIR-Café; World Economic Outlook database; and IMF staff estimates.						
1/ Beginning in 1995, producer prices were no longer fixed by OCIR-café.						
2/ About 1.4 kg. of parchment coffee (<i>café parche</i>) makes 1 kg. of green (export) coffee						

³⁸ The law creating the Coffee Stabilization Fund is expected to be revoked by late 1999.

³⁹ The exporters complained that the OCIR-Café assessment of the Kigali-Mombassa c.i.f. costs were underestimated, given the recent increases in the transportation costs in Kenya. The official price quotations also ignored the quality discounts borne by coffee exporters owing to the inconsistent quality of Rwandese coffee.

125. Progress in privatization of the coffee-processing assets managed by OCIR-Café (mainly the two washing stations) has been very slow. Thus far, only one washing station has been fully privatized, while small equipment has been practically given away to the coffee producers. OCIR-Café still fulfils the role of the agency responsible for certification of quality and origin. The revenue from the certification services—the 3 percent on the Mombassa f.o.b. price—is primarily used for the administration and operation of warehouses.

126. **A new role for OCIR-Café.** With the ending of its direct involvement in coffee marketing and production, OCIR-Café became the umbrella organization for associations of coffee producers with the main role of promoting quality and supporting technological progress. OCIR-Café has technically and financially assisted in the rehabilitation of coffee plantations, mainly through the introduction of the high-yield varieties; however, the resources of OCIR-Café have been insufficient to perform this task efficiently and this process is three years behind schedule. Thus far, only 1.2 million trees have been distributed from the nurseries operated by OCIR-Café. The lack of adequately equipped and staffed laboratories is the main bottleneck in this process; in that connection, about RF 600 million in training and equipment.

127. **Assessment/outlook/agenda.** The policy efforts undertaken in 1995–99 have not succeeded in reviving the production of coffee. The main reason seems to be that the transition from a heavily regulated to a market-determined framework has not translated into improved incentives for coffee producers. Little has been done to reverse the degradation of coffee plantations and no replacement has been offered during the transition for the services formerly assured by OCIR-Café, such as provision of fertilizers and insecticides. The reforms also have failed to address efficiently the problems of unregulated property rights over the land, most of which still remains within the customary domain of communal property.

128. It is thought that, irrespective of the degree of competition among coffee exporters, the improved interaction between coffee growers and coffee exporters is key to the revival of coffee exports. Some progress in this area has already been made on both sides. The exporters committed themselves to investing a certain part of their revenue in the production of high-yield varieties and expressed interest in developing long-term contractual relations with coffee producers. The producers began organizing themselves in associations to increase their bargaining power vis-à-vis exporters and intermediaries, who operate in their own name but eventually supply exporters with semiprocessed coffee. Associations are also being set up for the purpose of improving the yield and quality of coffee through better husbandry and investment.⁴⁰ An important role to be played by these associations is the development of rural

⁴⁰ There is a controversy regarding the policy with regard to coffee growers' associations. OCIR-Café is attempting to play the role of the umbrella organization. The donors supporting the projects in this area, however, endorse the view that this job can be better performed by international nongovernmental organizations or by local autonomous bodies, supported by the main stakeholders in the coffee sector.

credit through their representation of coffee growers in their relations with the banks. About RF 30 million in a pilot project was lent by Banque Populaire to a coffee growers association in the Lake Kivu area.

129. At present, the government policy toward the coffee sector is focused on privatizing the remaining government-owned assets, encouraging the development of producer associations, implementing land reform, and further restructuring OCIR-Café.

Policies for the tea sector

130. **Background.** Tea plantations covering an area of 12,234 hectares are located mainly in direct proximity to ten tea factories, which are engaged in processing the green leaf tea into the exportable black leaf variety (98 percent of black leaf tea is exported). About one-third of the acreage is owned by OCIR-Thé (the so-called industrial block), and the remaining two-thirds is owned by small farmers and cooperatives. OCIR-Thé operates nine factories, which account for about 80 percent of black leaf tea production. The remaining 20 percent is produced by one factory, which is 49 percent state owned, and is operated by a private company, Sorwathé. The entire tea sector provides about 30,000 jobs.

131. Tea is subject to very rigorous processing requirements. Green leaf tea has to be delivered with a few hours from the time it is picked to avoid a degradation of quality. Because there is a shortage of processing capacity, factories are virtually in a monopsonistic position vis-à-vis the tea growers.⁴¹ As a consequence, the producer prices for tea tend to be lower than in other countries in the region (Table 16). In addition, the prices fetched by Rwandese tea on the international markets are somewhat lower than the international prices for tea of comparable quality, reflecting mainly poor logistics and marketing on the side of OCIR-Thé. Tea can be harvested nearly continuously (with production peaking during the two rainy seasons) and is, therefore, a more reliable source of cash income for producers than coffee, which is harvested only once a year.

132. **Recent developments 1994–99.** After the war, the focus of the government's policy was on the rehabilitation of state-owned tea factories, with financial and technical assistance from the European Union. During 1994–97, the sector returned to the prewar production level, but further growth was hampered by low productivity, insufficient profits, and low investment in processing capacity, despite relatively favorable world prices. On the other hand, the privately run Sorwathé generated profits in the range of 40–50 percent in 1997–98.

⁴¹ At present, the production capacity is estimated at 13,000–15,000 tons of black leaf tea a year. It is estimated that the production of tea could be tripled without increasing the acreage of tea plantations if the constraint on processing capacity were lifted.

Table 16. Tea Producer Prices in Kenya, Rwanda, and Uganda, 1993–99

Producer Prices	1993	1998	1999
(In U.S. dollars per kilogram of processed tea equivalent) 1/			
Kenya	1.23	1.06	...
Rwanda	0.63	0.40	0.50
Uganda	0.63	0.44	...
(In percent of export prices)			
Kenya	76	69	...
Rwanda	39	26	...
Uganda	39	28	...

Sources: World Bank; OCIR-Thé; and IMF staff estimates.
1/ About 4.5 kg of green tea becomes 1 kg of processed (black) tea.

133. For the state-owned part of the tea sector (about one-third of acreage), the government fixes the producer prices. From 1993 to 1996, the price was set at RF 20 per kilogram of green leaf. A surge in inflation and the subsequent depreciation of the Rwanda franc entailed a rapid decline of producer prices in real and foreign currency terms. In 1996, the producer price was raised to RF 27 per kilogram of green leaf; however, in 1998 the price of green leaf tea in dollar terms was only about two-thirds of its 1993 level (Table 16). In February 1999, the government raised the producer prices to RF 37 per kilogram (equivalent to about US\$0.11, or about US\$0.50 per kilogram of processed tea equivalent)—slightly above the prices fetched by tea producers in Uganda in 1998, but barely half of the 1998 average producer price level in Kenya.⁴² Nonetheless, a preliminary assessment of the first half of 1999 indicates that, although limited in scope, the latest increase in producer prices further worsened the financial performance of OCIR-Thé.

134. **Outlook.** Because of its natural conditions and international reputation for growing a high-quality tea, the expansion of tea production appears to provide Rwanda with the best opportunity to increase its export earnings in the near term. It is also widely believed that the problems faced by the tea sector need to be addressed through a comprehensive privatization, preferably with the participation of a strategic investor who can inject the required capital in the processing capacity. Such a privatization strategy has already been elaborated, and it is expected that the process will be launched later in 1999 and finalized in 2000–01. The main problem faced in formulating the privatization strategy was to adequately reflect the complex

⁴² The producer prices at the Kenyan tea parastatal KTDA are based on a two-tier system; in practice, tea producers receive from KTDA no less than 60 percent of the export revenue.

incentive structure faced by various stakeholders. It was agreed, for example, that tea producers ought to be offered a certain portion of shares in the privatized factories. The experience of Sorwathé (limited shareholding plus two-tier payment, with a performance-based premium) provides a good example of an effective interest-sharing arrangement.

E. Policies and Perspectives for Developing Nontraditional Exports

135. Despite various attempts at developing nontraditional exports, mainly minerals and noncoffee and tea cash crops, success has been very limited, and the share of the nontraditional exports has declined during the postwar period. One of the key challenges the authorities are facing is the need to develop sophisticated marketing (storage, commercialization, and business relations) links with the destination markets.

136. **Minerals.** These include cassiterite (or tin dioxide, the chief source of metallic tin) and ores of wolfram, niobium, and tantalum, mainly coltan.⁴³ In the 1970s, tin and cassiterite, mined together with wolfram, were the second most important export commodity, after coffee. The importance of these minerals for Rwanda as exportable commodities progressively declined after China entered the international markets in the early 1980s, causing the international price of tin and wolfram to fall rapidly. On the other hand, coltan has become potentially more important in recent years. Niobium and tantalum are essential components of high-value-added alloys, such as the steel used in the production of surgical instruments. Experts consider that Rwandese coltan is of relatively high quality and offers good revenue prospects even if mined only at the artisanal level. Obsolete mining regulations and a lack of clear guidelines for privatizing REDEMI, the state-owned mining enterprise, are the main policy factors hampering the development of coltan production on a more significant scale.

137. **Horticulture.** Cinchona (for the production of quinine) and, in particular, pyrethrum (used in the production of natural insecticides) are the two main export commodities in this group. Rwanda has a considerable comparative advantage in this area, owing to the favorable climate and abundance of high-quality soils required in the production of these crops. However, the main cinchona- and pyrethrum-growing areas (northwest of the country) have long been plagued by security problems. The pyrethrum plantations were abandoned, and this land is now, to a large extent, occupied by the population of refugees returning from the Democratic Republic of the Congo, who use it for production of food (potatoes and tubers). Since the war, OPYRWA (the parastatal processing pyrethrum flowers) has been largely inactive, and until 1998 it was mainly engaged in selling the prewar stocks of dried pyrethrum. The privatization of OPYRWA, which is to take place by end-1999, is expected to revitalize the production of pyrethrum on an industrial scale. Cinchona is still harvested on an artisanal level for domestic purposes, mainly as a natural remedy against malaria, but thus far it has failed to generate more significant commercial interest.

⁴³ Colombo-tantalite a mix of columbite containing niobium and tantalite containing oxide of tantalum.

138. The second category of the horticultural products, which has been recognized as a potential source of export revenue in Rwanda, includes the commonly grown fruits, flowers, and vegetables. While some entrepreneurial efforts are emerging in this new area, sizable investment is needed to establish the logistic and marketing base, including "just-in-time" techniques for production and transport (air freight)—not least in order to meet the sanitary and phytosanitary requirements of the sophisticated import markets for these products. At present, some of the surplus production of fruits and vegetables is traded with the neighboring countries.

139. **Artisanal products, skins and hides, textiles.** Exports of artisanal products—whose potential has recently been discovered—soared in the first half of 1999, spurred by the World Bank-sponsored projects in this area. The connection of artisanal capacity (unique designs) with the potential existing in leather and textiles industries appears particularly promising. The development of the potential in skins and hides has been impeded by the lack of local processing capacity (tanneries); greater capacity would allow Rwanda to retain higher value added. At present, Rwanda sells mostly raw hides or semifinished sheep and goat leather to the European and Asian leather processing industries. Exports of skins and hides have declined in 1998–99 on account of unfavorable prices. Nevertheless, it is expected that, with the implementation of the new investment code, Rwanda will attract foreign investment in the leather processing industry, which has traditionally offered good profit opportunities. In the bid to invite more foreign investment in the textile industry, the government intends to divest itself of its minority interest in Rwantexco, a relatively modern, by regional standards, textile factory employing 750 skilled workers. While, owing to its relatively high production (energy, water) and transport costs, Rwanda is not expected to be able to compete on international markets with textile exports from Asia, it is believed that Rwantexco has considerable export potential for regional markets, mainly because of the quality of its products, its geographic location, and unique designs, suitable for meeting African demand.

Table 17. Rwanda: Gross Domestic Product by Origin at Current Prices, 1994-98

	1994	1995	1996	1997	1998 Est.
(In billions of Rwanda francs)					
GDP at market prices	165.8	337.2	431.4	562.4	632.1
GDP at factor cost	161.4	318.4	405.5	522.0	587.8
Indirect taxes	4.4	18.8	25.9	40.4	44.3
Primary sector	82.5	149.0	200.3	252.0	278.6
Food crops	72.5	123.8	162.0	213.7	241.7
Export crops	0.5	8.5	6.9	5.4	5.5
Livestock	5.7	11.0	23.2	25.8	23.0
Other	3.8	5.7	8.2	7.1	8.4
Secondary sector	35.1	55.7	80.8	107.6	124.6
Mining	0.1	0.1	0.2	0.3	0.4
Electricity, gas, and water	1.0	1.7	2.3	2.8	3.0
Manufacturing	28.6	35.6	52.5	70.9	79.7
Construction and public works	5.4	18.3	25.8	33.6	41.5
Tertiary sector	48.2	132.5	150.3	202.8	228.9
Commerce and tourism	26.2	46.5	42.9	58.1	66.9
Transport and communications	1.5	14.0	16.4	22.6	26.1
Public administration	11.4	22.4	30.2	40.2	41.7
Services	9.1	49.6	60.8	81.9	94.2
(In percent of GDP)					
Primary sector	49.8	44.2	46.4	44.8	44.1
<i>Of which:</i> food crops	43.7	36.7	37.6	38.0	38.2
export crops	0.3	2.5	1.6	1.0	0.9
Secondary sector	21.2	16.5	18.7	19.1	19.7
<i>Of which:</i> manufacturing	17.2	10.6	12.2	12.6	12.6
Tertiary sector	29.1	39.3	34.8	36.1	36.2
<i>Of which:</i> public administration	6.9	6.6	7.0	7.1	6.6

Source: Ministry of Finance and Economic Planning.

Table 18. Rwanda: Gross Domestic Product by Origin at Constant 1995 Prices, 1994-98

	1994	1995	1996	1997	1998 Est.
(In billions of Rwanda francs)					
GDP at market prices	250.8	337.2	390.6	440.7	482.6
GDP at factor cost	244.1	318.4	367.1	409.1	448.8
Indirect taxes	6.7	18.8	23.5	31.6	33.8
Primary sector	115.3	149.0	178.9	185.2	205.2
Food crops	95.6	123.8	146.5	152.8	171.0
Export crops	1.3	8.5	6.3	6.2	6.1
Livestock	13.3	11.0	18.2	19.1	20.4
Other	5.1	5.7	7.9	7.1	7.7
Secondary sector	36.5	55.7	68.6	84.2	93.8
Mining	0.1	0.1	0.2	0.3	0.3
Electricity, gas, and water	1.0	1.7	1.5	1.6	1.7
Manufacturing	28.5	35.6	42.1	50.4	54.8
Construction and public works	6.9	18.3	24.8	31.9	37.0
Tertiary sector	99.0	132.5	143.1	171.3	183.6
Commerce and tourism	61.1	46.5	37.6	46.3	50.8
Transport and communications	1.9	14.0	16.7	20.4	22.4
Public administration	16.4	22.4	30.0	35.1	33.9
Services	19.6	49.6	58.8	69.5	76.5
(Annual percent change)					
GDP at market prices	-50.2	34.4	15.8	12.8	9.5
Primary sector	-31.3	29.2	20.1	3.5	10.8
<i>Of which:</i> food crops	-23.9	29.5	18.3	4.3	11.9
export crops	-89.5	553.8	-25.9	-1.6	-1.6
Secondary sector	-65.3	52.6	23.2	22.7	11.4
<i>Of which:</i> manufacturing	-54.0	24.9	18.3	19.7	8.7
Tertiary sector	-50.5	33.8	8.0	19.7	7.2
<i>Of which:</i> public administration	-21.7	36.6	33.9	17.0	-3.4
(In percent of GDP)					
Primary sector	46.0	44.2	45.8	42.0	42.5
<i>Of which:</i> food crops	38.1	36.7	37.5	34.7	35.4
export crops	0.5	2.5	1.6	1.4	1.3
Secondary sector	14.6	16.5	17.6	19.1	19.4
<i>Of which:</i> manufacturing	11.4	10.6	10.8	11.4	11.4
Tertiary sector	39.5	39.3	36.6	38.9	38.0
<i>Of which:</i> public administration	6.5	6.6	7.7	8.0	7.0

Source: Ministry of Finance and Economic Planning.

Table 19. Rwanda: Supply and Use of Resources at Current Market Prices, 1994-98

	1994	1995	1996	1997	1998 Est.
(In billions of Rwanda francs)					
GDP	165.8	337.2	431.4	562.4	632.1
Consumption	243.4	356.7	450.1	578.4	643.6
Public	19.6	38.3	51.9	59.8	71.7
Private (residual)	223.8	318.4	398.2	518.6	571.9
Domestic investment	19.4	50.6	66.9	83.8	99.2
Government	4.4	27.4	39.4	46.1	42.3
Private	15.0	23.2	27.5	37.7	56.9
Resource gap	-97.0	-70.1	-85.5	-99.8	-110.7
Exports of goods and nonfactor services	10.4	17.5	25.6	43.5	34.3
Imports of goods and nonfactor services	107.4	87.6	111.1	143.3	145.0
(In percent of GDP)					
GDP	100.0	100.0	100.0	100.0	100.0
Consumption	146.8	105.8	104.3	102.8	101.8
Public	11.8	11.4	12.0	10.6	11.3
Private (residual)	135.0	94.4	92.3	92.2	90.5
Domestic investment	11.7	15.0	15.5	14.9	15.7
Government	2.7	8.1	9.1	8.2	6.7
Private	9.0	6.9	6.4	6.7	9.0
Resource gap	-58.5	-20.8	-19.8	-17.7	-17.5
Exports of goods and nonfactor services	6.3	5.2	5.9	7.7	5.4
Imports of goods and nonfactor services	64.8	26.0	25.8	25.5	22.9

Source: Ministry of Finance and Economic Planning.

Table 20. Rwanda: Supply and Use of Resources at Constant 1995 Prices, 1994-98

	1994	1995	1996	1997	1998 Est.
(In billions of Rwanda francs)					
GDP	250.8	337.2	390.6	440.7	482.6
Consumption	345.2	356.7	402.4	463.2	495.6
Public	29.7	38.3	47.0	46.8	54.8
Private (residual)	315.5	318.4	355.4	416.4	440.8
Domestic investment	24.4	50.6	55.3	77.3	97.8
Government	5.6	27.4	32.6	42.5	41.7
Private	18.8	23.2	22.7	34.8	56.1
Resource gap	-118.8	-70.1	-67.1	-99.8	-110.7
Exports of goods and nonfactor services	16.1	17.5	24.8	32.4	32.2
Imports of goods and nonfactor services	134.9	87.6	91.9	132.1	142.9
(In percent of GDP)					
GDP	100.0	100.0	100.0	100.0	100.0
Consumption	137.6	105.8	103.0	105.1	102.7
Public	11.8	11.4	12.0	10.6	11.3
Private (residual)	125.8	94.4	91.0	94.5	91.3
Domestic investment	9.7	15.0	14.2	17.5	20.3
Government	2.2	8.1	8.3	9.6	8.6
Private	7.5	6.9	5.8	7.9	11.6
Resource gap	-47.4	-20.8	-17.2	-22.6	-22.9
Exports of goods and nonfactor services	6.4	5.2	6.4	7.3	6.7
Imports of goods and nonfactor services	53.8	26.0	23.5	30.0	29.6

Source: Ministry of Finance and Economic Planning.

