Kenya: Selected Issues and Statistical Appendix

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KENYA

Selected Issues and Statistical Appendix

Prepared by the Staff Team Consisting of Mr. Katz (head), Mr. Maehle, and Mr. Powell
(all AFR), Ms. Kozack (PDR), and Mr. Szekely (FAD)

Approved by the African Department

February 28, 2002

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Kenya: Basic Data

Area: 582,600 square kilometers
Population, 1999 estimate: 29.4 million
Population, 1993-99 average annual growth: 2.3 percent
GNI per capita, *World Bank Atlas* method, 1999 estimate: U.S. $ 360

	1996	1997	1998	1999	2000	2001 Estimate 1/
National accounts	(In billions of Kenya shillings, unless otherwise specified)					
GDP at current market prices	528.7	623.2	690.8	740.3	788.9	824.9
GDP at constant (1982) prices	112.1	114.4	116.2	117.7	117.5	118.8
GDP at factor cost at constant (1982) prices	98.2	100.5	102.3	103.7	103.4	104.5
(annual percentage change)	4.6	2.4	1.8	1.4	-0.3	1.1
	(In percent of GDP at current market prices)					
Gross domestic expenditure	104.3	107.4	107.7	105.9	109.9	108.8
Consumption	84.0	88.9	90.3	89.7	94.4	93.4
Gross capital formation	20.3	18.5	17.4	16.2	15.6	15.5
Net exports	-4.3	-7.4	-7.7	-5.9	-9.9	-8.8
Gross savings	18.2	14.3	12.5	14.0	13.4	13.0
Prices	(Annual percentage change)					
Consumer price index (annual average)	8.9	11.4	6.6	3.5	6.2	0.8
Consumer price index (end of period)	3.3	3.0	2.5	8.0	7.5	-3.1
Terms of trade, goods (- deterioration)	2.6	2.0	-5.0	-1.3	0.1	1.2
Exchange rates						
Kenya shilling per U.S. dollar (period average)	57.1	58.0	61.8	70.4	76.3	78.6
Nominal effective exchange rate (-depreciation; end of period)	3.9	-3.8	-1.2	-10.3	2.9	2.2
Real effective exchange rate (- depreciation; end of period)	12.0	1.8	-0.1	-5.1	7.8	-2.4
Central government finance 2/	(In billions of Kenya shillings, unless otherwise specified)					
Total revenue	147.9	179.0	192.3	178.0	191.2	206.6
Grants	5.8	5.3	4.9	4.2	24.1	10.0
Total expenditure and net lending	167.8	194.0	197.5	176.7	231.8	238.7
Recurrent	141.4	161.2	161.5	157.9	198.9	201.7
Development and net lending	26.4	32.9	36.0	18.9	32.8	37.0
Overall balance on a commitment basis						
(excluding grants)	-19.9	-15.1	-5.2	1.3	-40.6	-32.1
(including grants)	-14.1	-9.8	-0.3	5.5	-16.5	-22.1
Overall cash balance						
(including grants)	-7.2	-5.3	-1.9	1.7	-15.0	-22.9
Overall balance on a commitment basis (in percent of GDP)						
(excluding grants)	-3.5	-2.3	-0.7	0.2	-5.0	-3.8
(including grants)	-2.5	-1.5	0.0	0.7	-2.0	-2.6

Kenya: Basic Data (concluded)

	1996	1997	1998	1999	2000	2001 Estimate 3/
Money and credit			(Annual percentage change)			
Domestic credit 4/	9.9	27.2	9.1	-1.6	1.7	-1.7
Government (net)	-1.6	5.4	-0.1	-1.6	-2.5	4.0
Other public sector	0.1	0.8	-0.8	0.6	0.2	0.0
Private sector	11.4	21.0	10.0	-0.7	3.9	-5.7
Money and quasi money (M3)	15.9	9.8	3.1	2.8	0.8	2.4
Balance of payments			(In millions of U.S. dollars, unless otherwise specified)			
Current account balance	-196	-450	-549	-234	-220	-253
Excluding official transfers (net)	-209	-469	-549	-233	-311	-340
Exports, f.o.b.	2,083	2,060	2,012	1,755	1,774	1,761
Imports, f.o.b.	-2,598	-2,944	-3,028	-2,679	-2,965	-2,850
Trade balance	-515	-884	-1,016	-924	-1,191	-1,089
Services (net)	98	90	122	298	245	241
Income (net)	-226	-172	-130	-173	-134	-154
Current transfers (net)	446	516	475	564	860	748
Capital and financial account (net)	643	413	616	214	211	278
Capital account (net)	112	63	79	63	63	62
Financial account (net)	531	350	537	151	148	217
Investment assets and liabilities (net)	-51	-199	-172	-305	-170	-256
Short term (net) and errors and omissions	582	549	709	456	318	473
Overall balance	447	-37	66	-20	-8	25
Current account balance (in percent of GDP)						
(including official transfers)	-2.1	-4.2	-4.9	-2.2	-2.1	-2.4
(excluding official transfers)	-2.3	-4.4	-4.9	-2.2	-3.0	-3.2
Gross official international reserves (end of period)						
In millions of U.S. dollars	855	788	783	791	897	1,064
In months of next years imports	2.7	2.5	2.8	2.6	3.0	3.6
External debt						
Stock of external debt (end of period) 5/ 6/	6,172	5,950	5,757	5,473	5,268	5,154
(in percent of GDP)	66.9	55.6	50.9	52.0	50.9	49.1
Net present value of external public debt						
(in percent of exports of goods and services) 6/ 7/	187	153	145	136	140	136
Scheduled external debt service 5/ 7/						
(in percent of export of goods and services)	24.3	22.4	23.6	27.3	18.6	17.6
External payments arrears (end of period)	67	104	25	113	60	103

Sources: Kenyan authorities; and IMF and World Bank staff estimates.

1/ Actual data for prices and exchange rates.
2/ Fiscal year starting July 1 of the calendar year indicated.
3/ Actual data for money and credit.
4/ In percent of beginning-of-period broad money stock.
5/ Public medium- and long-term debt, including to the Fund.
6/ After Paris Club rescheduling in November 2000, and assuming comparable treatment by non-Paris Club and commercial creditors.
7/ Three-year backward-looking average.

I. INTRODUCTION

1.   This selected issues paper provides background on seven topics of particular relevance for this Article IV consultation, namely, the interpretation of inflation data, export performance, trade policy and regional integration, the health of the banking sector, corruption, fiscal sustainability, and external vulnerability.

2.   Section II addresses the question of how to interpret recent developments in the Kenyan consumer price index (CPI) properly, to assess the current inflationary pressure and extract signals about possible future CPI inflation trends. **Failure of the key inflation rates monitored and published properly to reflect the current situation can cause market distortions, as well as complications for monetary and fiscal policy formulation.** In 2001, the key inflation rates monitored and published in Kenya—the annual average and 12-month rates of change in the overall and "underlying" CPI—did not adequately indicate that consumer prices, in fact, had been falling since November 2000. During most of 2001, those rates continued to show strong positive inflation. Developments in the Kenyan CPI during 2000-01demonstrate that 12-month and annual average growth rates reflect current inflationary pressures with a significant delay.

3.   **Section III discusses why Kenya's exports have performed poorly over the past five years in spite of a more liberalized trade and exchange rate regime.** The analysis provided shows that Kenya faces both price and nonprice constraints on export performance. Price constraints include a decline in the terms of trade (excluding coffee) over 1996-98, a decrease in the ratio of the price of tradable to nontradable goods, and rising unit labor costs. Beyond these traditional measures of competitiveness, Kenyan exporters also face a variety of nonprice constraints, particularly related to physical infrastructure. These constraints increase the costs and risks of doing business in Kenya.

4.   **Section IV describes the strides Kenya has made over the last two years in establishing a more open and transparent trade regime.** The recently launched tariff reform aims at streamlining Kenya's tariff structure while paving the way toward greater integration with Kenya's regional trading partners. This section describes Kenya's current trade regime, including recent developments, discusses its involvement in regional free trade areas, and illustrates some of the potential obstacles to further regional integration. If Kenya is to fully realize the benefits from a more open and regionally integrated trade regime, it will be important to continue pursuing the tariff reform, while also dismantling the nontariff barriers that still exist.

5.   **Section V addresses the health of Kenya's banking system, which has been in a fragile and deteriorating state for some years.** This situation largely reflects the belated recognition of nonperforming loans (NPLs) in government-owned and other small banks, mainly resulting from political interference with licensing and lending decisions. This section also describes the potential implications of implementing the Central Bank of Kenya (Amendment) Act (the so-called Donde Act), which would set restrictions on the bank

lending and deposit rates. Implementation of this law would likely have a number of adverse implications, especially for smaller domestic banks, and would affect the long-term growth of the economy, increasing unemployment and poverty.