Table 21. Rwanda: Selected Food Crops Production, 1994-98
(In thousands of metric tons)

	1994	1995	1996	1997	1998 Est.
Bananas	1,489.0	2,001.4	2,105.0	2,248.4	2,625.5
Pulses	49.8	134.0	189.2	156.2	177.2
Beans and cowpeas	41.5	126.3	178.7	144.4	162.5
Soya beans and groundnuts	8.3	7.7	10.5	11.8	14.7
Cereals	132.0	141.0	182.1	221.4	191.2
Sorghum	54.8	77.3	102.1	122.2	120.5
Maize	66.7	55.6	66.6	83.4	58.6
Wheat	2.0	6.0	6.8	6.0	4.1
Rice	8.5	2.1	6.6	9.8	7.9
Roots and tubers	1,207.0	881.0	1,143.0	1,246.0	1,204.2
Irish potatoes	208.4	137.7	195.4	229.6	181.1
Sweet potatoes	409.7	550.5	664.6	741.6	751.1
Taro	97.7	44.8	62.4	71.7	83.7
Cassava	491.2	148.0	220.6	203.0	188.2
Total	2,877.8	3,157.4	3,619.3	3,872.0	4,198.1

Source: Ministry of Finance and Economic Planning.

Table 22. Rwanda: Coffee and Tea Production, Prices, and Costs, 1994-98

	1994	1995	1996	1997	1998 Est.
(In thousands of metric tons, unless otherwise indicated)					
Coffee					
Production of parchment coffee					
Volume	...	29.3	20.4	19.8	19.0
Acreage (in thousands of hectares)	...	...	...	...	...
Yield (kilogram/hectare)	...	...	...	...	...
Production of green coffee					
Production	...	21.0	15.0	14.8	14.3
Exports from Rwanda	13.1	15.1	21.1	14.2	15.0
Changes in stocks	...	5.9	-6.1	...	...
Stock level (end-year)	...	...	...	0.6	0.1
Production volume of tea					
Green leaves	18.6	21.8	40.5	41.7	57.2
Dried leaves	4.1	5.4	9.1	13.2	14.9
(In Rwanda francs per kilogram, unless otherwise indicated)					
Prices and costs					
Coffee					
Minimum producer price (unprocessed) 1/	300.0	300.0	...	...	...
Average realized producer price (unprocessed)	...	...	...	...	...
Export prices (f.o.b. Mombasa)	330.0	681.7	643.7	907.1	587.5
Export prices (f.o.b. Mombasa, in US\$/kg.)	1.5	2.6	2.1	3.0	1.9
Export tax (in millions of Rwanda francs) 2/	...	1,750.0	331.0	4,262.0	1,581.0
Area cultivated (in thousands of hectares)	...	...	...	...	...
Yield (kilograms per hectare)	...	...	...	...	...
Tea					
Producer price (green tea)	20.0	16.0	23.0	27.0	27.0
Producer price (processed tea equivalent)	...	...	...	...	...
Export price	367.4	281.3	367.8	483.8	483.9
Export prices (in US\$/kg.)	1.7	1.0	1.2	1.6	1.5

Source: Rwandese authorities.

1/ Since 1996, producer prices have been market determined; in 1997, estimated average producer price.

2/ The export tax is proportional and based on f.o.b. Mombasa export price; it is imposed only when the price exceeds US\$ 0.95 per kilogram.

Table 23. Rwanda: Production of Principal Manufactured Goods and Minerals, 1994-98
(In units indicated)

	1994	1995	1996	1997	1998 Est.
Manufactured goods					
Beer (million liters)	44.1	49.1	59.4	76.3	65.0
Nonalcoholic beverages (million liters)	6.5	14.3	18.8	26.7	36.3
Sugar (metric tons)	508.8	0.0	0.0	0.0	0.0
Soap (tons)	...	5,019	6,959	7,500	6,966
Corrugated iron sheets (thousand tons)	1,820	2,454	2,085	4,229	2,588
Cigarettes (millions)	105.7	35.9	128.5	252.9	303.0
Textile (million yards)	3.3	2.9	5.8	8.6	10.3
Cement (metric tons)	10,000	36,000	42,452	60,505	58,929
Minerals					
Cassiterite (metric tons)	358.1	247.0	330.0	327.0	330.0
Wolfram (metric tons)	...	19.2	62.3	42.0	188.0
Colombo-tantalite (metric tons)	56.2	53.9	97.0	224.0	224.0
Gold (kilograms)	...	...	...	10.0	17.0

Source: Rwandese authorities.

Table 24. Rwanda: Energy, Water, and Telephone Production, Consumption, and Prices, 1994-98

	1994	1995	1996	1997	1998 Est.
(In millions of kilowatt-hours, unless otherwise indicated)					
Electricity					
Available supply	74.01	112.93	154.74	180.11	186.08
Domestic production	30.68	53.62	72.16	110.83	153.63
Imports	43.33	59.31	82.58	70.14	93.65
Domestic production/consumption (percent)	0.41	0.47	0.47	0.62	0.83
Number of subscribers (thousands)	30.61	33.40	35.81	36.98	...
Electricity tariff (Rwanda francs/kilowatt-hour) 1/					
Low-tension supply	40.0	40.0	40.0	42.0	42.0
Medium- and high-tension supply					
Up to 99 kilowatt hours	13.0	13.0	13.0	42.0	42.0
Above 100 kilowatt-hours	13.0	13.0	13.0	42.0	42.0
(In millions of cubic meters, unless otherwise indicated)					
Water					
Production	8.01	13.62	16.42	17.50	17.80
Consumption	...	9.63	11.11	...	...
Number of subscribers (thousands)	22.40	24.70	25.40	26.00	...
Consumption tariff (Rwanda francs/kilowatt-hour)					
0-25	79.0	79.0	79.0	200.0	200.0
26-60	120.0	120.0	120.0	300.0	300.0
Above 60 and below 100	159.0	159.0	159.0	350.0	350.0
Above 100	178.0	178.0	178.0	375.0	375.0
Natural gas					
Production	240.9	378.9	309.8	356.6	...
Consumption	...	0.4	0.3	...	...
Petroleum products					
Imports (thousand tons)	28.5	56.5	63.0	89.3	95.5
Average import price (Rwanda francs/kg)	...	...	...	72	...
Retail price (Rwanda francs/liter)					
Regular	...	...	...	234	235
Diesel	...	...	...	230	230
Telephone (RWANDATEL)					
Basic rates (Rwanda francs)	14.0	14.0	14.0	14.0	...
Turnover (millions of Rwanda francs)	...	...	...	4,973	...

Source: Rwandese authorities.

1/ RF, Rwanda franc; kwh, kilowatt-hours.

Table 25. Rwanda: Production of Selected Manufactured Products, 1993-98
(In units indicated)

Enterprise	Ownership	Main Product	Start of Operation	Production capacity	Monthly Production		Date of Resumption of Activities
					1993	1998	
Agro-industries							
Usine à thé de GISAKURA	Public	Dried tea (tons)	1975	103.8	133	138	Sep. 94
Usine à thé de RUBAYA	Public	Dried tea (tons)	1979	96.9	96	93	Nov. 94
Usine à thé de GISOVU	Public	Dried tea (tons)	1983	132.0	75	99	Nov. 94
Usine à thé de PFUNDA	Public	Dried tea (tons)	1972	46.3	121	56	Nov. 94
SORWATHE	Mixed	Dried tea (tons)	1979	138.0	100	138	Sep. 94
RWANDEX CAFE	Mixed	Coffee (tons)	1964	27.8	2,595	721	Sep. 94
Laiterie de RUBIRIZI	Mixed	Milk (liters)	1985	...	213	Closed	Jan. 95
Laiterie du RWANDA	Public	Milk (liters)	1969	100.0	230	230	Mar. 95
Laiterie de GISHWATI	Public	Milk (liters)	1985	...	2,595	Closed	Sep. 94
SOPAB	Mixed	Livestock fodder	1988	...	...	...	...
ETIRU	Private	Wheat flour (tons)	1948	...	200	...	Jan. 95
Régie Sucrière KABUYE	Public	Refined sugar (tons)	1969	Started production in 1999	...	...	Dec. 94
BRALIRWA - Beer	Mixed	Beer (hectoliters)	1958	0.6	85,243	541	Oct. 94
BRALIRWA - Soft drinks	Mixed	Soft drinks (hectoliters)	1958	1.7	15,925	276	Oct. 94
SOBOLIRWA	Private	Soft drinks (hectoliters)	1988	...	8,676	Closed	Oct. 94
OVIBAR	Public	Banana beer (liter)	1978	...	80,000	...	Dec. 94
SONAFRUTS	Mixed	Maracuja juice (liter)	1979	...	10,000	...	...
TABARWANDA	Mixed	Cigarettes	1976	70.1	432	303	Jun. 95
COOKIRWA	Private	Biscuits (cartons)	1981	...	180	...	Jan. 95
CODERVAM	Coop.	White rice	1982	...	...	...	...
Rizerie de RWAMAGANA	Public	White rice	1978	...	...	...	...
Rizerie de BUGARAMA	Public	White rice	1967	...	...	...	...
Textiles							
UTEXRWA	Private	Clothing (1,000 meters)	1985	117.7	1,337	1,574	...
Printing and paper products							
Imprimerie Scolaire	Public	Printing	1980	...	...	...	...
Imprimerie Nationale	Public	Printing	1962	...	...	...	...
Imprimerie de KABGAYI	ASBL	Stationary (kg)	1932	...	4,600	...	Oct. 94
Imprimerie de KIGALI	Private	Printing (U.S. dollars)	1980	...	87,046	...	Jan. 95
SOCOBIKO	Private	Toilet paper (cartons)	1985	...	2,928	...	Oct. 94
Chemicals							
OPYRWA	Public	Pyrethrum (tons)	1972	...	4	...	Oct. 94
RWANDA PAINTS	Private	Paint (tons)	1980	...	6	...	Jan. 95
OXYRWA	Private	Acetylene (cylinders)	1984	...	125	...	Jan. 95
RAMCO	Private	Paints (tons)	1982	...	0.85	...	Jan. 95
SULFO RWANDA	Private	Soaps (tons)	1969	70.9	693	491	Sep. 94
SAKIRWA	Private	Soaps (tons)	1981	125.7	70	88	Jan. 95
SORWAL	Mixed	Matches (cartons)	1987	...	6,306	...	May. 95
SONATUBES	Mixed	PVC tubes (tons)	1978	109.8	224	246	Jan. 95
ANIK INDUSTRIES	Private	Candles (kilograms)	1982	...	4,950	...	...
RWANDA FOAM	Private	Mattresses (tons)	1983	...	...	...	Apr. 95
SOMIREX INDUSTRIES	Private	Toothpaste and soap (cartons)	1983	...	3,479	Closed	Oct. 95
CUPHMETRA	Public	Medicines	1980	...	...	Closed	...
Sta. Rwandaise des Batteries	Private	Batteries	1988	...	...	Closed	...
AMEKI COLOR	Private	Paint	...	...	...	...	...
MIROPLAST	Private	Plastics	1978	...	...	...	...
Construction goods							
PPCT	Public	Lime	1981	...	...	...	...
CIMERWA	Public	Cement (tons)	1984	98.2	5,000	4,911	Aug. 94
Entreprises SEBULIKORO	Private	Tiles	1973	...	10,000	...	Jan. 95
Briqueterie RULIBA	Private	Clay bricks (tons)	1988	...	1,200	...	Nov. 95
Metal industries							
RWANDEX CHILLINGTON	Private	Hoes	1984	...	100,000	...	Nov. 94
TOLIRWA	Private	Corrugated iron (tons)	1979	45.3	477	216	Jan. 95
UPROTUR	Private	Tubes (tons)	1986	100.0	450	450	Nov. 94
PROMETAL	Private	Nails and wire nets (tons)	1985	12.2	205	25	Sep. 94
RWANDA-PETROLGAZ	Private	Packing goods (units)	1985	...	11,000	...	Jan. 96

Source: Ministry of Commerce.

Table 26. Rwanda: Consumer Prices, 1996-98 1/
(March-June 1982=100)

	Weight	1996				1997				1998			
		Mar.	June	Sep.	Dec.	Mar.	June 2/	Sep.	Dec.	Mar.	June	Sep.	Dec.
Imported goods													
Food	10	403.67	420.46	453.93	464.78	477.37	...	488.02	494.31	503.21	500.16	489.69	493.98
Beverages and tobacco	1	352.21	337.70	329.90	319.81	320.78	...	392.86	388.95	386.96	391.20	393.32	390.87
Clothing	9	385.59	394.88	421.90	434.42	433.18	...	461.83	481.23	487.95	502.27	507.48	500.15
Household equipment	2	427.73	454.67	471.17	490.65	470.48	...	468.78	49.66	469.82	469.68	448.80	477.07
Health	1	661.55	672.22	679.94	687.20	690.83	...	668.84	675.06	681.40	688.65	680.16	676.57
Other health services	2	324.89	314.75	319.49	320.84	348.02	...	358.97	358.99	362.98	367.54	367.69	376.04
Housing	3	335.27	342.43	352.29	359.20	359.88	...	362.47	364.39	363.81	369.46	379.04	382.43
Transportation	7	821.23	831.97	836.75	820.53	819.20	...	820.47	823.69	823.10	823.16	821.64	819.89
Leisure, spectacles, and culture	1	210.15	205.40	208.62	209.25	203.84	...	199.40	199.40	199.40	199.54	199.54	201.16
Others	1	588.65	597.91	611.54	614.01	614.01	...	620.07	621.57	621.57	621.57	621.57	622.25
Group index	37	475.33	485.70	504.46	509.24	512.53	...	524.43	531.87	536.15	540.00	537.52	538.85
Mixed goods													
Food	1	495.89	493.29	554.44	586.09	601.70	...	610.38	607.08	595.49	592.36	594.91	620.75
Beverages and tobacco	7	347.02	347.02	347.02	347.02	347.02	...	358.35	376.76	369.67	369.67	372.30	350.52
Clothing	2	334.39	342.00	387.96	387.96	399.35	...	394.44	426.41	444.75	476.89	476.89	494.81
Household equipment	0	446.83	464.72	561.34	583.34	444.06	...	446.90	449.12	455.75	457.11	459.85	514.23
Health services	1	397.66	384.36	394.62	392.29	394.75	...	391.58	393.12	385.44	380.38	371.66	374.04
Housing	6	441.40	450.00	459.64	459.76	465.03	...	453.27	481.29	457.61	477.20	491.44	489.73
Leisure, spectacles, and culture	0	159.71	159.71	174.55	174.55	174.55	...	174.55	174.55	174.55	174.55	174.55	174.55
Others	0	200.00	200.00	200.00	200.00	200.00	...	200.00	200.00	200.00	200.00	200.00	200.00
Group index	18	392.22	395.22	410.24	412.81	414.81	...	415.37	435.63	425.76	435.42	440.90	436.48
Local goods													
Food	24	382.03	376.23	400.81	434.30	438.55	...	523.54	647.60	632.96	597.96	513.38	487.36
Beverages and tobacco	1	239.37	239.41	239.65	258.63	239.18	...	242.48	242.64	242.81	244.45	246.49	293.47
Household equipment	6	318.43	318.43	358.72	358.72	358.72	...	394.01	411.65	410.46	395.93	387.33	396.15
Health	0	558.77	450.52	450.52	450.52	484.16	...	544.71	544.71	544.71	544.71	544.71	544.71
Other health services	0	993.20	1,118.32	1,163.77	1,168.82	1,168.82	...	1,168.82	1,168.82	1,168.82	1,168.82	1,147.83	1,132.68
Housing	4	275.78	277.21	279.11	249.47	283.69	...	296.82	297.11	286.08	291.07	312.18	355.40
Transportation	3	292.85	292.85	292.85	295.35	292.85	...	292.85	312.80	312.80	312.80	312.80	312.80
Leisure, spectacles, and culture	0	484.33	484.33	484.33	484.33	484.33	...	484.33	484.33	484.33	484.33	484.33	482.28
Others	6	190.70	199.85	245.13	245.11	279.13	...	281.26	281.26	281.53	338.04	338.65	342.75
Group index	45	332.89	330.28	354.69	370.37	374.88	...	432.05	501.98	492.99	480.08	435.95	429.03
All goods													
Food	35	392.30	392.95	421.38	448.45	455.46	...	516.78	603.12	595.19	570.33	509.75	494.14
Beverages and tobacco	9	334.43	333.04	332.03	333.65	331.38	...	347.58	361.63	355.91	356.52	359.02	347.47
Clothing	11	376.29	385.38	415.80	426.08	427.10	...	449.72	471.38	480.19	497.71	501.98	499.19
Household equipment	8	352.11	359.93	395.83	401.80	391.56	...	415.83	428.46	427.88	417.77	406.28	421.89
Health	2	635.52	616.08	621.84	627.26	638.50	...	637.41	642.05	646.78	652.20	645.86	643.18
Other health services	4	363.51	355.55	362.99	363.48	382.00	...	388.25	388.75	388.96	390.38	387.24	393.15
Housing	13	364.08	370.04	377.21	369.15	382.82	...	382.32	395.56	381.10	392.86	408.30	422.33
Transportation	10	660.28	667.75	671.08	660.57	658.87	...	659.76	668.07	667.66	667.70	666.65	665.43
Leisure, spectacles, and culture	1	269.84	266.17	268.80	269.29	265.12	...	261.69	261.69	261.69	261.80	261.80	262.60
Others	6	220.84	229.97	272.77	272.94	304.32	...	306.74	306.85	307.10	359.23	359.79	363.63
Overall index	100	396.71	399.96	420.57	429.83	435.67	...	463.53	501.31	497.01	494.41	474.75	471.35

Source: Ministry of Planning.

1/ Data for previous years are not provided here because of a large discrepancy between the newly reconstructed consumer price index and the prewar index.

2/ Data for June 1997 are unavailable.

Table 27. Rwanda: Monthly Salaries in the Private Sector, 1980-95, and 1996-98 1/
(Minimum salaries, in Rwanda francs)

	1980-95 2/	1996 3/	1997	1998
Unskilled labor				
Grade 1	2,500	3,000	3,000	6985
Grade 2	3,750	4,500	4,500	8500
Grade 3	5,250	6,300	6,300	9093
Apprentices				
Grade 1	6,750	8,100	8,100	11159
Grade 2	8,250	9,900	9,900	11503
Grade 3	9,750	11,700	11,700	13857
Skilled labor				
Grade 1	12,000	14,400	14,400	16452
Grade 2	14,400	17,280	17,280	18823
Grade 3	16,560	19,872	19,872	24946
Grade 4	19,320	23,184	23,184	33516
Technicians				
Grade 1	16,650	19,980	19,980	34440
Grade 2	20,640	24,768	24,768	40296
Grade 3	23,805	28,566	28,566	51188
High-level technicians				
Grade 1	22,080	26,496	26,496	52425
Grade 2	25,300	30,360	30,360	56610
Grade 3	31,625	37,950	37,950	63336

Source: Ministry of Labor and Social Affairs.