6.   Section VI discusses corruption in Kenya and its impact on Kenya's economic performance. **Corruption in Kenya is widely thought to have reached endemic proportions.** In recent years, the IMF has increasingly recognized the adverse impact of corruption and poor governance on macroeconomic performance and the success of economic reforms. This section surveys some of the recent research on the economic impact of corruption to illustrate the potential benefits of reducing corruption for growth and poverty alleviation in Kenya.

7.   **Section VII analyzes fiscal sustainability and fiscal risk in Kenya.** The current fiscal position of the central government is very fragile. The level of indebtedness is high, and the overall magnitude of fiscal risks the central government assumes is also large. The results of the analysis show that Kenya needs an extended period of rapid growth, combined with an up-front fiscal consolidation and concessional financing, in order to restore fiscal sustainability.

8.   **Finally, Section VIII analyzes Kenya's external vulnerabilities.** As Kenya recovers from a period of high debt-service payments, which occurred throughout the 1990's and into 2001 its debt-service burden and stock of debt have fallen. The results of the analysis show that Kenya's external vulnerability would be reduced over the medium- and longer-term under conditions of robust economic growth and macroeconomic stability. Kenya's ability to withstand terms of trade shocks, however, would be worsened under conditions of low growth and economic stagnation.

II. INFLATION IN KENYA—SIGNAL EXTRACTION FOR POLICY PURPOSES[1]

A. Introduction

9.   **This section addresses the question of how to interpret properly recent developments in the Kenyan consumer price index (CPI), so as to assess current inflationary pressures and extract signals about possible future CPI inflation trends.** Expectations are formed, in part, on the perceived current situation. Monetary policy, moreover, influences inflation with a lag that can be significant. This makes it important to detect early signals in the data about possible changes in future inflation trends. Similarly, proper fiscal policy requires accurate revenue and expenditure forecasts, which, again depend, in part on accurate price (and volume) forecasts for key national accounts variables.

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[1] Prepared by Nils Mæhle.

10.   Moreover, **failure of the key inflation rates monitored and published properly to reflect the current situation can cause market distortions, as well as complications for monetary and fiscal policy formulations.** In 2001, the key inflation rates monitored and published in Kenya—the annual average[2] and 12-month[3] rates of change in the overall and "underlying"[4] CPI—did not adequately indicate that consumer prices in fact had been falling since November 2000. During most of 2001, those rates continued to show strong positive inflation. Consequently, the 2001/02 budget (July–June) was based on an assumption of an average annual increase in consumer prices of 5 percent (equal to the CBK's internal inflation target, and significantly higher than the actual outturn of 0.8 percent). Lower-than-projected inflation resulted in an overprojection of growth in nominal GDP and budget revenues. The 2001/02 budget projected revenues to be about K Sh 11 billion (1.2 percent of GDP) higher than are now expected for the year.

11.   **This section is organized as follows**: Subsection B provides a summary of key aspects of the development of consumer prices, as measured by the current Kenyan CPI, during the last two years; Subsection C discusses briefly the properties of growth rates over different time-horizons and trend-cycle[5] estimates from the perspective of extracting signals about possible future inflation trends; Subsection D addresses the current Kenyan measure of underlying inflation; and Subsection E offers conclusions. These issues are further elaborated in three annexes. Annex I elaborates on the properties of various growth rates. Annex II briefly discusses the signal extraction properties of standard univariate seasonal adjustment and trend-cycle estimation techniques, and relates the trend-cycle filters to the growth rates discussed in Subsection C and Annex I. Finally, Annex III provides a brief survey of the literature on the concept and measurement of core inflation.

12.   The following **main points** are made:

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[2] Defined as the percentage change in the average index value for the last 12 months over the average index value for the previous 12 months.

[3] The 12-month rate of change is the rate of change from the same month in the previous year and is sometimes referred to as the "annual" rate of change or the "over-the-year" rate of change. In Kenya, the 12-month rate is called the month-on-month rate of change; a label that elsewhere is used exclusively for the rate of change from the previous month—the 1-month rate of change.

[4] The authorities' underlying index is equal to the overall CPI excluding rent and food, and represents only 35 percent of the CPI basket. The rent component has for the latest years been imputed by assuming that it follows the rest of the CPI.

[5] The trend-cycle is the combined long-term trend and the business-cycle movements in the data.

- The 12-month growth rate can be seriously misleading for some purposes and the annual average rate even more so. The 12-month rate is sensitive to one-off shocks and shows the current development with a delay of approximately five-six months. This delay in reflecting the current inflation pressure was the reason why the published Kenyan overall inflation rates continued to show strong positive inflation while prices were actually falling.

- Simple trend extrapolations of the index level, but not of the growth rates, can provide relatively robust projections of the annual average and 12-month growth rates several months ahead, because past developments account for a large part of the future changes in these rates.

- Evidence from other countries suggests that exclusion-based core inflation measures—such as the current Kenyan measure of underlying inflation, which exclude food and rent from the overall CPI—often perform poorly.

- Although evidence suggests that some other measures of core inflation may perform better, these measures cannot be applied to Kenyan data because the Kenyan CPI is not prepared at a sufficiently detailed level.

- When monitoring and publishing inflation data in Kenya, more attention should be given to one-month and three-month growth rates in the data, and less to the 12-month and annual average growth rates. More attention should also be given to the detailed CPI components.

B. Key Features of Consumer Price Inflation in Kenya, 2000-01

13.   **The 12-month rate of change in the CPI fell from 7.5 percent in December 2000 to - 3.1 percent in December 2001, and the annual average inflation rate declined from 6.2 percent in 2000 to 0.8 percent in 2001.** Following the drought in early 2000, a sharp increase in prices of several nonfood groups (particularly fuel and power) and a more moderate increase in food prices caused overall CPI inflation to rise. Food prices have been falling since July 2000, and the overall CPI has been falling since November 2000 (Figure 1). Between February and November 2000, the overall CPI increased by 6.3 percent,[6] or at an annualized average rate of 8.9 percent, while it fell by 3.2 percent, or at an annualized average rate of 2.9 percent, between November 2000 and December 2001.[7]

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[6] During the same period, nonfood prices increased by 10.0 percent, while food prices increased by 3.7 percent.

[7] During the same period, nonfood prices increased by 2.0 percent, while food prices fell by 6.9 percent.

14.   **This development in the CPI has been accompanied by strong short-term nonseasonal volatility[8] (Table 1) and significant changes in relative prices (Fig. 1 right panel), which makes it difficult to gauge the underlying trend in inflation.** Strong short-term volatility may be characteristic of price behavior in Kenya, but it may also reflect measurement problems. Of the subindices, only the food component shows any clearly identifiable (though moderate) seasonality.

Figure 1. Kenya: Overall CPI and Main Components
(Indices, January 1999=100)
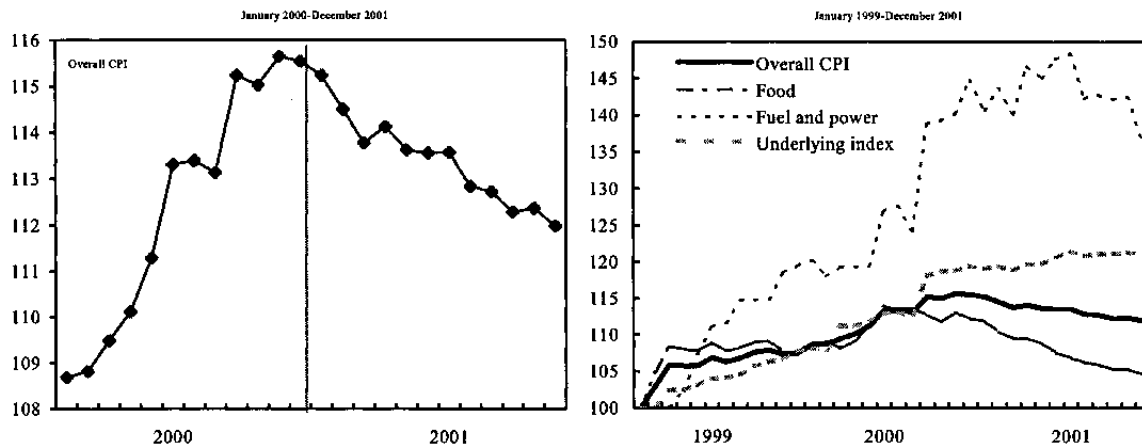
Sources: Kenyan authorities; and staff calculations.