1/ Excluding employers' social security contributions.

2/ Minimum wages and salaries remained unchanged at the 1980 level through 1995.

3/ Minimum wages and salaries were increased by 20 percent in 1996.

Table 28. Rwanda: Budgetary Operations of the Central Government, 1994-98
(In billions of Rwanda francs)

	1994	1995	1996	1997	1998 Est.
Revenue and grants	7.5	61.5	70.8	95.9	99.0
Total revenue	6.0	23.1	39.4	58.1	66.0
Tax revenue	6.0	21.7	36.2	54.9	62.6
Direct taxes	1.6	2.9	10.3	14.6	18.3
Taxes on goods and services	2.3	9.9	14.4	21.9	28.5
Taxes on international trade	2.2	8.9	11.5	18.5	15.8
Of which: export tax	0.1	1.8	0.3	4.3	1.6
Nontax revenue	0.0	1.4	3.2	3.1	3.4
Grants	1.5	38.4	31.4	37.8	33.0
Budgetary grants	0.0	12.0	0.1	2.8	3.5
Capital grants	1.5	26.4	31.3	35.0	29.5
Total expenditure and net lending	26.6	69.5	95.3	109.6	117.4
Current expenditure	22.2	42.1	55.9	64.0	75.3
Wages and salaries 2/	6.6	13.6	19.1	28.7	28.9
Civil	4.1	6.1	10.2	13.6	12.3
Defense	2.5	7.4	8.9	15.1	16.6
Purchases of goods and services	7.0	17.4	25.0	21.2	25.5
Civil	3.8	10.1	11.3	13.0	14.9
Defense	3.2	7.3	13.7	8.2	10.6
Interest payments	7.4	7.8	6.9	6.8	5.7
Domestic debt (due)	4.8	4.0	2.9	3.0	2.3
External debt (due)	2.5	3.8	4.0	3.8	3.4
Transfers (including RRA)	1.0	3.3	3.1	6.2	9.3
Exceptional social expenditure 3/	0.2	0.0	1.7	1.0	5.8
Assistance to victims of genocide	...	...	...	0.0	3.8
Demobilization/reintegration	...	...	...	1.0	1.5
Retrenchment/training costs	...	...	...	0.0	0.0
Education assistance and governance	...	...	...	0.0	0.5
Capital expenditure	4.4	27.4	39.4	46.1	42.3
Domestic	0.3	0.0	0.0	0.1	2.5
Foreign	4.1	27.4	39.4	46.0	39.8
Net lending	0.0	0.0	0.0	-0.5	-0.2
Primary deficit (including exceptional social expenditure) 5/	-8.8	-11.2	-9.5	0.9	-3.5
Primary deficit (excluding exceptional social expenditure) 6/	-8.9	-11.2	-7.8	1.9	-0.3
Overall deficit (payment order)					
Including grants	-19.1	-8.0	-24.5	-13.8	-18.4
Excluding grants	-20.6	-46.4	-55.9	-51.6	-51.4
Change in arrears (net reduction -)	15.8	13.3	9.4	1.6	-22.2
Domestic	7.4	6.9	2.5	-4.2	-3.9
External	8.4	6.4	6.9	5.8	-18.3
Deficit (cash basis)	-3.2	5.3	-15.1	-12.2	-40.6
Financing	3.2	-5.3	15.1	12.2	40.6
Foreign financing (net)	-2.4	7.4	10.6	11.6	40.8
Drawings	2.6	13.9	16.5	18.6	23.6
Amortization	-5.0	-6.5	-5.9	-7.0	-7.0
Rescheduling and refinancing	0.0	0.0	0.0	0.0	24.2
Domestic financing	5.6	-12.7	4.5	0.6	-0.2
Banking system (monetary survey)	5.4	-12.8	-1.8	0.7	0.0
Non bank sector (including, Caisse sociale du Rwanda repayment)	0.0	0.0	0.0	0.0	-1.6

Sources: Ministry of Finance; and Fund staff estimates.

Table 29. Rwanda: Budgetary Receipts, 1994-98

	1994	1995	1996	1997	1998 Est.
(In billions of Rwanda francs)					
Revenue and grants	7.5	61.5	70.8	95.9	99.0
Total revenue	6.0	23.1	39.4	58.1	66.0
Tax revenue	6.0	21.7	36.2	54.9	62.6
Direct taxes	1.6	2.9	10.3	14.6	18.3
Tax on income and profits	1.5	2.8	10.0	14.2	17.8
Companies	...	...	...	9.3	12.7
License	0.6	0.3	0.9	1.0	0.3
Individuals	0.4	1.6	2.7	4.3	4.0
Others	...	...	...	-0.3	0.8
Property taxes	0.1	0.1	0.3	0.4	0.5
Taxes on goods and services	2.3	9.9	14.4	21.9	28.5
Excise taxes	1.1	5.7	7.9	12.3	13.8
Turnover tax	1.0	3.0	5.0	7.5	12.2
Road Fund	0.2	1.2	1.5	2.1	2.5
Taxes on international trade	2.2	8.9	11.5	18.5	15.8
Export tax	0.1	1.8	0.3	4.3	1.6
Of which: coffee	0.0	1.8	0.3	4.3	1.6
Import duties	1.8	6.9	10.7	13.5	13.7
Other	0.3	0.2	0.5	0.7	0.5
Non-tax revenue	0.0	1.4	3.2	3.1	3.4
Grants	1.5	38.4	31.4	37.8	33.0
(Annual percent change)					
Revenue and grants	-80.4	716.9	15.1	35.4	3.3
Total revenue	-76.7	283.4	70.5	47.3	13.7
Tax revenue	-74.9	262.5	66.8	51.6	14.0
Direct taxes	-75.7	85.9	255.8	41.4	25.5
Tax on income and profits	-75.4	89.8	263.3	41.6	25.4
Companies	...	...	...	...	...
Licenses	-28.1	-44.2	160.6	12.9	-66.4
Individuals	-81.0	300.0	68.1	59.9	-7.0
Others	...	...	...	...	-335.5
Property taxes	-79.4	31.4	103.5	35.7	29.5
Taxes on goods and services	-77.9	336.1	45.2	51.8	30.3
Excise taxes	-81.4	418.2	38.6	55.7	12.2
Turnover tax	-64.3	200.0	68.3	48.6	62.7
Road Fund	-88.9	597.4	19.3	42.3	21.1
Taxes on international trade	-70.0	312.4	29.4	60.3	-14.5
Export tax	...	1,700.0	-81.6	1,195.2	-63.2
Of which: coffee	...	...	-81.6	1,195.2	-63.2
Import duties	15.8	-24.2	160.9	40.7	-30.3
Non-tax revenue	-98.2	3,717.9	127.4	-1.7	8.8
Grants	-88.1	2,460.0	-18.2	20.4	-12.7

Sources: Ministry of Finance; and Fund staff estimates.

Table 30. Rwanda: Functional Classification of Central Government Recurrent Expenditure, 1994-98
(In billions of Rwanda francs) 1/

	1994	1995	1996	1997	1998 Est.
General public services	...	...	...	...	27.5
Defense 2/	5.7	14.8	22.6	23.3	27.2
Social services	...	...	...	...	14.7
Education 3/	...	...	...	...	11.1
Health	...	...	...	...	2.6
Other	...	...	...	...	1.0
Economic services	2.2	4.1	2.0	1.3	2.5
Agriculture	0.7	0.7	0.7	0.6	1.0
Mining and manufacturing	0.2	0.2	...	0.2	0.2
Energy and public works	1.1	2.9	1.0	0.3	1.0
Transport and communications	0.1	0.2	0.1	0.2	0.2
Other economic affairs	0.1	0.1	0.1	...	0.1
Interest payments on public debt	2.5	3.8	4.0	3.8	3.4
Total current expenditure	22.2	42.1	55.9	64.0	75.3

Sources: Ministry of Finance; and Fund staff estimates.

1/ On an "engagement" basis.

2/ In 1997 includes RF 1.0 billion exceptional social expenditure for demobilized soldiers and RF 0.8 billion for transfers.

3/ In 1997, includes transfers to the University of Rwanda.

Table 31. Rwanda: Recurrent Social Expenditure, 1998
(In billions of Rwanda francs) 1/

	1998
Total social expenditure (recurrent, including National University of Rwanda (UNR))	17.5
Basic social spending (recurrent, excluding UNR)	14.7
Education	13.9
Wages and salaries (excluding UNR)	7.9
Goods and services (excluding UNR) 2/	1.4
Transfers	4.6
UNR	2.8
Scholarships 3/	1.4
ISAE, IRST, primary school, other 4/	0.3
Health	2.6
Wages and salaries	1.0
Goods and services 2/	1.1
Transfers	0.5
Social affairs/gender, women, and development	1.0
Wages and salaries	...
Goods and services	...
Transfers	...
Youth, culture, and sport	0.0
Wages and salaries	...
Goods and services	...
Transfers	...
Memorandum items:	
Total social expenditure (including KIST, KHI, KIE, teacher training)	17.5
KHI, KIE, KIST, teacher training 5/	...

Sources: Rwandese authorities; and staff estimates.

1/ To be monitored based on the fiscal "flash" reports, financial data from the Ministries of Education and Health, and surveys of decentralized units, with assistance from the World Bank and U.K. Department for International Development.

2/ Targets agreed upon in the context of the midterm review.

3/ Include scholarships for Ministry of Education only.

4/ ISAE and IRST are agricultural and technical research institutions; other includes higher education activities.

5/ The transfers to these institutions (for training health workers and teachers and for research) are included under exceptional social spending.

Table 32. Rwanda: Government Domestic Debt by Creditor, 1994-98
(In millions of Rwanda francs)

	1994	1995	1996	1997	1998 Est.
Banking sector	49,500.0	48,239.0	50,664.6	51,238.1	51,571.2
Central bank	43,360.0	43,349.0	46,090.0	44,114.0	44,447.1
Advances	1,412.0	1,412.0	2,632.0	656.0	977.9
Consolidated debt 1/	41,948.0	41,937.0	43,458.0	43,458.0	43,469.2
Commercial banks	6,140.0	4,890.0	4,574.6	7,124.1	7,124.1
Treasury bills	5,225.0	3,975.0	4,124.6	...	...
Development bonds	915.0	915.0	450.0	7,124.1	7,124.1
Noncommercial banks 2/	16,546.0	16,245.0	16,118.5	15,594.0	17,334.3
Treasury bills	2,272.0	1,971.0	1,899.8	1,821.0	1,821.0
Of which: CSR	...	...	...	...	496.9
Development bonds	14,274.0	14,274.0	14,218.7	13,773.0	15,513.3
Of which: CSR	...	...	...	...	12,593.8
Total domestic debt	66,046.0	64,484.0	66,783.1	55,832.0	68,905.6
Memorandum items:					
Interest in arrears on government paper held by CSR	...	...	...	...	10,852.7
Penalty interest on government paper held by CSR	...	...	...	...	5,004.9

Sources: Ministry of Finance and Economic Planning; and the National Bank of Rwanda.

1/ It excludes RF 9.0 billion in central bank claims on government arising from exchange losses related to the exchange system in March 1995, as well as on RF 2.0 billion overdraft to the prewar government.

2/ Excludes arrears vis-à-vis domestic suppliers; Caisse Sociale du Rwanda (CSR) claims on the government regarding employer contributions in arrears; interest in arrears; and penalty interest on treasury bills and development bonds.

Table 33. Rwanda: Central Government Labor Force, 1994-98 1/

	1994	1995	1996	1997	1998 Est.
General public service					
National Development Council	89	139	145	91	100
Presidency: Government Activities Coordination	70	81	94	92	73
Ministry of Interior and Local Development	449	765	495	804	181
Ministry of Justice	1,031	1,673	1,977	3,097	530
Ministry of Public Services and Vocational Training	83	139	96	138	170
Ministry of Finance	426	549	621	276	321
Ministry of Foreign Affairs and International Cooperation	225	133	157	111	121
Ministry of International Relations	0	0	0	0	
Prime Ministry	218	202	266	325	180
Defense					
Presidency: Defense and Security	...	...	...	...
Ministry of National Defense	...	...	...	401	505
Economic services					
Ministry of Industry and Handicrafts	187	176	147	89	60
Ministry of Commerce and Industry				129	142
Ministry of Agriculture, Husbandry, and Forestry	752	783	708	1,409	1,110
Ministry of Planning	125	86	142	...	...
Ministry of Public Works, Energy, and Water	374	1,050	1,278	534	416
Ministry of Transport and Communications	85	89	94	98	102
Ministry of Commerce and Consumption	0	0			
Ministry of Tourism	48	74	77	0	0
Social services					
Ministry of Primary and Secondary Education	18,355	19,701	23,239	27,374	28,965
<i>Of which: teachers</i>	...	...	...	27,000	28,863
Ministry of Higher Education and Scientific Research	85	77	106	...	...
Ministry of Youth and Associative Movements	342	258	260	467	530
Ministry of Health	2,280	5,064	4,357	4,759	3,917
Ministry of Information	37	51	41	40	46
Ministry of Gender, Family and Social Affairs	43	103	102	388	304
Ministry of Labor and Social Affairs 2/	59	260	311	...	...
Ministry of Rehabilitation	74	188	169	...	...
Total	25,389	31,794	34,882	40,622	37,773

Source: Ministry of Finance and Economic Planning.

1/ Average number of staff for the 12 months of the year.

2/ Since 1997, the Ministry of Labor and Social Affairs is incorporated in the Ministry of Gender, Family, and Social Affairs.

Table 34. Rwanda: Functional Classification of Central Government Expenditure, 1994-98
(In billions of Rwanda francs) 1/

	1994	1995	1996	1997	1998 Est.
General public services					21.4
National Assembly					0.5
Presidency	1.1
Vice Presidency					0.6
Cabinet of the Prime Minister					0.5
Supreme Court					0.1
Ministry of Interior and Local Development	0.8
Ministry of Justice	3.3
Ministry of Civil Service, Labor, and Training	0.5
Ministry of Finance 2/	10.6
Ministry of Foreign Affairs and International Cooperation	3.0
Ministry of Information					0.3
Defense					
Ministry of National Defense	27.7
Economic services					
Ministry of Handicrafts, Mines and Tourism	0.2
Ministry of Agriculture, Husbandry and Forestry	1.0
Ministry of Public Works, Energy, and Water	1.0
Ministry of Transport and Communications	0.2
Ministry of Commerce and Industry	0.1
Social services					
Ministry of Education	13.9
Ministry of Youth and Associative Movements	1.1
Ministry of Family and Social Affairs	4.4
Ministry of Health	2.2
Total	73.1

Source: Ministry of Finance and Economic Planning.

1/ Total is different from that in Table 30 reflecting differences in classification.

2/ Includes interest on public debt; excludes amortization and domestic arrears repayments.

Table 35. Rwanda: List of Public Enterprises and Public Financial Institutions

Nonfinancial public enterprises

Air Rwanda 1/
 Bugarama Rice Mill
 Butare Rice Mill
 BRALIRWA (brewery) 2/
 Cimenterie du Rwanda (CIMERWA)
 Coffee Factory Masaka
 Compagnie Rwandaise d'Hôtellerie de Tourisme (CRHT)
 Couvoir National de Rubirizi
 ELECTROGAZ (electricity, water, and gas)
 ETRU 2/
 Gishwati Dairy Plant
 Guest House Kinigi
 Hotel Akagera
 Hotel Izuba
 Imprimerie Scolaire (IMPRISCO)
 Laiterie de Nyabishindu
 Lake Ihema Fisheries
 Magasins Généraux du Rwanda (MAGERWA) 2/
 Mukamira Maize Factory
 Office des Cultures Industrielles du Rwanda - Café (OCIR-Café)
 Office des Cultures Industrielles du Rwanda - Thé (OCIR-Thé) 3/
 Office National des Transports en Commun (ONATRACOM)
 Office National pour le Développement et la Commercialisation
 des Produits Vivriers et des Productions Animales (OPROVIA)
 OPROVIA Warehouses
 Office du Pyrèthre du Rwanda (OPYRWA)
 Office Rwandais du Tourisme et des Parcs Nationaux (ORTPN)
 Office de Valorisation Pastorale du Mutara (OVAPAM)
 Office de Valorisation Industrielle de la Banane du Rwanda (OVIBAR)
 Office National des Postes
 Papeterie du Rwanda
 REDEMI (mining)
 Rwanda Télécommunications (RWANDATEL)
 Rwamagana Rice Mill
 Régie des Aéroports du Rwanda (RAR)
 Riziculture
 RWANDEX (coffee)
 RWANTEXCO (textiles) 2/
 SODEPARAL (leather goods) 1/
 SONAFRUIT (food industry) 2/
 Société des Transports Internationaux du Rwanda (STIR) 1/
 Société pour la Production Rizicole (SOPRORIZ)
 SOPAB (animal food) 2/
 SOPROTEL (hotel)
 SORWAL (matches) 2/
 SORWATHE (tea) 2/
 TABARWANDA (tobacco) 2/
 TRAFIPRO (marketing of food products)

Public financial institutions

Banque Nationale du Rwanda
 Banque Commerciale du Rwanda (BCR) 2/
 Banque Continentale Africaine du Rwanda (BACAR) 2/
 Banque de Kigali (BK) 2/
 Banque Rwandaise de Développement (BRD) 2/
 Caisse d'Épargne du Rwanda 1/ (CER)
 Caisse Hypothécaire du Rwanda 2/
 Crédit Intercommunale du Rwanda (CIR)
 Caisse Sociale du Rwanda (CSR)
 Société Nationale d'Assurance du Rwanda (SONARWA) 2/

Source: Ministry of Finance and Economic Planning.

1/ The enterprise is under liquidation

2/ The government has a minority interest.

3/ Includes nine tea factories.

Note: The above list excludes public entities (*établissements publics*) that serve social purposes (e.g., universities, research institutes, museums, the information office, and the population office).

Table 36. Rwanda: Monetary Survey, 1994-98

	1994	1995	1996	1997	1998			
					Mar.	Jun.	Sep.	Dec.
(in billions of Rwanda francs; end of period)								
Monetary authorities								
Net foreign assets	-0.3	13.3	18.8	27.8	27.7	27.7	23.8	27.9
Foreign assets	7.1	29.7	32.4	46.7	46.4	46.7	49.2	54.3
Foreign liabilities	7.4	16.4	13.6	19.0	18.7	19.0	25.4	26.4
Net domestic assets	20.4	15.5	16.1	12.3	8.9	9.8	9.7	7.7
Domestic credit	27.6	17.8	19.5	26.7	24.4	25.5	24.7	25.8
Government (net) 2/	25.9	15.2	18.4	25.5	23.0	23.7	22.6	23.4
Claims	34.8	36.4	37.1	44.1	43.5	43.5	43.5	44.4
Deposits	0.0	0.0	0.0	0.0	1.9	1.2	0.8	0.9
Treasury (including Rwanda Revenue Authority)	8.9	21.2	18.8	18.6	18.6	18.5	20.1	20.1
Line ministries	1.7	2.7	1.1	1.3	1.4	1.7	2.1	2.4
Nongovernment credit	0.2	0.2	0.3	0.2	0.2	0.5	0.7	0.8
Private sector	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7
Public enterprises	0.8	1.7	0.2	0.3	0.4	0.5	0.7	0.9
Commercial banks	0.8	1.7	0.2	0.3	0.4	0.5	0.7	0.9
Of which: money market	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other items, net (asset:+) 3/	-7.2	-2.4	-3.4	-14.4	-15.4	-15.6	-15.0	-18.1
Reserve money	20.1	28.8	34.9	40.0	36.6	37.5	33.5	35.6
Currency in circulation	12.1	18.2	20.9	22.6	19.5	19.7	18.9	20.9
Commercial bank reserves 4/	6.8	9.3	13.1	16.1	15.3	16.4	12.4	12.2
Other nonbank deposits	1.1	1.3	1.0	1.3	1.9	1.5	2.2	2.5
Of which: Caisse sociale du Rwanda, and other autonomous public agencies	0.1	0.3	0.2	0.5	0.5	0.5	0.5	1.5
Commercial banks								
Net foreign assets	2.0	14.3	18.8	18.4	19.2	16.3	21.2	20.3
Foreign assets	2.8	15.6	20.2	22.3	22.4	20.5	24.3	24.1
Foreign liabilities	0.8	1.2	1.4	3.9	3.2	4.2	3.0	3.8
Reserves	6.8	9.3	13.1	16.1	15.3	16.4	12.4	12.2
NBR deposits	6.5	8.2	11.6	14.2	12.9	13.9	10.1	10.2
Required reserves 4/	...	...	...	10.0	9.9	9.8	8.4	8.0
Excess reserves	...	...	...	1.5	2.0	3.1	1.7	2.3
NBR borrowing from money market	0.0	0.0	0.0	2.7	1.0	1.1	0.0	0.0
Cash in vault	0.3	1.0	1.5	1.9	2.3	2.5	2.3	1.9
Credit from NBR (rediscount; - liability)	-0.8	-1.7	-0.2	-0.3	-0.4	-0.5	-0.7	-0.9
Domestic credit	11.6	27.8	22.9	44.9	48.4	52.3	54.3	56.5
Central government (net) 5/	0.9	-1.0	-6.0	-0.1	1.8	1.3	2.1	1.9
Credit	2.7	4.5	5.0	5.6	6.5	6.7	6.7	7.0
Deposits 5/	1.8	5.5	11.0	5.7	4.7	5.4	4.6	5.1
Public enterprises	0.1	0.4	0.2	0.0	0.8	0.1	0.4	0.4
Private sector	10.6	28.5	28.7	45.1	45.7	50.9	51.8	54.2
Other items, net (assets:+) 3/	3.9	-5.4	-7.4	-1.2	-4.7	-8.3	-8.1	-13.6
Deposits 5/	23.5	44.4	47.2	78.0	77.8	76.1	79.1	74.5
Private	23.5	44.4	47.2	66.8	66.2	63.4	65.4	60.3
Public (nongovernment) 5/	0.0	0.0	0.0	11.2	11.6	12.7	13.7	14.2
Monetary survey								
Net foreign assets	1.7	27.7	37.6	46.1	47.0	44.0	45.0	48.2
Net domestic assets	35.0	36.2	31.5	55.8	52.2	53.3	55.2	49.7
Domestic credit	38.3	43.9	42.3	71.4	72.3	77.2	78.3	81.5
Central government (net) 5/	26.8	14.2	12.4	25.3	24.8	25.0	24.6	25.4
Public enterprises	0.8	1.1	0.9	0.7	1.5	0.8	1.2	1.2
Private sector	10.7	28.7	29.0	45.3	46.0	51.4	52.5	55.0
Other items, net (asset: +) 3/	-3.3	-7.7	-10.8	-15.6	-20.1	-24.0	-23.1	-31.8
Broad money 5/	36.8	63.9	69.1	101.9	99.2	97.3	100.2	97.9
Currency in circulation	12.1	18.2	20.9	22.6	19.5	19.7	18.9	20.9
Deposits	24.6	45.7	48.2	79.3	79.6	77.6	81.3	77.0
Of which: foreign currency deposits	2.4	15.2	14.1	15.9	16.9	15.0	17.7	18.5
(Annual changes in percent of beginning-of-period broad money)								
Net foreign assets	-7.7	70.5	15.6	12.4	6.1	1.2	1.9	2.0
Net domestic asset	1.2	3.2	-7.4	35.1	10.2	5.0	10.2	-6.0
Domestic credit	-38.7	15.3	-2.6	42.1	18.0	17.0	10.6	9.9
Government (net)	-16.5	-34.4	-2.8	18.8	1.6	4.0	-3.4	0.0
Economy	-22.3	49.7	0.2	23.3	15.9	13.0	13.6	9.9
Other items, net	39.9	-12.1	-4.8	-7.0	-7.8	-12.0	-0.4	-15.9
Broad money	-6.5	73.7	8.2	47.5	16.3	6.2	12.0	-3.9
(in percent, unless otherwise indicated)								
Memorandum items:								
Currency/broad money ratio	33.0	28.5	30.3	22.2	19.7	20.2	18.9	21.4
Reserve money annual growth	10.0	43.1	21.5	14.6	-0.4	-1.3	-10.6	-11.0
Reserves/deposits	85.5	64.8	74.0	51.4	47.1	49.3	42.3	47.8
Money multiplier	1.8	2.2	2.0	2.5	2.7	2.6	3.0	2.7
Velocity (GDP/M2 eop.)	4.5	5.3	6.2	5.5	...	...	...	6.3
Velocity (GDP/M2 avg.)	4.4	6.7	6.5	6.6	...	...	...	6.3
Nominal GDP (in billions of Rwanda francs)	165.8	337.2	431.4	562.4	...	...	...	632.1

Source: National Bank of Rwanda (NBR).

1/ Actual figures are based on current exchange rates and are not adjusted for program adjustments as described in the technical memorandum of understanding.

2/ Net credit to government excludes RF 9 billion NBR claims on government arising from exchange losses related to the liberalization of the exchange system in March 1995, as well as RF 2 billion overdraft to the prewar government.

3/ Other items as projected under the 1999 program include exchange revaluation changes due to the difference between the program exchange rate (US\$1=RF 330.5) and at end-1998.

4/ The reserve requirement was reduced in July 1998 from 12 percent to 10 percent.

5/ Figures for net credit to government from commercial banks and broad money in 1997 and 1998 were revised (both upward) after reclassifying deposits of public enterprises and other autonomous public agencies, which were previously classified under government deposits and excluded from broad money.

Table 37. Rwanda: Summary Accounts of the National Bank of Rwanda, 1994-98
(In billions of Rwanda francs; end of period)

	1994	1995	1996	1997	1998			
					Mar.	Jun.	Sep.	Dec.
Foreign assets	7.1	29.7	32.4	46.7	46.4	46.7	49.2	54.3
<i>Of which:</i>								
SDR holdings	...	...	...	...	...	...	...	...
Reserve position in the Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Claims on government	34.8	36.4	37.1	44.1	43.5	43.5	43.5	44.4
Ordinary advances	2.4	1.8	2.6	0.7	0.0	0.0	0.0	1.0
Special advances	15.5	15.5	0.0	0.0	0.0	0.0	0.0	0.0
Consolidated debt	1.4	1.4	34.5	43.5	43.5	43.5	43.5	43.5
Postal checking system	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0
Other	15.5	15.5	0.0	0.0	0.0	0.0	0.0	0.0
Claims on public enterprises	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7
Claims on the private sector	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3
Claims on deposit money banks	0.8	1.7	0.2	0.3	0.4	0.5	0.7	0.9
Money market loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Claims on other financial institutions	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.4
Unclassified assets	23.3	45.8	40.3	30.8	28.8	29.7	31.6	32.0
Total assets	66.2	113.7	110.3	122.2	119.3	120.9	125.7	132.5
Reserve money	20.0	28.5	34.7	36.8	35.2	35.9	33.0	34.2
Currency outside banks	12.1	18.2	20.9	22.6	19.5	19.7	18.9	20.9
<i>Out of:</i> total currency	12.5	19.3	22.4	24.5	21.8	22.1	21.2	22.9
Currency in commercial banks	0.3	1.0	1.5	1.9	2.3	2.5	2.3	1.9
Bank deposits	6.5	8.2	11.6	11.6	11.9	12.8	10.1	10.2
Money market deposits	0.0	0.0	0.0	2.7	1.0	1.1	0.0	0.0
Other deposits	0.7	0.8	0.5	0.6	0.6	0.6	0.8	0.9
Private sector deposits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public enterprises	0.5	0.5	0.4	0.4	0.4	0.3	0.6	0.8
Other financial institutions' deposits	0.3	0.3	0.1	0.2	0.3	0.2	0.3	0.1
More deposits	0.3	0.2	0.2	0.2	0.8	0.4	0.8	0.1
Import deposits	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other	0.2	0.1	0.1	0.1	0.7	0.3	0.7	0.1
Foreign liabilities	7.4	16.4	13.6	19.0	18.7	19.0	28.1	29.2
<i>Of which:</i> SAF	1.8	3.9	3.4	2.5	2.5	2.2	2.3	2.0
ESAF	0.0	0.0	0.0	0.0	0.0	0.0	5.2	5.5
Project import fund	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.8
Total government and CSR	9.0	21.5	19.0	19.2	20.9	20.3	18.7	19.7
Government deposits	8.9	21.2	18.8	18.7	20.5	19.7	18.2	18.2
OTR	0.0	0.0	0.0	0.0	1.5	0.5	0.3	0.0
Rwanda Revenue Authority	0.0	0.0	0.0	0.0	0.3	0.8	0.5	0.9
Other (including projects)	4.3	18.9	15.5	14.5	14.4	14.2	13.1	13.9
Counterpart funds	4.6	2.3	3.2	4.2	4.2	4.3	4.3	3.4
Caisse sociale du Rwanda and other	0.1	0.3	0.2	0.5	0.5	0.5	0.5	1.5
Coffee funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public institutions	0.1	0.2	0.2	0.5	0.3	0.4	0.4	1.0
Community deposits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Social security fund	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.4
Long-term liabilities (Trust Fund Loans)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital, reserves, and SDR allocations	14.0	20.2	13.1	11.7	14.1	12.9	12.5	15.0
Unclassified liabilities	16.5	31.9	34.5	43.3	40.0	42.4	44.5	46.3
Total liabilities	66.8	114.2	110.8	119.7	118.6	120.1	125.9	131.7

Source: National Bank of Rwanda (NBR).

Table 38. Rwanda: Summary Accounts of Commercial Banks, 1994-98
(In billions of Rwanda francs)

	1994	1995	1996	1997	1998			
					Mar.	Jun.	Sep.	Dec.
Reserves	6.8	9.3	13.1	16.1	15.3	16.4	12.4	12.2
Cash	0.3	1.0	1.5	1.9	2.3	2.5	2.3	1.9
Deposits at the NBR	6.5	8.2	11.6	11.6	11.9	12.8	10.1	10.2
Money market loans	0.0	0.0	0.0	2.7	1.0	1.1	0.0	0.0
Foreign assets	2.8	15.6	20.2	22.3	22.4	20.5	24.3	24.1
Claims on Government	2.7	4.5	5.0	5.6	6.5	6.7	6.7	7.0
<i>Of which: development and treasury bonds</i>	4.1	4.3	4.6	0.0	0.0	0.0	0.0	0.0
Claims on nongovernment sector	19.3	37.9	38.5	56.7	63.3	68.3	69.4	67.4
Claims on public enterprises	0.1	0.4	0.2	0.0	0.8	0.1	0.4	0.4
Claims on private sector	10.4	28.4	28.6	44.9	45.6	50.8	51.7	54.1
Claims on other financial institutions	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other	8.6	9.1	9.6	11.7	16.7	17.4	17.2	12.7
Total assets	31.5	67.3	76.7	100.7	107.4	112.0	112.7	110.6
Total deposits	...	51.5	61.5	77.8	81.2	81.0	84.1	83.0
Non-government sector deposits	23.5	44.4	47.2	66.8	66.2	63.4	65.4	70.0
Demand deposits	15.4	22.2	24.4	33.6	29.1	33.6	28.7	31.0
<i>Of which: other financial institutions</i>	1.2	0.7	0.6	0.7	0.5	1.2	1.0	1.0
Time and saving deposits	5.6	7.0	8.7	17.2	20.1	14.8	19.0	20.5
<i>Of which: other financial institutions</i>	1.0	0.9	2.0	2.7	2.0	2.3	2.2	1.7
Foreign currency deposits	2.4	15.2	14.1	15.9	16.9	15.0	17.7	18.5
<i>Of which: other financial institutions</i>	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deposits by other banks	...	1.6	3.4	3.6	4.8	3.5	4.6	3.5
Government deposits	3.4	5.5	10.9	7.5	10.1	14.0	14.1	9.5
Foreign liabilities	0.8	1.2	1.4	3.9	3.2	4.2	3.0	3.8
Credits from the NBR	0.3	1.6	0.1	0.1	0.1	0.1	0.4	0.1
Own capital	3.7	6.9	7.7	11.7	13.7	14.4	15.5	16.0
Provisions and Guarantee Fund	1.4	2.0	1.9	3.4	2.3	2.7	2.3	2.9
Reserves	1.2	1.5	2.2	2.4	3.5	3.6	3.6	3.3
Capital	0.8	1.8	2.1	2.3	2.3	2.3	2.3	2.3
Specific provisions	0.5	0.9	0.9	2.8	4.5	5.0	6.2	6.5
Net profit	-0.2	0.7	0.6	0.8	1.1	0.8	1.0	1.0
Other liabilities (including to deposit money banks (D	7.1	7.7	9.4	10.8	14.2	15.8	14.3	11.2
To DMBs	2.1	1.6	3.4	3.6	4.8	3.5	4.6	3.5
Other	5.0	6.0	6.0	7.2	9.3	12.3	9.7	7.7
Total liabilities	38.8	67.3	76.7	100.7	107.4	112.0	112.7	110.6

Source: National Bank of Rwanda (NBR).

Table 39. Rwanda: Commercial Bank Credit , 1994-98
(In billions of Rwanda francs)

	1994	1995	1996	1997	1998 Est.
Total	12,087	25,644	27,809	45,914	55,124
Sector					
Agriculture	65	157	74	178	56
Mining	15	10	20	27	36
Manufacturing	3,558	4,748	4,650	9,209	9,220
Construction	1,842	2,476	3,147	4,929	7,298
Real estate, including housing	880	1,595	1,872	3,845	6,326
Distribution and tourism	3,851	13,201	14,273	21,567	23,092
Transport, communication	629	1,428	1,398	2,189	3,640
Other	1,247	2,029	2,375	3,970	5,456
Short term (< 1 year)					
Sector					
Agriculture	57	135	66	116	15
Mining	15	0	0	17	1
Manufacturing	2,274	3,463	3,792	7,494	7,112
Construction	1,107	1,092	1,720	2,162	2,437
Real estate, including housing	166	250	471	110	1,504
Distribution and tourism	3,787	12,426	13,124	18,932	20,091
Transport, communication	327	550	761	942	799
Other	816	1,578	1,845	2,650	3,447
Medium term (1 to 5 years)					
Sector					
Agriculture	8	21	8	62	40
Mining	0	0	10	0	26
Manufacturing	1,070	1,103	731	1,601	2,023
Construction	369	733	817	1,710	3,271
Real estate, including housing	369	728	817	1,702	3,252
Distribution and tourism	61	670	1,030	2,382	2,686
Transport, communication	266	848	603	1,213	2,729
Other	50	185	450	1,093	1,641
Long term (> 5 years)					
Sector					
Agriculture	0	1	0	0	1
Mining	0	10	10	10	9
Manufacturing	214	182	127	114	85
Construction	366	651	610	1,057	1,590
Real estate, including housing	345	617	584	2,033	1,570
Distribution and tourism	3	105	119	253	315
Transport, communication	36	30	34	34	112
Other	381	266	80	227	368

Source: National Bank of Rwanda (NBR).

Table 40. Rwanda: Financial Sector Indicators, 1995-98

(In billions of Rwanda francs, unless otherwise indicated)

	1995	1996	1997	1998			
				Mar.	Jun.	Sep.	Dec.
Commercial banks							
Nonperforming loans	...	15.6	10.4	11.5	16.0	16.5	16.9
(in percent of private sector loans)	...	40.5	18.3	18.2	23.4	23.8	25.1
Required provisioning	...	...	7.4	7.0	8.4	8.5	14.6
Actual provisioning	...	...	4.3	5.1	6.0	6.9	7.9
Required capital adequacy ratio (in percent)	...	5.0	5.0	5.0	5.0	5.0	5.0
Actual capital adequacy ratio (in percent)	...	...	3.6	...	...	...	1.8
Required foreign currency exposure limit (in percent of own capital)	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Required reserves							
(in percent of total deposits)	16.0	14.0	12.0	12.0	12.0	10.0	10.0
Actual reserves							
(in percent of total deposits)	18.0	21.2	20.7	18.8	20.2	14.7	14.7
Profits							
(in percent of total own capital)	...	12.2	13.5	14.5	20.8	29.5	42.1

Source: National Bank of Rwanda (NBR).

Table 41. Rwanda: Interest Rates, 1996-98
(In percent, end of period)

	1996				1997				1998			
	Mar.	June	Sep.	Dec.	Mar.	June	Sep.	Dec.	Mar.	June	Sep.	Dec.
Discount rate	16.0	16.0	16.0	16.0	13.0	13.0	11.5	10.3	10.8	11.1	12.6	13.8
NBR money market borrowing rate 1/	...	...	...	...	...	...	...	...	6.8	7.1	8.6	9.8
Interest rate on government overdraft	11.0	11.0	11.0	11.0	11.0	11.0	9.0	8.0	8.0	8.0	8.1	8.0
Deposit rates												
1 month	4.7	3.9	5.0	4.8	8.4	8.5	8.6	8.4	8.7	8.5	8.6	6.0
3 months	12.8	14.9	11.2	12.1	8.9	8.3	9.4	8.9	9.0	7.9	8.1	8.1
6 months	8.6	7.7	10.5	10.8	9.3	8.7	10.3	10.4	10.2	9.4	8.7	8.7
12 months	10.3	6.1	8.6	7.6	8.8	8.7	11.3	11.3	11.6	10.4	10.3	10.0
Lending rates												
Maximum	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
Range	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Crop credit	18	18	16.0	18.0	18.0	14.5	16.0	16.0	18.0	14.5	16.0	16.0
Interbank money market rate	...	...	15.0	11.0	9.0	9.3	9.0	8.0	8.0	8.0	8.1	8.0

Source: National Bank of Rwanda (NBR).

1/ The NBR's intervention in the money market was initiated in August 1997.

Table 42. Rwanda: Balance of Payments, 1994-98
(In millions of U.S. dollars)

	1994	1995	1996	1997	1998 Est.
Exports, f.o.b.	32.2	50.4	62.0	93.0	62.4
<i>Of which: coffee</i>	17.4	38.8	43.2	45.3	26.7
Imports, f.o.b.	367.4	194.1	213.3	277.4	255.7
Trade balance	-335.2	-143.7	-151.3	-184.5	-193.3
Services (net)	-108.7	-118.2	-142.0	-162.1	-166.1
<i>Of which: interest on public debt (including Fund)</i>	9.2	13.9	13.8	12.1	12.9
Transfers (net)	398.6	316.5	290.1	287.6	262.1
Private	44.5	15.8	26.5	25.0	18.3
Public	354.1	300.7	263.6	262.6	243.8
Current account balance (including official transfers)	-45.3	54.5	-3.2	-58.9	-97.3
Current account balance (excluding official transfers)	-399.4	-246.2	-266.8	-321.5	-341.1
Direct investment	0.0	2.0	2.2	2.6	7.1
Public sector capital	-10.1	28.4	32.1	42.9	51.4
Long-term borrowing	7.0	50.7	53.7	63.9	73.9
Scheduled amortization	17.1	22.3	21.7	21.0	22.4
Private capital	12.4	-47.0	-13.6	1.2	-2.1
Capital account balance	2.3	-16.6	20.7	46.7	56.4
Errors and omissions	-1.0	13.3	-18.4	23.9	15.3
Overall balance	-44.1	51.2	-0.9	11.7	-25.6
Financing	44.1	-51.2	0.9	-11.7	25.6
Change in net foreign assets of NBR (increase -)	9.0	-46.7	-17.2	-29.2	6.6
Net credit from the Fund	0.0	13.5	-1.3	18.1	13.8
Change in gross official reserves (increase -)	-3.7	-48.5	-7.0	-46.7	-10.8
Change in other foreign liabilities (increase +)	12.7	-11.8	-9.0	-0.5	3.7
Change in arrears (decrease -) 1/	35.1	-4.5	18.1	17.5	-58.2
Exceptional financing	0.0	0.0	0.0	0.0	77.2

Sources: National Bank of Rwanda (NBR); and Fund staff estimates.

Table 43. Rwanda: Exports, 1994-98

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

	1994	1995	1996	1997	1998 Est.
Total exports, f.o.b.	32.2	50.4	62.0	93.0	62.4
Percent change	-52.5	56.8	22.9	50.0	-32.9
Moving indices (1992=100)					
Price index	130.8	168.9	148.9	196.9	150.4
Percent change	19.6	29.2	-11.8	32.2	-23.6
Volume index	35.8	43.4	60.5	68.6	60.3
Percent change	-60.3	21.4	39.4	13.4	-12.2
Fixed indices (1992=100)					
Price index	105.9	150.8	140.9	131.8	119.1
Percent change	-52.5	56.8	22.9	50.0	-32.9
Volume index	44.2	48.6	64.0	102.5	76.2
Percent change	-59.0	27.4	50.4	44.9	-5.6
By commodity					
Coffee	17.4	38.8	43.2	45.3	26.7
Percent change	-53.6	122.2	11.4	4.9	-41.0
Volume (1,000 tons)	13.1	15.1	21.1	14.5	14.3
Percent change	-55.9	15.2	39.6	-31.3	-1.3
Unit value (cts/lb.)	60.5	116.6	93.0	142.0	84.8
Unit value (US\$/kg)	1.3	2.6	2.1	3.1	1.9
Percent change	5.1	92.9	-20.2	52.7	-40.3
Tea	5.8	3.8	9.3	20.6	22.9
Percent change	-69.0	-33.3	142.5	121.5	11.0
Volume (1,000 tons)	3.5	4.0	7.8	13.0	14.9
Percent change	-70.0	14.4	96.0	67.2	14.6
Unit value (f.o.b., US\$/kg.)	1.7	1.0	1.2	1.6	1.5
Percent change	3.1	-41.8	23.7	32.5	-3.1
Cassiterite and tin	0.5	0.9	0.8	1.0	0.4
Percent change	-66.4	71.6	-7.1	18.9	-55.1
Volume (tons)	358.1	246.5	330.0	327.4	196.8
Percent change	-45.2	-31.2	33.9	-0.8	-39.9
Unit value (US\$/kg)	1.4	3.6	2.5	3.0	2.2
Percent change	-38.8	149.2	-30.6	19.8	-25.3
Hides and skins	1.2	2.2	3.2	4.6	2.2
Percent change	-50.2	78.0	43.3	42.9	-52.2
Volume (tons)	770.0	1,250.2	1,221.7	1,610.0	918.9
Percent change	-42.4	62.4	-2.3	31.8	-42.9
Unit value (US\$/kg)	1.6	1.8	2.6	2.8	2.4
Percent change	-13.5	9.6	46.6	8.4	-16.3
Pyrethrum and chincona	0.3	0.4	0.3	3.4	0.8
Percent change	-46.7	31.8	-33.5	1,029.4	-77.5
Volume	6.4	14.0	6.3	45.8	11.8
Percent change	0.0	118.6	-55.0	627.6	-74.3
Unit price (\$/kg)	53.1	32.0	47.3	73.5	64.3
Percent change	-46.7	-39.7	47.8	55.2	-12.4
Other products	1.8	4.3	5.2	18.2	9.4
Value index (1992=100)	31.9	74.5	90.4	315.2	163.1
Percent change	-73.0	133.7	21.4	248.7	-48.2
Volume index (1992=100)	30.3	69.4	82.8	284.1	145.1
Percent change	-73.5	128.7	19.3	243.2	-48.9
Price index (1992=100)	105.1	107.3	109.2	110.9	112.4
Percent change	2.2	2.2	1.7	1.6	1.3
Other adjustments	5.0	0.0	0.0	0.0	0.0

Sources: National Bank of Rwanda (NBR); and Fund staff estimates.

Table 44. Rwanda: Imports, 1994-98
(In millions of U.S. dollars, unless otherwise indicated)

	1994	1995	1996	1997	1998 Est.
Total c.i.f.	458.7	238.2	257.0	342.9	323.1
Total, f.o.b.	367.4	194.1	213.3	277.4	255.7
Freight and insurance	91.3	44.1	43.7	65.5	67.4
Moving indices (1992=100)					
Price index	99.7	105.1	108.6	98.8	89.0
Percent change	7.0	5.3	3.4	-9.0	-9.9
Volume index	152.8	76.6	81.4	116.4	119.2
Percent change	28.2	-49.8	6.3	43.0	2.3
Fixed indices (1992=100)					
Price index	132.3	144.2	148.6	132.1	120.0
Percent change	9.3	9.0	3.0	-11.1	-9.2
Volume index	143.0	69.4	73.9	108.1	109.7
Percent change	25.5	-51.5	6.6	46.3	1.5
Total, c.i.f.	458.7	238.2	257.0	342.9	323.1
Capital goods	36.0	49.8	54.1	61.7	60.7
Private capital	3.6	5.0	5.4	6.2	6.1
Public	32.4	44.8	48.6	55.6	54.6
Intermediate goods	22.8	41.1	54.7	70.5	68.5
Energy products	23.6	21.8	26.7	32.0	34.8
Other imports	362.8	125.5	121.6	173.4	154.8
Food	218.1	56.3	50.6	53.5	49.3
Other	144.7	69.2	71.0	119.8	105.6
Other adjustments (electric energy)	13.5	0.0	0.0	5.3	4.3
By category					
Capital goods	36.0	49.8	54.1	61.7	60.7
Value index (1992=100)	52.1	72.1	78.3	89.4	87.9
Volume index (1992=100)	53.6	67.3	75.4	93.5	93.1
Percent change	-51.5	25.5	12.0	24.0	-0.3
Price index (1992=100)	97.2	107.2	103.8	95.7	94.4
Percent change	3.0	10.3	-3.1	-7.8	-1.3
Intermediate goods	22.8	41.1	54.7	70.5	68.5
Value index (1992=100)	24.7	44.5	59.1	76.3	74.1
Volume index (1992=100)	25.5	41.3	56.7	79.4	78.1
Percent change	-75.8	62.1	37.3	40.0	-1.6
Price index (1992=100)	96.8	107.6	104.3	96.1	94.8
Percent change	3.3	11.2	-3.1	-7.8	-1.3
Energy products	23.6	21.8	26.7	32.0	34.8
Value index (1992=100)	63.7	58.9	72.2	86.3	94.0
Volume index (1992=100)	73.4	62.8	64.9	82.1	131.8
Percent change	-29.0	-14.5	3.5	26.4	60.5
Price index (1992=100)	86.9	93.8	111.1	105.1	71.3
Percent change	-5.4	8.0	18.4	-5.4	-32.1
Food	218.1	56.3	50.6	53.5	49.3
Value index (1992=100)	752.8	194.3	174.5	184.8	170.1
Volume index (1992=100)	709.9	169.5	135.6	161.1	169.9
Percent change	250.0	-76.1	-20.0	18.8	5.4
Price index (1992=100)	106.0	114.6	128.6	114.7	100.1
Percent change	5.1	8.1	12.2	-10.8	-12.7
Other	144.7	69.2	71.0	119.8	105.6
Value index (1992=100)	235.4	112.6	115.5	195.0	171.7
Volume index (1992=100)	243.2	104.6	110.8	202.9	181.1
Percent change	88.4	-57.0	5.9	83.1	-10.7
Price index (1992=100)	96.8	107.6	104.3	96.1	94.8
Percent change	3.3	11.2	-3.1	-7.8	-1.3

Sources: National Bank of Rwanda (NBR); and Fund staff estimates.

Table 45. Rwanda: Services and Transfers, 1994-98
(In millions of U.S. dollars)

	1994	1995	1996	1997	1998 Est.
Services (net)	-108.7	-118.2	-142.0	-162.1	-166.1
Credit	22.2	38.1	26.9	60.2	56.9
Debit	130.9	156.4	168.9	222.3	222.9
Nonfactor services (net)	-105.6	-123.7	-127.8	-145.6	-159.1
Credit	15.3	16.2	21.5	51.0	46.9
Freight	2.4	2.4	3.2	4.8	5.4
Other transportation	3.4	3.4	3.9	4.2	3.5
Travel	2.1	2.1	3.5	17.0	19.0
Foreign governments	6.6	6.6	8.7	16.8	16.3
Other	0.9	1.7	2.1	8.2	2.7
Debit	120.9	139.9	149.3	196.6	206.0
Freight	64.7	31.3	31.0	46.5	47.9
Other transportation	15.6	6.7	14.2	23.1	21.2
Travel (excluding bourses)	20.9	8.9	12.5	12.9	16.4
Government of Rwanda (net)	0.0	0.0	7.9	15.2	11.0
Private services	3.9	5.3	4.6	15.5	14.3
Technical assistance	15.8	87.7	79.1	83.4	81.7
Other (adjustment)	0.0	0.0	0.0	0.0	13.5
Factor services (net)	-3.1	5.4	-14.2	-16.5	-7.0
Credit	6.9	21.9	5.5	9.2	9.9
Investment income	1.0	2.8	5.5	8.0	8.7
Nonresidents (UNAMIR and NGOs)	5.9	19.1	0.0	1.2	1.2
Debit	10.0	16.5	19.7	25.7	16.9
Dividends and private investment income	0.8	1.3	2.2	6.3	0.2
Investment income	9.2	14.2	13.8	12.1	12.9
Interest on public debt	9.2	13.9	13.8	12.1	12.9
IMF	0.1	0.1	0.6	0.9	1.9
Other	9.1	13.8	13.1	11.2	11.0
Other	0.0	0.3	0.0	0.0	0.0
Labor income	0.0	1.0	3.2	6.2	2.8
Property income	0.0	0.0	0.6	1.2	1.1
Transfers (net)	398.6	316.5	290.1	287.6	262.1
Credit	398.6	320.9	294.2	312.8	278.8
Debit	0.0	4.5	4.1	25.2	16.8
Private (net)	44.5	15.8	26.5	25.0	18.3
Credit	44.5	15.8	28.9	48.8	33.7
Debit	0.0	0.0	2.4	23.8	15.4
Public (net)	354.1	300.7	263.6	262.6	243.8
Credit	354.1	305.2	265.4	264.0	245.2
Current grants for budgetary support (non-Special Program for Africa)	0.0	35.8	8.2	9.0	11.1
PIP support	6.9	93.5	90.0	115.9	95.1
Capital (projects)	6.9	69.3	67.5	86.9	71.3
Technical assistance	0.0	24.2	22.5	29.0	23.8
Other current grants	347.2	175.9	167.1	139.1	139.0
Technical assistance (outside public investment program)	15.8	61.4	50.0	45.0	50.0
Humanitarian aid	331.4	114.5	117.1	94.1	89.0
Debit	0.0	4.5	1.7	1.4	1.4

Sources: National Bank of Rwanda (NBR); and Fund staff estimates.

Table 46. Rwanda: Summary of External Public Debt, 1994-98
(In millions of U.S. dollars)

	1994	1995	1996	1997	1998 Est.
Official debt service					
Total	26.3	36.2	36.7	35.5	37.7
Interest	9.2	13.9	13.8	12.1	12.9
Principal	17.1	22.3	22.9	23.4	24.8
IMF	0.1	0.1	1.9	3.3	4.2
Interest	0.1	0.1	0.6	0.9	1.9
Principal	0.0	0.0	1.3	2.4	2.4
Debt service on nonrescheduled debt	26.2	36.1	34.8	32.2	33.4
Interest	9.1	13.8	13.1	11.2	11.0
Principal	17.1	22.3	21.7	21.0	22.4
Official debt; outstanding stock including IMF; including reschedulings; excluding arrears					
Debt outstanding (beginning of period)	853.4	946.1	1,001.6	1,033.0	1,040.6
Disbursements	7.0	50.7	53.7	63.9	73.9
Amortization	-17.1	-22.3	-21.7	-21.0	-22.4
Rescheduling/refinancing flow	0.0	0.0	0.0	0.0	59.3
Amortization of rescheduled debt	0.0	0.0	0.0	0.0	-0.2
Adjustments 1/	102.8	27.1	-0.7	-35.3	19.2
Debt outstanding (end of period)	946.1	1,001.6	1,033.0	1,040.6	1,170.3
Arrears					
Arrears outstanding (beginning of period)	30.8	66.5	61.5	78.9	97.3
Change in arrears	35.1	-4.5	18.1	17.5	-58.2
Accumulated	35.1	15.9	18.1	17.5	15.0
Settled	0.0	-20.4	0.0	0.0	-73.2
Adjustments 1/	0.6	-0.5	-0.6	0.9	4.0
Arrears outstanding (end of period)	66.5	61.5	78.9	97.3	43.1
Debt and arrears outstanding, including IMF (end of period)	1,012.6	1,063.0	1,111.9	1,137.9	1,213.4
Memorandum items					
Net stock of rescheduled debt	0.0	0.0	0.0	0.0	59.3
Official debt due to IMF	12.8	26.3	24.2	40.4	56.4

Sources: National Bank of Rwanda; and Fund staff estimates.

1/ Includes valuation changes and errors and omissions.

Table 47. Rwanda: External Public Debt, Stock Outstanding, 1994-98
(In millions of U.S. dollars) 1/

	1994	1995	1996	1997	1998			
					Debt 1/	Arrears	Total debt 2/	In Percent of total
Total external debt	1,012.6	1,063.0	1,111.9	1,137.9	1,170.3	43.1	1,213.4	100.0
Multilateral	810.2	854.9	899.2	927.4	1,034.6	8.3	1,042.9	85.9
IBRD-IDA	494.5	500.7	520.1	557.5	642.7	0.0	642.7	53.0
African Development Fund	183.2	201.0	226.7	203.4	220.4	0.0	220.4	18.2
African Development Bank	9.7	7.7	7.5	6.8	6.5	0.0	6.5	0.5
International Fund for Agricultural Development	24.4	23.4	23.1	25.3	29.1	0.0	29.1	2.4
Arab Bank for Economic Development in Africa (BADEA)	39.7	39.2	40.2	30.8	37.8	0.0	37.8	3.1
Arab League	1.5	2.0	1.6	1.7	1.2	0.0	1.2	0.1
European Union	31.9	32.7	32.9	34.4	25.3	5.0	30.3	2.5
European Investment Bank	2.9	11.8	13.1	15.0	8.0	3.3	11.3	0.9
OPEC Fund	9.6	10.2	10.0	12.3	7.2	0.0	7.2	0.6
IMF	12.8	26.3	24.2	40.4	56.4	0.0	56.4	4.7
Bilateral	202.4	208.1	212.7	210.5	135.7	34.9	170.6	14.1
Paris Club	108.4	112.1	113.7	102.8	85.7	0.0	85.7	7.1
Official Development Assistance	67.3	76.0	77.6	70.6	71.6	0.0	71.6	5.9
Austria	6.4	16.8	17.0	14.5	16.4	0.0	16.4	1.4
Caisse Centrale de Coopération Économique	44.4	44.3	45.5	41.4	42.2	0.0	42.2	3.5
FCEOM (Japan)	16.5	15.0	15.1	14.6	13.0	0.0	13.0	1.1
Non-ODA (suppliers credits)	41.1	36.0	36.1	32.2	14.1	0.0	14.1	1.2
Banque Nationale de Paris (BNP/ Amsterdam)	3.2	3.5	3.4	1.8	0.6	0.0	0.6	0.1
BNP/ Paris	19.5	16.1	15.9	7.3	3.7	0.0	3.7	0.3
Société pour l'Expansion des Exportation/Canada	4.6	4.1	4.4	6.5	3.7	0.0	3.7	0.3
Compagnie Française d'Assurance pour le Commerce Extérieur	12.5	12.4	12.4	15.2	5.6	0.0	5.6	0.5
USA (Air Rwanda)	1.4	0.0	0.0	1.4	0.4	0.0	0.4	0.0
Non-Paris Club	94.1	96.0	99.0	107.7	50.0	34.9	84.9	7.0
ODA	94.1	96.0	99.0	107.7	50.0	34.9	84.9	7.0
China	21.6	25.3	25.3	24.9	22.0	1.1	23.1	1.9
Abu Dhabi Fund	2.3	2.9	3.2	3.7	0.1	2.2	2.4	0.2
Kuwaiti Fund	31.8	32.2	33.7	37.4	13.7	15.0	28.7	2.4
Libya	1.6	1.4	2.0	2.2	0.1	1.1	1.2	0.1
Saudi Fund for Development	31.5	34.2	34.8	39.4	14.0	15.5	29.5	2.4
Unallocated amounts	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-ODA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: Rwandese authorities; and Fund staff estimates.

1/ Excluding arrears.

2/ Including arrears and late interest.

Table 48. Rwanda: External Public Debt, Scheduled Principal and Interest, 1995-98 1/
(In millions of U.S. dollars)

	1995		1996		1997		1998	
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest
Total	22.3	13.9	22.9	13.8	23.4	12.1	24.8	12.9
Multilateral	11.9	9.4	15.3	9.8	14.6	8.1	15.3	9.8
IBRD-IDA	3.5	4.6	4.7	4.5	5.2	3.8	4.7	4.2
African Development Fund	1.4	1.9	1.5	1.9	1.5	1.4	1.9	1.4
African Development Bank	0.6	0.3	0.6	0.3	0.4	0.3	0.6	0.3
International Fund for Agricultural Development	0.5	0.7	0.5	0.6	0.4	0.2	0.5	0.6
Arab Bank for Economic Development in Africa (BADEA)	3.1	1.0	3.3	0.9	2.5	1.0	2.2	0.7
Arab League	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0
European Union	0.7	0.3	0.8	0.3	0.8	0.2	1.0	0.3
European Investment Bank	0.8	0.2	0.8	0.2	0.5	0.2	0.8	0.2
OPEC Fund	1.3	0.3	1.7	0.3	0.7	0.1	1.1	0.3
IMF	0.0	0.1	1.3	0.6	2.4	0.9	2.4	1.9
Bilateral	10.4	4.4	7.7	4.0	8.8	3.9	9.4	3.0
Paris Club	3.0	2.7	3.1	2.6	3.1	2.3	4.4	2.3
Official Development Assistance	1.4	1.8	1.5	1.9	1.7	1.3	2.9	1.8
Austria	0.0	0.2	0.0	0.2	0.0	0.2	0.0	0.2
Caisse Centrale de Coopération Économique	0.7	1.1	0.8	1.1	1.1	1.0	2.4	1.1
FCEOM (Japan)	0.7	0.6	0.7	0.5	0.6	0.2	0.7	0.5
Non-ODA (suppliers credits)	1.6	0.9	1.5	0.7	1.4	0.9	1.5	0.5
Banque Nationale de Paris (BNP)/Amsterdam	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BNP/ Paris	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Société pour l'Expansion des Exportation/Canada	0.4	0.3	0.4	0.2	0.4	0.3	0.4	0.2
Compagnie Française d'Assurance pour le Commerce Extérieur	1.1	0.6	1.1	0.5	0.9	0.7	1.1	0.3
USA (Air Rwanda)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-Paris Club	7.4	1.7	4.6	1.4	5.7	1.7	4.8	0.7
ODA	7.4	1.7	4.6	1.4	5.7	1.7	4.8	0.7
China	1.4	0.0	1.6	0.0	0.2	0.0	1.6	0.0
Abu Dhabi Fund	0.3	0.0	0.3	0.0	0.3	0.0	0.3	0.0
Kuwaiti Fund	2.1	0.8	2.3	0.8	2.1	0.6	2.6	0.7
Libya	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0
Saudi Fund for Development	0.2	0.0	0.2	0.0	2.0	0.4	0.2	0.0
Unallocated amounts	3.3	0.8	0.0	0.5	1.0	0.7	0.0	0.0
Non-ODA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: National Bank of Rwanda.

1/ Figures for interest reflect an estimate of late interest.

Table 49. Rwanda: External Debt, Outstanding Arrears, 1995-98
(In millions of U.S. dollars; end of period)

	1995			1996			1997			1998		
	Principal	Interest	Total	Principal	Interest	Total	Principal Est.	Interest Est.	Total Est.	Principal Prel.	Interest Prel.	Total Prel.
Total	46.1	15.4	61.5	59.0	19.9	78.9	70.9	26.4	97.3	32.7	10.4	43.1
Multilateral excluding IMF	15.4	6.2	21.6	20.8	7.5	28.2	25.4	9.0	34.4	5.3	2.9	8.3
IBRD-IDA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
African Development Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
African Development Bank	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
International Fund for Agricultural Development	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Arab Bank for Economic Development in Africa (BADEA)	9.8	3.9	13.7	12.7	5.0	17.7	15.2	6.0	21.2	0.0	0.0	0.0
Arab League	0.5	0.5	1.0	0.6	0.0	0.6	0.7	0.0	0.8	0.0	0.0	0.0
European Union	1.3	0.8	2.1	2.1	1.0	3.1	2.8	1.2	4.0	3.6	1.4	5.0
European Investment Bank	0.5	0.7	1.2	1.8	1.1	3.0	2.4	1.3	3.7	1.8	1.5	3.3
OPEC Fund	3.4	0.2	3.6	3.6	0.3	3.9	4.3	0.5	4.7	0.0	0.0	0.0
IMF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bilateral	30.7	9.2	39.9	38.2	12.4	50.7	45.5	17.4	62.9	27.4	7.5	34.9
Paris Club	17.7	5.8	23.5	20.1	7.7	27.8	22.7	11.6	34.3	0.0	0.0	0.0
Official Development Assistance	4.0	4.0	8.1	5.4	5.7	11.0	5.7	6.6	12.3	0.0	0.0	0.0
Austria	0.0	0.7	0.7	0.0	0.9	0.9	0.0	1.0	1.0	0.0	0.0	0.0
Caisse Centrale de Coopération Économique	1.5	2.3	3.8	2.3	3.5	5.7	2.3	4.3	6.6	0.0	0.0	0.0
PCEOM (Japan)	2.5	1.0	3.5	3.1	1.3	4.4	3.4	1.3	4.7	0.0	0.0	0.0
Non-ODA (suppliers credits)	13.7	1.7	15.4	14.8	2.0	16.8	17.0	5.0	22.0	0.0	0.0	0.0
Banque Nationale de Paris (BNP)/ Amsterdam	1.6	0.2	1.8	1.6	0.2	1.8	1.8	0.0	1.8	0.0	0.0	0.0
BNP/ Paris	7.6	0.9	8.5	7.4	0.9	8.3	6.5	0.8	7.3	0.0	0.0	0.0
Société pour l'Expansion des Exportation/Canada	0.9	0.7	1.5	1.1	1.0	2.1	2.5	1.6	4.0	0.0	0.0	0.0
Compagnie Française d'Assurance pour le Commerce Exté	3.6	0.0	3.6	4.6	0.0	4.6	5.0	2.5	7.5	0.0	0.0	0.0
USA (Air Rwanda)	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.1	1.4	0.0	0.0	0.0
Non-Paris Club	12.9	3.5	16.4	18.1	4.8	22.9	22.8	5.8	28.6	27.4	7.5	34.9
ODA	12.9	3.5	16.4	18.1	4.8	22.9	22.8	5.8	28.6	27.4	7.5	34.9
China	0.1	0.0	0.1	0.4	0.0	0.4	0.6	0.0	0.6	1.1	0.0	1.1
Abu Dhabi Fund	1.0	0.2	1.1	1.4	0.3	1.6	1.6	0.3	2.0	1.6	0.6	2.2
Kuwaiti Fund	5.5	2.1	7.6	7.0	2.6	9.6	9.1	3.2	12.3	11.1	3.9	15.0
Libya	0.0	0.1	0.1	0.7	0.2	0.9	0.9	0.2	1.1	0.9	0.2	1.1
Saudi Fund for Development	6.3	1.1	7.4	8.6	1.7	10.3	10.6	2.1	12.7	12.7	2.8	15.5
Unallocated amounts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-ODA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: National Bank of Rwanda; and Ministry of Finance and Economic Planning.

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates	
1. Tax on income and profits				
1.1 Tax on rental income (<i>impôt sur les revenus locatifs</i>)	Annual schedular tax on rental income from land and buildings, including income derived from the lease of equipment and furniture. Allowances for housing paid to employees occupying their own houses are taxed as rental income, provided the housing is recorded in the land registry.	<p>Exemptions:</p> <ul style="list-style-type: none"> • Republic of Rwanda, prefectures and communes. <p>Deductions:</p> <ul style="list-style-type: none"> • 10 percent of gross income for repairs and maintenance; and • 12 percent of mortgage interest. 	Income brackets	Rates (percent)
			From RF 0 – 180,000	0
			180,001 – 300,000	15
			300,001 – 600,000	25
			600,001 – 1,000,000	30
			Over 1,000,001	40
1.2 Tax on income from business profits and personal earnings (<i>impôt professionnel</i>)	Annual schedular tax on profits of all private sector firms, wage income, profits of liberal professions, or any other income, the source of which is an activity in Rwandan territory not taxed under another schedular tax.			
1.2.1 Profits of companies, partnerships, and individual enterprises (<i>impôts sur les sociétés</i>)	Net profits realized from industrial, commercial, agricultural, handicraft, and mining activities carried on within the country. Nonresident enterprises are taxed on their income within Rwanda. A standard assessment of profits is made by the tax administration for taxpayers who do not keep regular accounts.	<p>Exemptions:</p> <ul style="list-style-type: none"> • Republic of Rwanda, prefectures, and communes; • profits made by international transport under condition of reciprocity; and • activities of animal husbandry and agriculture whose aim is merely food producing on a property not exceeding 5 hectares or whose sale will not exceed RF 1 million. 	40 percent.	

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates																		
		<p>Deductions:</p> <ul style="list-style-type: none"> • medical allowance for staff and their dependents are deductible in the level and conditions determined by the Ministry of Finance; • grants to nonprofit institutions approved for tax purposes by the Minister of Finance with a maximum of 1/1000 of the turnover realized during the financial year and for all gifts given; and • deductions include tax rates related to the normal business of the company, including basic license and excluding company tax (Art. 1 of the Law no. 15/98. 																			
1.2.2 Wages, salaries, and other personal earnings (<i>taxe professionnelle sur les rémunérations</i>)	The tax is levied on all wages and salaries earned in the public and private sectors by residents of Rwanda. Withheld at source by the employer.	<ul style="list-style-type: none"> • Pensions and other social security benefits to various categories of beneficiaries and family allowances paid in accordance with the relevant legislation. 	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Income brackets</th> <th style="text-align: center;">Rates (percent)</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">From RF 0 –</td> <td style="text-align: right;">180,000</td> <td style="text-align: center;">0</td> </tr> <tr> <td style="text-align: right;">180,001 –</td> <td style="text-align: right;">300,000</td> <td style="text-align: center;">15</td> </tr> <tr> <td style="text-align: right;">300,001 –</td> <td style="text-align: right;">600,000</td> <td style="text-align: center;">25</td> </tr> <tr> <td style="text-align: right;">600,001 –</td> <td style="text-align: right;">1,000,000</td> <td style="text-align: center;">30</td> </tr> <tr> <td style="text-align: right;">over</td> <td style="text-align: right;">1,000,001</td> <td style="text-align: center;">40</td> </tr> </tbody> </table>	Income brackets		Rates (percent)	From RF 0 –	180,000	0	180,001 –	300,000	15	300,001 –	600,000	25	600,001 –	1,000,000	30	over	1,000,001	40
Income brackets		Rates (percent)																			
From RF 0 –	180,000	0																			
180,001 –	300,000	15																			
300,001 –	600,000	25																			
600,001 –	1,000,000	30																			
over	1,000,001	40																			

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates								
1.2.3 Income from liberal arts professions (<i>profit des professions libérales, charges, offices et autres occupations lucratives</i>)	The tax is levied on income from liberal arts professions	Professional expenses are deductible provided that evidence of payment is made.	For individuals, the rates are the same as in 1.2.2. Self-employed whose annual income (or turnover) is less than RF 36 million have to pay 2 percent of their turnover. Self-employed whose annual income is more than RF 36 million and less than or equal to RF 60 million can opt for a presumptive tax of 2 percent.								
1.3 Business license tax (<i>patente</i>)	A minimum tax levied annually on enterprises and individuals conducting commercial or industrial activities in Rwanda. The tax is credited against the profit tax. Upon payment of the tax, taxpayers are issued stickers (<i>avignettes@</i>) to be displayed on their premises.	Exemptions: <ul style="list-style-type: none"> • wage earners; and • individuals in the agricultural sector, who sell their product directly. 	The rates for individuals and corporations are differentiated according to economic activity (traders, artisans, import-export activities, transport, hotels, liberal arts professions, industries, banks, and insurance), and the district business. <i>Patente</i> unit (P) rate is RF 2,000 for 1999. The highest rate is 120 P, i.e, RF 240,000. So the <i>patente</i> paid ranges from RF 2,000 to RF 240,000.								
2. Taxes on property (<i>impôts personnels</i>)	The tax is fixed in proportion to the area occupied by buildings or structures.	General exemptions:	Rate per m²								
2.1 Buildings and structures		<ul style="list-style-type: none"> • Republic of Rwanda, prefectures, and communes. • public offices and establishments (scientific, agronomic, medical, a artistic, pedagogic, philanthropic). • diplomats and diplomatic staff, consuls, and consular staff. 	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Kigali</td> <td style="width: 50%; text-align: right;">RF 210</td> </tr> <tr> <td>Other urban communities</td> <td style="text-align: right;">RF 130</td> </tr> <tr> <td>Commercial centers</td> <td style="text-align: right;">RF 99</td> </tr> <tr> <td>Other districts</td> <td style="text-align: right;">RF 55</td> </tr> </table>	Kigali	RF 210	Other urban communities	RF 130	Commercial centers	RF 99	Other districts	RF 55
Kigali	RF 210										
Other urban communities	RF 130										
Commercial centers	RF 99										
Other districts	RF 55										

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates								
2.2	Undeveloped land	<p>The tax is levied annually on the surface area of undeveloped land recorded in the land registry.</p> <p>Exemptions:</p> <ul style="list-style-type: none"> • land used exclusively for religious, scientific, or sporting activities; • land used exclusively for agriculture or livestock rearing; and • land occupied by the chambers of commerce, nonprofit associations, and trade unions. 	<p style="text-align: right;">Rate per m²</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Kigali</td> <td style="text-align: right;">RF 210</td> </tr> <tr> <td>Other urban communities</td> <td style="text-align: right;">RF 130</td> </tr> <tr> <td>Commercial centers</td> <td style="text-align: right;">RF 96</td> </tr> <tr> <td>Other districts</td> <td style="text-align: right;">RF 55</td> </tr> </table>	Kigali	RF 210	Other urban communities	RF 130	Commercial centers	RF 96	Other districts	RF 55
Kigali	RF 210										
Other urban communities	RF 130										
Commercial centers	RF 96										
Other districts	RF 55										
2.3	Boats	<p>Tax payable by individuals or corporations that have registered boats or ships.</p>	<ul style="list-style-type: none"> • Engine-driven vessels: RF 1,200 per m³ of gross displacement. • Towing vessels: RF 1,200 per m³ of displacement when empty. • Pleasure craft, barges, and other towed vessels: RF 600 per m³ of net displacement. • Boats and rafts: <ul style="list-style-type: none"> (1) oar- or paddle-driven: RF 600 per year; (2) engine-driven: RF 600 per year plus RF 20 per cm³ of engine volume; and (3) sail-driven: RF 600 per year per m³ of sail surface. 								

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
2.4 Vehicles	Imposed on bicycles, motorcycles, and automobiles: the tax is calculated according to type of vehicle, engine power, or weight.	Special exemptions for: <ul style="list-style-type: none"> • animal-drawn vehicles; • fire-fighting vehicles; • ambulances and motorized carriages for the handicapped; • vehicles used exclusively for testing by manufacturers and tradesmen; and • vehicles used by foreign visitors to Rwanda. 	In RF (a year) Bicycles 240 Motorcycles 1,800–3,000 Automobiles, with weight not exceeding 2,500 kg 2 hp 4,800 3 hp 5,400 4 hp 6,000 5 hp 6,600 6–9 hp 1,200 10–12 hp 1,800 for each hp Over 12 hp 2,4000 for each hp Automobiles, with weight exceeding 2,500 kg Per 100 kg 1,200
2.5 Mining concessions	An annual tax is imposed based on the surface area of mining concessions. The tax is payable by those who are accorded exclusive title to a mining concession either for purposes of exploitation or for prospecting.	None.	Concession for the purpose of: Exploitation of a mine 150 per hectare Prospecting 30 per hectare
3. Taxes on goods and services (<i>taxes sur les biens et services</i>)			
3.1 Excise duties (<i>taxes de consommation</i>)			

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates	
3.1.2 Soft drinks	On soft drinks, mineral waters, and other nonalcoholic beverage made domestically or imported.	Exported soft drinks.	60 percent for lemonades 10 percent for soda water and mineral water	since 1/99 since 1/99
3.1.3 Cigarettes	On domestically manufactured cigarettes.	Exported cigarettes.	80 percent	since 1/99
3.1.4 Petroleum	On imported petroleum products.		60 percent	since 1/99
3.1.5 Liquors/wine, spirits	On domestically produced and imported alcoholic beverages.	Exported liquor (wine, spirit)	90 percent	since 1/99
3.2 Sales tax (<i>impôt sur le chiffre d'affaires, or ICHA</i>)	On imported goods, locally produced industrial goods, construction activities, services and entertainment. ICHA is included in the wholesale price paid by a customer to an industrial or a wholesaler (Law no. 16/98).	Exemptions: <ul style="list-style-type: none"> • grants not meant for sale given to legal nonprofit organizations; • products locally manufactured already; • products or goods meant for export; • products from craftsmen, agriculture, forestry, animal husbandry, fishing, or hunting of local origin and without any transformation for commercial or industrial purposes; • works made by painters, sculptors, portrayers, engravers, writers, and all other persons considered to be artists and only selling products of their own make; 	15 percent on sales in general	since 2/98

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
		<ul style="list-style-type: none"> • scientific and medical equipment of which the list is to be issued by the Minister having jurisdiction over health; • care and treatment provided to people by members of medical and paramedical bodies, as well as medical and biological analyses; • banking, transit, insurance, and storage operations relating to export as well as to import of basic amenities; • banking operations made by the National Bank of Rwanda; • exchange operations made by duly registered financial institutions; • debt interest collected by banks on behalf of other customers; • social security operations made by Rwanda Social Security Fund for its own business profit; • goods destined to be placed under the customs regime of temporary exemption or customs bondage; • travelers' baggage and such removal items, by virtue of customs regulations; and • operations related to transport. 	

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
5. Taxes on international trade <i>(taxes sur le commerce international)</i>			
5.1 Import duties <i>(droits d'entrée)</i>	One-column schedule based on the CCC Tariff Nomenclature. The duties are mainly ad valorem, but certain items, such as cigarettes, are assessed at specific rates.	Exemptions: <ul style="list-style-type: none"> • passengers' baggage; • personal effects after change in residence; • diplomats' effects; and • commercial samples of negligible value. 	<p>The customs duties, which are ad valorem, have been 0, 5, 15, and 25 percent of the c.i.f. value of imports since 1/99.</p> <p>Since 15 July 1999, a surcharge of 10 percent has been added for imported goods for which customs duty rate is 15 percent or 25 percent.</p> <p>For beer, cigarettes, milk, powder milk, and construction materials, the surcharge is 15 percent.</p> <p>There is no surcharge on petrol, petroleum products, lubricants, sugar, or rice.</p>

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
	A separate schedule applies to imports originating in Preferential Economic Zone (ZEP) countries.	<ul style="list-style-type: none"> • Articles used exclusively for religious practice. • Provisions and spare parts for aircraft leaving Rwanda. • Articles sent to families, within certain limits. • Material and equipment exclusively for use in aiding the physically handicapped. • Educational, scientific, or cultural items. • Gifts distributed by philanthropic institutions. • Articles manufactured in Rwanda, which were exported and reimported. 	The ad valorem equivalents for imported goods taxed at specific rates may exceed these limits.
5.2 Warehousing fee on imports (<i>droits d'entreposage à l'importation</i>)	Additional tax on imports, for handling and storage.	<p>Exemptions:</p> <ul style="list-style-type: none"> • Government imports. • Files of businesses or individuals. • Coffins, urns, and other funeral goods. 	4 percent of the c.i.f. value of imports, of which 25 percent (1 percent of the import value) goes to the bonded warehouse MAGERWA, and 75 percent (3 percent of the import value) to the government, in addition to import tax revenue. A preferential rate of 1 percent of the c.i.f. value is applicable to items exempted from customs duties; all proceeds at this rate go to MAGERWA.

Rwanda: Summary of the Tax System
(Position as of end-August 1999; all amounts in Rwanda francs)

Tax	Nature of Tax	Exemptions and Deductions	Rates
			Warehousing fees: RF 300 a month per 100 kg for indoor storage; and RF 150 a month per 100 kg for outdoor storage These rates are increased to RF 750 and RF 500, respectively, after the first two months of storage. 30 percent of warehousing fee revenue goes to the government and 70 percent to MAGERWA.
5.3 Export duties (<i>droits d'exportation</i>)	Export duties	All goods and services.	All goods and services are exempted including coffee.
6. Rural taxes (<i>impôts ruraux</i>) (collected by the communes)			
6.1 Poll tax (<i>contribution personnelle minimum</i>)	Payable by every male over 18 years of age and by women engaged in remunerative employment outside the home.	Exemptions: • Students • Persons in religious orders who do not receive remuneration • Invalids, retirees, and the elderly • Certain military and police officials	RF 400 a year per person.
6.2 Livestock tax	Annual tax per head of livestock.	None	Single rate of RF 150 a year per head of livestock.

Source: Directorate of Taxes, Ministry of Finance and Economic Planning.

RWANDA: SUMMARY OF EXCHANGE AND TRADE SYSTEM¹

A. Exchange Rate Arrangements and Developments

1. The currency of Rwanda is the Rwanda franc (RF). On September 6, 1983, Rwanda changed the peg of the Rwanda franc from the U.S. dollar to the SDR at the rate of RF 102.71=SDR 1. The exchange rate was devalued by 40 percent in foreign currency terms to RF 171.18 per SDR on November 9, 1990, and by a further 15 percent to RF 201.39 per SDR, on June 10, 1992; it remained at this level until March 1995.
2. On March 6, 1995, the authorities launched a market-determined exchange rate system. Under the new system, the exchange rate of the Rwanda franc is determined freely in the exchange market in which commercial banks and licensed foreign exchange bureaus operate. The authority for approving requests for foreign exchange for current transactions is delegated to commercial banks and foreign exchange bureaus,² which implement the exchange regulations, including the control of supporting documentation. Since 1995, the National Bank of Rwanda (NBR) no longer posts official Rwanda franc exchange rates, but calculates and publishes daily for reference purposes the average rate, which (since October 1998) has been based on interbank foreign exchange transactions, including with the NBR.³
3. When the new foreign exchange system was put in place, the foreign exchange market was characterized by a preference for cash dollars—and an active parallel market⁴—to cover not only invisible operations (such as tourist and business travel), but also regular import operations. Since late 1995, confidence in the commercial banks has returned and the share of bank-intermediated transactions increased markedly, resulting in a significant drop in the parallel market premium. However, a significant part of imports from the region continue to be financed by cash dollars, either bought from commercial banks (which charge a premium above the rate for bank account transactions) or from foreign exchange bureaus. Moreover, weak enforcement of the exchange regulations and the nonobservance of

¹ Position on June 30, 1999. Based on the Exchange Regulations of March 6, 1995 and subsequent modifications of July 16, 1996, August 8, 1997, December 26, 1997, and December 31, 1998.

² The number of registered foreign exchange bureaus increased from 20 to 40 between 1995 and 1998. The bureaus are authorized to sell/purchase foreign exchange banknotes for invisible transactions, as well as from the banks, if necessary, to meet their clients' demand for such transactions.

³ This "NBR reference rate" must be used for banks' accounting of their foreign exchange position.

⁴ The term "parallel market" refers to the informal, or "black" foreign exchange market.

restrictions on net open positions of foreign exchange bureaus allowed foreign exchange to leak from the banks via foreign exchange bureaus to the parallel market for informal current transactions and unauthorized capital transactions.

4. When the exchange market opened in March 1995, the exchange rate for the Rwanda franc, previously fixed at RF 134 per U.S. dollar, depreciated to RF 235 per U.S. dollar, compared with a parallel rate of approximately RF 260. After a peak of about RF 315 per U.S. dollar around mid-1995, the exchange rate subsequently appreciated to about RF 300 per U.S. dollar by end-1995. It remained close to that level in 1996–97 and has gradually depreciated since early 1998, reaching about RF 340 per U.S. dollar in early October 1999, offsetting in part the nominal appreciation of the U.S. dollar vis-à-vis the currencies of Rwanda's main trading partners.

5. The parallel market premium,⁵ which progressively declined during most of 1996–97, showed some persistence in 1998–99 and has been subject to large fluctuations related to seasonalities in demand for imports and, to some extent, speculative waves: the premium has fluctuated around a baseline level of about 5 percent, with peaks reaching over 10 percent in the first and the third quarters of 1999. The persistence of the premium reflects the continued preference for cash settlement of regional trade transactions, combined with banks' costs for procuring dollar bills, as well as the demand for unauthorized capital transactions and foreign exchange hoarding.

B. Trade and Payments System⁶

6. Exports are subject to prior declaration with an authorized bank, and export proceeds must be repatriated within seven business days of the date of receipt. Exporters are permitted to sell their foreign export earnings freely in the exchange market or to retain them in accounts with domestic banks. The surrender requirements for export earnings of coffee and tea were reduced from 90 percent to 50 percent at end-1996 and eliminated at end-December 1997. The remaining export restriction—a 16 percent ad valorem export tax on coffee that

⁵ Defined as the premium between the average parallel market rate and the NBR reference rate, or interbank rate. The parallel market premium can be broken down into the following elements: (a) a pure black market premium between the parallel market rate and the selling rate at the foreign exchange bureaus; (b) a convenience premium between the selling rate at the foreign exchange bureaus and the banks; and (c) a cash premium between the selling rate at the banks and the rate for the interbank transactions, reflecting the banks' cost of importing foreign banknotes. In recent years, the convenience premium accounted on average for about 2 percentage points, the cash premium accounted on average for about 4–5 percentage points, and the pure black market premium accounted for the remainder of the total parallel market premium.

⁶ On December 10, 1998, Rwanda accepted the obligations under Article VIII of the Fund's Articles of Agreement.

was introduced in April 1998 in place of a variable export tax—was eliminated effective January 1, 1999. Imports are permitted freely upon presentation of import documents (a bank import declaration system). Effective December 31, 1998, the banks are also allowed to satisfy requests for foreign exchange for import transactions not exceeding US\$50,000, with import document action to be provided only ex post. Rwandese residents are free—subject to documentation requirements—to acquire foreign exchange through commercial banks and exchange bureaus, and to make payments abroad for all current international transactions, including those for invisible transactions. Limits apply to provision of foreign exchange for certain invisible transactions; ⁷ prior authorization by the NBR is required for transfers above these limits, but the NBR will authorize all bona fide requests. Transfers for scheduled debt service are free, provided that the NBR was notified about the loan contract and the funds were initially received by a local commercial bank. Nonresidents are also free to transfer abroad the proceeds received from such transactions. The 0.4 percent commission levied on inward and outward transfers other than the loan proceeds and debt-service payments related to export financing loans was abolished on December 31, 1998. In September 1999, the NBR issued an instruction authorizing residents to withdraw foreign exchange from their foreign currency accounts without documentation subject to the limits of US\$2,500 per withdrawal and US\$5,000 per account per year.

7. The import tariff regime is governed by the tariff code. In February 1995, the structure of external tariffs was revised: the number of rates was reduced from six to four, the maximum tariff was lowered from 100 percent to 60 percent, and the other tariff rates were set at zero percent, 10 percent, 20 percent, and 40 percent. Effective January 1998, the tariff structure was further reduced, with a maximum rate set at 40 percent and other rates of zero percent, 10 percent, and 20 percent. Effective January 1, 1999, the tariff rates were brought in line with the Cross-Border Initiative objectives, with the setting of a 25 percent maximum tariff (mainly on final goods), a 15 percent tariff on intermediate goods, and 5 percent tariff on raw materials; a zero tariff was upheld with respect to imports of capital goods. In mid-1999, temporary import surcharges of 10 percent and 15 percent were imposed on all consumption goods and most intermediate goods.

8. All outward transfers of capital require prior approval of the NBR. Direct investments by nonresidents are allowed and must be registered by authorized banks; in this case, they are eligible for transfer guarantee. Repayment of principal of foreign loans is allowed, provided prior notification of the loan contract has been received by the NBR and the funds have originally been received by a local bank.

⁷ Travelers are allowed to purchase up to US\$4,000, and up to US\$10,000 in the case of business travel, upon presentation of travel documents.

MODELING BROAD MONEY DEMAND IN RWANDA¹

I. INTRODUCTION

1. Finding a stable money demand function is generally considered essential for the formulation and conduct of efficient monetary policy. Hence, considerable effort has been made in the empirical literature—for both industrialized and developing countries—to determine the factors that affect the long-run demand for money and assess the stability of the relationship between these factors and various monetary aggregates.² In the case of Rwanda, a limited number of studies (Bertoncino, 1993) attempted to identify the key macroeconomic variables determining the demand for money, with almost none—to our knowledge—focusing on the stability of the estimated coefficients. Furthermore, these studies have ignored the impact of foreign opportunity cost variables on money balances, and also the problem of apparent but spurious regression that arises when statistical inferences are drawn from nonstationary time-series data.

2. This study applies system co-integration analysis to examine the behavior of broad money in Rwanda for the period 1980–98. The hypothesis is that there exists a stable relationship among broad money, income, and various rates of return over the sample period. Information about the stability of the money demand function in Rwanda is crucial to the effectiveness of the monetary policy implemented by the National Bank of Rwanda (NBR); an accurate calibration of both long-run and dynamic effects of rates of return on the demand for money is important for the design and the assessment of the macroeconomic implications of financial liberalization and the adoption of indirect monetary policy instruments.

II. SOME THEORETICAL CONSIDERATIONS

3. The theoretical underpinnings of the demand for money function have been well established in the economic literature, with widespread agreement that the demand for money is primarily a demand for real cash balances. In the absence of money illusion, an increase in the general level of prices will induce a proportionate increase in the nominal demand for money, leaving the level of real balances unchanged. Keynes postulated three motives for holding real money balances: transactions, precautionary, and speculative. Following the liquidity preference theory, several authors have questioned Keynes's rationale for (or doubted the existence of) a speculative demand for money, and contributed to the theoretical

¹ Prepared by Jean-Claude Nachega.

² See Goldfeld and Sichel (1990) and Laidler (1993) for an extensive theoretical and empirical review of money demand models. See Boughton (1991a) for a review of empirical models for industrialized countries. See Ericsson (1998) for a recent review of the main methodological issues.

literature by distinguishing broadly between the transactions demand (Baumol, 1952; and Tobin, 1956) and the asset motive (Tobin, 1958; and Friedman, 1956). Hence empirical studies of money demand should ideally converge to a specification in which real money balances are a function of a scale variable (as measured by income, wealth, or expenditure), the own rate of return on money, and the opportunity cost of holding money, notably the domestic interest rate and/or the expected rate of inflation. The latter two variables are proxies for the rates of return on alternative financial and physical assets, respectively. However, most published studies have failed to account for the effects of the own rate of return on money holdings, as well as of the alternative measures of foreign opportunity costs on money balances—an omission that tends to bias the estimates of the income elasticity. Each of these shortcomings is addressed in the present paper.

4. The inclusion of the expected rate of inflation has been emphasized in the case of developing countries, where, given underdeveloped monetary and financial systems and non-market-determined interest rates, physical assets would represent one of the major hedges against inflation and an alternative asset in the portfolio of the nonbank public.³ Moreover, with increasing financial globalization and the growing empirical evidence on portfolio balance models in open economies, the expected rate of return on foreign securities has been often added as an explanatory variable in the money demand function, either adjusted for exchange rate movements or combined with a measure of exchange rate depreciation.⁴ Or, alternatively, assuming perfect asset substitutability, the differential between the domestic and foreign interest rates is included.

III. GENERAL SPECIFICATION OF THE MONEY DEMAND FUNCTION AND EMPIRICAL METHODOLOGY

5. The basic model underpinning the preceding discussion can be summarized as follow:⁵

$$(M^d / P) = f(Y, R) \quad (1)$$

³ The conventional idea is that, in developing countries where interest rates ceilings and capital controls prevail, asset substitution is likely to be between money and physical assets rather than between money and financial assets.

⁴ See Arango and Nadiri (1981) for an early treatment of the issues. See Calvo and Végh (1992) for a survey of the literature on currency substitution in developing countries. In a recent study, Agénor and Khan (1996) find, for a group of ten developing countries, that the foreign interest rate and the expected depreciation of the parallel exchange rate are important factors in determining the choice between holdings of domestic currency and foreign currency deposits held abroad.

⁵ See Ericsson (1998).

where

M^d = demand for nominal money balances;

P = the price level;

Y = scale variable (income, wealth or expenditure, in real terms); and

\mathbf{R} = vector of expected rates of return (within and outside broad money).

6. This specification represents the “desired” or long-run real money demand function and assumes a long-run unitary elasticity of the nominal cash balances with respect to the price level. This assumption of price homogeneity can be tested empirically. The function $f(., .)$ is assumed to be increasing in Y , decreasing in those elements of \mathbf{R} representing rates of return on alternative assets, and increasing in rates of return associated with assets included in M .

7. For the purpose of our study, the assets considered are Rwanda franc broad money as measured by M2, domestic goods, holdings of U.S. dollar cash, and foreign bonds. The corresponding expected rates of return for the four assets are proxied by the annual interest rate offered on three-month deposits ($DEPO$), the rate of inflation (Δp) as measured by the consumer price index, the depreciation rate of the Rwanda franc per U.S. dollar exchange rate (Δe), and the annualized three-month London interbank offered rate ($LIBOR$), respectively. The scale variable Y is proxied by GDP at market price in constant 1990 prices. With the exception of real GDP, all the series are quarterly and taken from the International Financial Statistics (IFS) database. The GDP series has been interpolated from the annual series contained in the World Economic Outlook (WEO) database.

8. Following the traditional approach, equation (1) is specified in a log-linear form, with the exception of interest rates $DEPO$ and $LIBOR$:

$$(m^d - p)_t = a_0 + a_1 y_t + a_2 \Delta p_t + a_3 DEPO_t + a_4 LIBOR_t + a_5 \Delta e_t + \epsilon_t \quad (2)$$

where variables in lower case denote natural logarithms and ϵ_t is the error term. The anticipated signs for the a_i 's are the following: $a_1 > 0$ (more specifically, $a_1=1$ for the quantity theory or $a_1 = 0.5$ for the Baumol-Tobin model of economies of scale); $a_2 < 0$, $a_3 > 0$, $a_4 < 0$, and $a_5 < 0$.

9. Equation (2) assumes, however, an instantaneous adjustment of the actual stock of real money balances to its desired level, that is, an equilibrium state between real money supply and the real demand for money. This is unlikely, given the existence of transaction costs and uncertainty. In addition, the desired level of real money balances is unobservable. A distinction is therefore generally made between the long- and short-run behavior in the money market, by specifying a partial adjustment mechanism of actual real cash balances

toward their desired (long-run) level of the form. The current study applies Johansen (1988) and Johansen and Juselius (1990) multivariate maximum likelihood procedure to determine empirically the number of co-integrating vectors and the adjustment parameters.

IV. TIME-SERIES PROPERTIES AND CO-INTEGRATION RESULTS

10. Quarterly data for the period 1980–98 are used. All the variables are expressed in logarithm terms with the exception of the two interest rates; see Figure 1 for a plot of the individual time series in level. The empirical investigation commenced with an analysis of the time-series properties of the variables of interest for the money demand function. The augmented Dickey-Fuller (ADF) test was used to determine the order of integration of data compiled for each variable. With the exception of inflation and currency depreciation, our results indicate that the variables in levels have unit roots. While expressed in first differences, all the variables have nonunit roots, that is, are stationary using the ADF test.

11. After determining the order of the integration of the variables of interest, the Johansen procedure was applied to a seventh-order vector autoregression (VAR) version of equation (2) to test for co-integration among nominal broad money, real GDP, price level, the depreciation rate of the Rwanda franc, the deposit rate, and the LIBOR rate.^{6 7} The model also contains seasonal dummies and a trend. The four seasonal dummies are entered unrestricted, while the trend is entered restricted. The trace eigenvalue statistics (λ_{trace}) rejected the null hypothesis of both no and at most one co-integrating vector in favor of at least one and at most two co-integrating vectors at the ten percent level.⁸ Following Podivinsky (1998), the identification of the full system was conducted by assuming two co-integrating vectors and imposing specific linear (including exclusion) restrictions on the beta coefficients. More specifically, nominal broad money and the foreign interest rate have been excluded from the first and second co-integrating relations, respectively. In addition, a likelihood ratio test suggested also that the price level could successfully be excluded from the first co-integrating vector: $\chi^2(1)=0.091[0.7633]$.⁹ The first of the two possible co-integrating vectors can be interpreted as defining the open economy IS relation in Rwanda:

⁶The lag length of the VAR has been chosen on the basis of the Schwartz-Bayesian criterion, as well as on the residuals' being white noise.

⁷Nominal broad money and prices are entered separately in the VAR(7), taking into account the stationarity of inflation. This allowed also us to test for long-run price homogeneity.

⁸Owing to the shortness of the available time-series, we adopt the 10 percent critical values for rejecting non-co-integration.

⁹Throughout this paper asymptotic p -values are presented in square brackets following the observed chi-square statistics.

$$y = b_0 + 5.3 \Delta e - 12.02 DEPO + 11.87 LIBOR + 0.013 trend \quad (3)$$

where b_0 is an estimated constant and a random error term is omitted for brevity. Equation (3) implies that trend-adjusted real income (cyclical real income) is positively affected by currency depreciation and the LIBOR rate, and negatively by the domestic interest rate. Currency depreciation affects positively cyclical output through net exports, while a rise in domestic interest rate contracts output by depressing aggregate investment. The economic interpretation of the positive relationship with respect to the LIBOR rate is provided below. At this stage, the almost equal absolute values of the coefficients of the two interest rates (*DEPO* and *LIBOR*) are noteworthy.

12. The second co-integrating vector corresponds to the **long-run money demand function** in Rwanda and can be written as

$$m = a_0 + 0.82 p + 1.09 y - 3.15 \Delta e + 11.3 DEPO + 0.03 trend \quad (4)$$

where a_0 is an estimated constant and a random error term is omitted for brevity. All the coefficients have the expected signs. A 1 percent rise in the price level induces an almost proportionate increase in the demand for nominal balances. A likelihood ratio test imposing a unit coefficient on price (homogeneity) was not rejected: $\chi^2(2)=0.298[0.8614]$. Price homogeneity was therefore imposed for the remainder of the analysis. The demand for broad money in Rwanda is positively related to income and the deposit rate and negatively to the depreciation rate of the Rwanda franc. The income elasticity of broad money demand is positive and close to unity (1.09), which is consistent with the quantity theory hypothesis. A test imposing a unitary income elasticity was not rejected: $\chi^2(3)=1.01[0.7988]$. The finding of a unitary income elasticity suggests that, over the sample period changes in real income have been inducing on average a proportionate increase in the demand for real broad money. This does not necessarily imply that broad money velocity is stationary, as our specification is also a function of rates of return (Δe and *DEPO*). Furthermore, it is shown in Figure 3 that broad money velocity has been on a declining trend during the sample period, reflecting financial deepening.

13. The demand for broad money is negatively and significantly affected by the rate of depreciation of the Rwanda franc, with the estimated coefficient significantly different from zero: $\chi^2(4)=10.456[0.0334]$. The semielasticity of the own rate of return is positive and also significantly different from zero: $\chi^2(4)=18.875[0.0008]$.¹⁰ Thus, policies affecting the interest rate can be effective in increasing financial savings through money holdings. Before testing

¹⁰The coefficients of *DEPO* and *LIBOR* are, however, annual semielasticities in both the IS and the money demand relationships. To get quarterly average elasticities for *DEPO* and *FMMR*, one has to multiply these semielasticities by their respective means over the sample period—that is, 0.07 and 0.10, respectively—and then divide by four. In the case of equation (4), such a computation gives a quarterly elasticity of 0.2 ($=0.07*11.3*0.25$) for *DEPO*.

for the significance of the *DEPO* coefficient, the positive coefficient of the trend in the money demand function has been tested and found to be statistically different from zero: $\chi^2(4)=33.332[0.0000]$.

14. The Johansen approach provides an alternative means or, more precisely, a system approach of testing for the existence of unit roots in each variable, when the null hypothesis is that of stationarity rather than nonstationarity. Such a test was conducted for exchange rate depreciation, and the null hypothesis was clearly rejected: $\chi^2(6)=37.5[0.0000]$. Thus, the test confirmed that all the variables considered here are indeed nonstationary, reinforcing the robustness of Johansen co-integrating results. Lastly, a test imposing an equal semielasticity (in absolute value) for *DEPO* and *LIBOR* in the IS relationship was not statistically rejected: $\chi^2(4)=1.0606[0.9005]$. It is interesting to note here the parameters of the two identified co-integrating vectors after specific restrictions—equal interest rate semielasticity in absolute terms in the IS relationship, and price and income homogeneity in the money demand equation—have been imposed on the beta coefficients:

$$y = b_1 + 5.2 \Delta e - 11.6 (DEPO - LIBOR) + 0.013 \text{ trend} \quad (3b)$$

and

$$m - p - y = a_1 - 3.15 \Delta e + 11.3 DEPO + 0.029 \text{ trend} \quad (4b)$$

15. Figure 4 displays the two identified co-integrating relations, which are clearly stationary. Three observations are worth mentioning here regarding equations (3b) and (4b). First, inverse broad money velocity co-integrates with both exchange rate depreciation and the deposit rate. Second, broad money velocity ($p + y - m$) has been on average on a negative trend (-2.9 percent a quarter) over the sample period. The coefficients of both Δe , *DEPO*, and *trend* have been found to be statistically significant and different from zero in equation (4b): $\chi^2(4)=10.5[0.033]$, $\chi^2(4)=18.9[0.0008]$, and $\chi^2(4)=33.3[0.00]$, respectively. Figure 3 confirms the finding that the financial deepening experienced by the Rwandese economy over the sample period can in part be attributed to monetary policy aimed at sufficiently high interest rates. The correlation coefficient between the interest rate differential (*DEPO-LIBOR*) and broad money velocity is indeed negative and high (-0.73).¹¹ Third, the positive coefficient of *LIBOR* in equation (3) can now be interpreted as follows. An increase in *LIBOR* that is not coupled with an equal increase in *DEPO* may induce capital outflows which trigger a depreciation of the exchange rate. This, in turn, will tend to increase net exports and, hence, cyclical output.

¹¹The correlation coefficient between broad money velocity and exchange rate depreciation is negative and very low (-0.15). One would expect a positive correlation between velocity and currency depreciation. However, the co-integration result in equation (4b), namely, an exchange rate depreciation does increase broad money velocity, is much more powerful.

V. CONCLUSIONS

16. The empirical analysis provides new insight into the relation among money, prices, income, and interest rates in Rwanda over the period 1980–98. First, the estimated system supports two co-integrating vectors: a long-run broad money demand function and an IS relationship. Cyclical income is found to be affected negatively by the differential between domestic and foreign interest rates, and positively by exchange rate depreciation. Thus, an exchange rate policy avoiding appreciation of the exchange rate is desirable. The estimated long-run broad money demand function supports price homogeneity and has both a unitary income elasticity and a strong own rate of return effect, and is sensitive to exchange rate depreciation. Thus, monetary policy aiming at sufficiently positive real interest rates can be an effective tool in increasing financial savings. The finding of a stable broad money demand function in Rwanda provides a useful guide for the conduct of monetary policy by the NBR.

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Figure 1. Rwanda: Money, Output, Prices, and Interest Rates

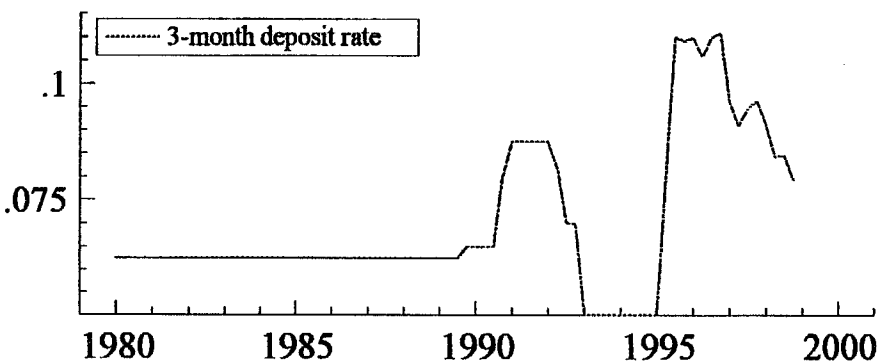
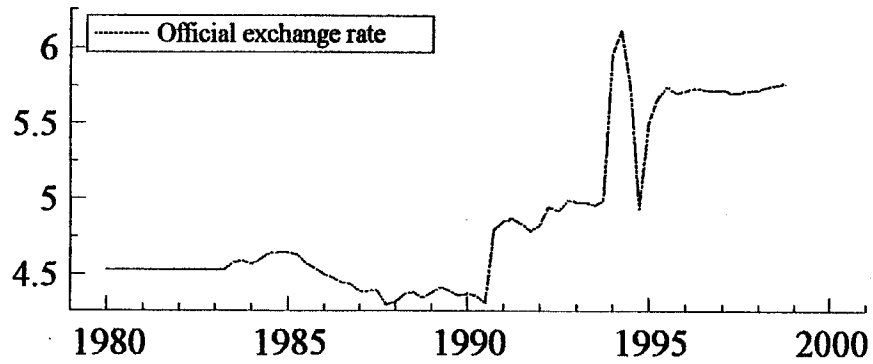
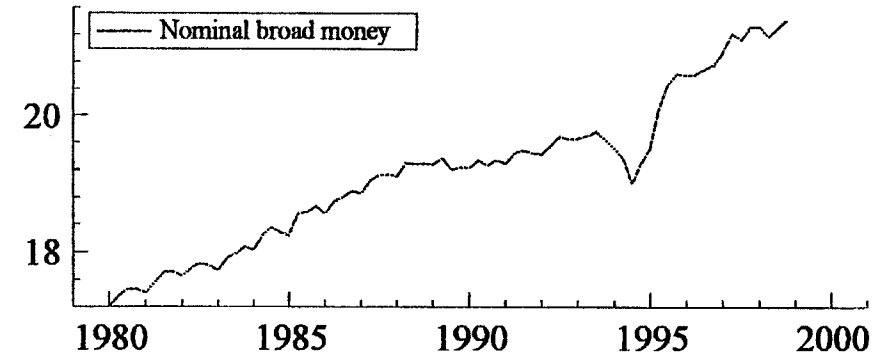
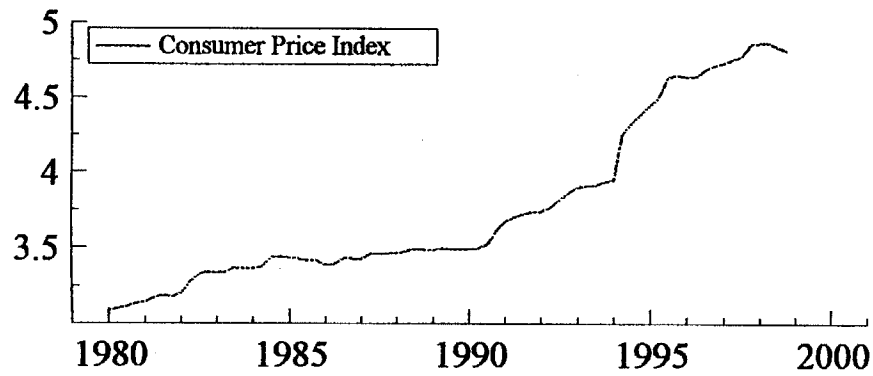
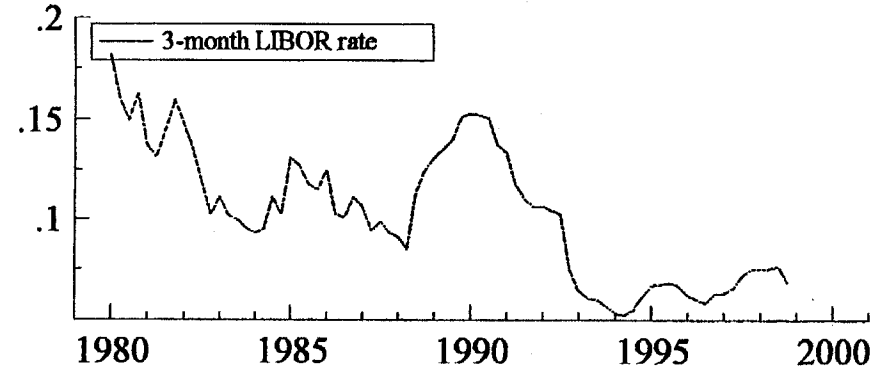
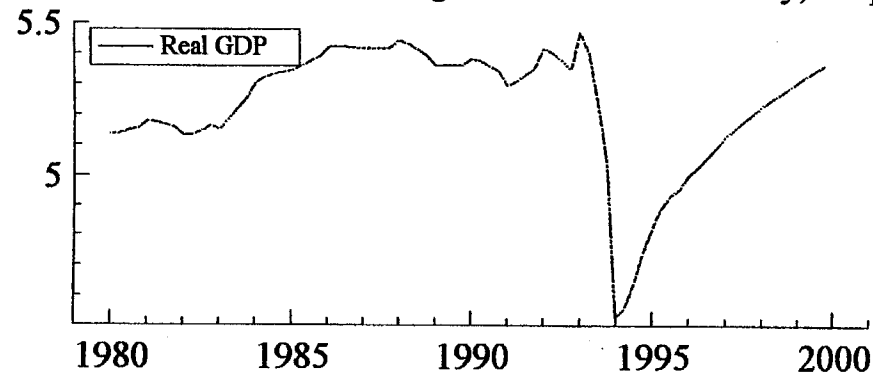


Figure 2. Rwanda: Inflation and Currency Depreciation

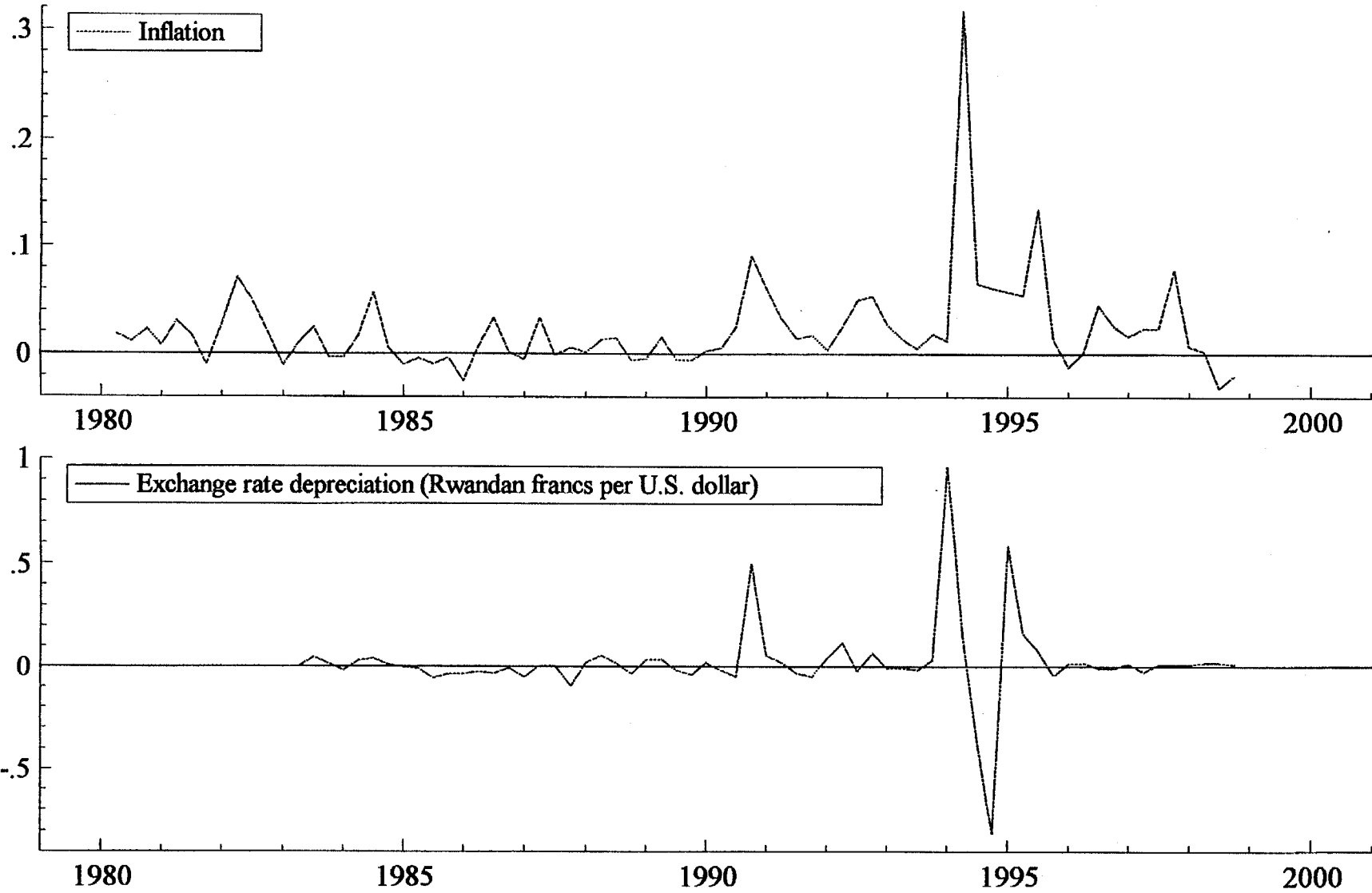


Figure 3. Rwanda: Financial Deepening, Broad Money Velocity, and Interest Rate Differential

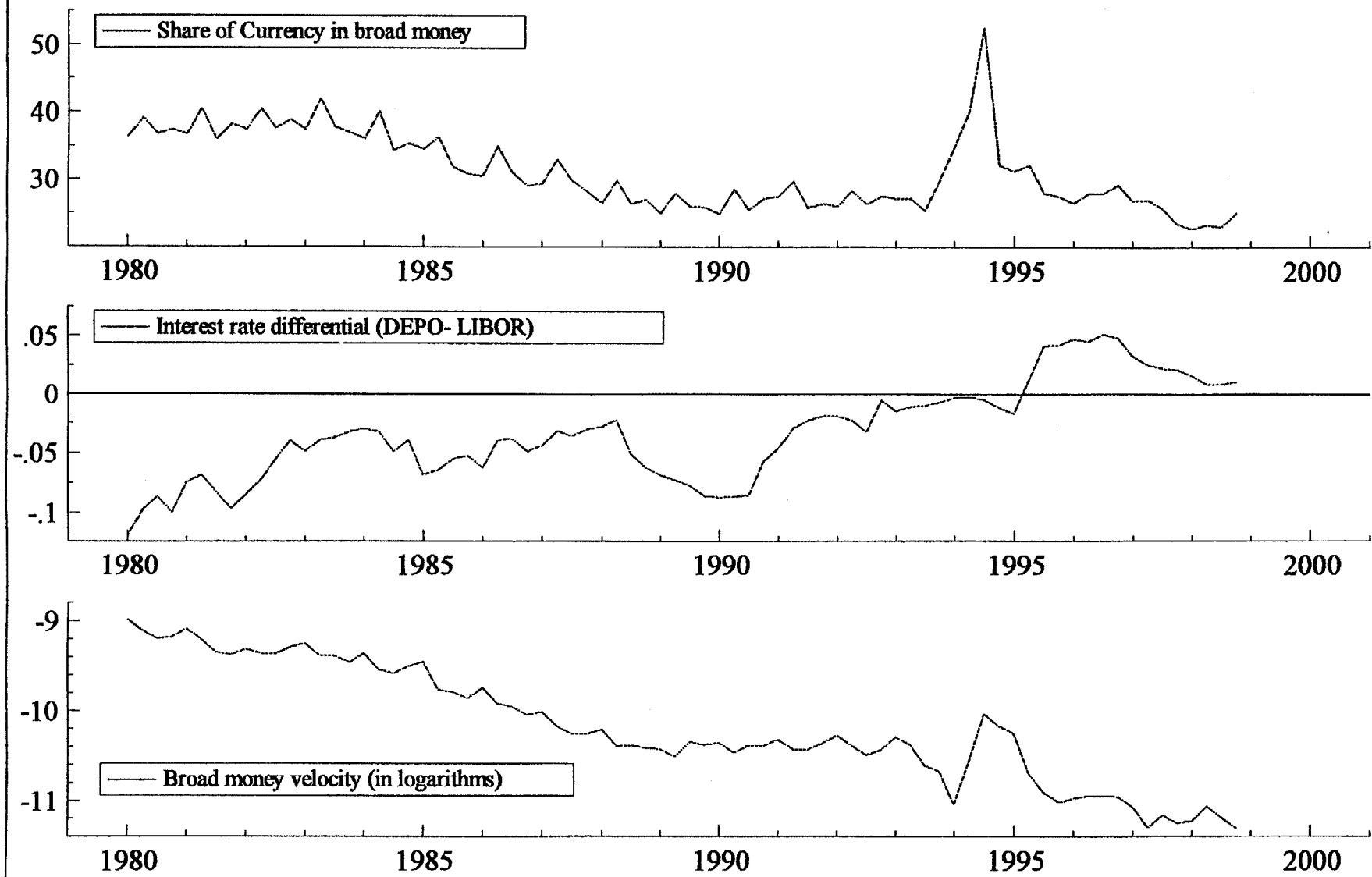


Figure 4. The Two Co-Integrating Relations