Table 1. Kenya: Short-Term Volatility in the CPI, 1995-2001

	Variance in 1-month percentage changes	
	Nonseasonally adjusted	Seasonally adjusted
Food	4.8	4.0
Drinks and tobacco	1.3	1.3
Clothing and footwear	2.6	2.6
Rent	2.0	1.6
Fuel and power	9.3	9.3
Household equipment and operations	0.9	0.9
Health and personal Care	1.5	1.5
Transport and communications	10.4	10.4
Recreation, entertainment and education	3.7	3.7
Miscellaneous goods and services	4.6	4.6
Overall CPI	1.8	1.5
Underlying (overall excluding food and rent)	1.0	1.0
Overall CPI excluding food, rent, and fuel and power	0.9	0.9

[8] Seasonal variations does not cause problems because it can be identified and removed using standard seasonal adjustment tools.

15.   **The published key 12-month inflation rates fail to adequately indicate the steady fall in consumer prices since November 2000.** During most of 2001, the published overall and underlying inflation rates continued to show strong positive inflation (Tables 2 and 3). The 12-month rate of change in the overall index averaged 2.6 percent for the November 2000 to September 2001 period, and dropped to 0.2 percent as late as June 2001, before turning negative in August 2001. Similarly, the 12-month rate of change in the authorities' measure of underlying inflation stayed at around 7 percent for the first three quarters of 2001 before dropping to 2.4 percent in September 2001.

C. Growth Rates and Signal Extraction

16.   **In the absence of seasonally adjusted data and trend-cycle estimates,[9] it is common practice in most countries to focus presentation of inflation data on 12-month rates of change and not on 1-month rates of change.** The 12-month growth rates often provide a convenient summary of developments over the last 12 months. However, the 2000-01 developments in the Kenyan CPI (see Table 2) provide an extreme example of how 12-month and annual average growth rates can be misleading. Neither rate shows the current inflationary pressure, because both are backward looking, and thus neither provides timely signals about potential future trends in the series. One-month rates of change in nonseasonally adjusted data, however, may contain too much noise. Three-month growth rates in seasonally adjusted data, which lag the current development by one month, may provide a better balance between timeliness and noise than the 1-month and 12-month growth rates. One-month growth rates in the trend-cycle estimates computed by standard seasonal adjustment packages might provide an even better balance.

17.   **The 12-month growth rate represents the 1-month rate cumulated over the last 12 months.** It is also, as shown in Annex I, equivalent to the (geometric) average one-month rate at an annualized rate for the last 12 months. Similarly, the annual average rate is approximately equal to the average 12-month rate for the last 12 months. And, as an average of the last 12 1-month rates, **the 12-month rate represents a basic estimate of the trend growth five-six months earlier.** Various versions of centered moving averages are commonly used as trend filters (see Annex I and Annex II). Consequently, the 12-month rate lags the current trend development by five-six months, which can be misleading. It may suggest, for example, that inflationary pressure is still rising when, in fact, prices have been falling for several months. The annual average rate constitutes a much longer trend filter and consequently lags the current trend development by even more than the 12-month rate.

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[9] Publication of seasonally adjusted CPI data is becoming more common. Many statistical agencies, however, are still reluctant to publish seasonally adjusted CPI data because these data typically are subject to revisions.

18.   **Simple moving-average filters are sensitive to one-off shocks and other outliers.**
As can be seen from Table 3 below (bolded data), an especially large (small) change in one
month will cause the 12-month growth rate to stay high (low) for the next 12 months. The
table shows how the very strong increase in the index between August and September 2000
of 5.0 percent[10] caused the published underlying (12-month) inflation rate to stay high for the
next 12 months.

Table 2. Kenya: Developments In the Overall CPI, January 1999-December 2001
(In percent, unless otherwise indicated)

	Index (1986 = 100)	12-Month Growth Rate	Average Annual Growth Rate	1-Month Growth Rate	1-Month Growth Rate at Annualized Rate	3-Month Growth Rate at Annualized Rate
Jan-00	651.4	8.7	4.3	1.1	13.7	2.7
Feb-00	652.2	5.7	4.8	0.1	1.5	5.5
Mar-00	656.2	3.4	5.0	0.6	7.7	7.5
Apr-00	660.0	4.1	5.2	0.6	7.1	5.4
May-00	667.0	5.2	5.5	1.1	13.5	9.4
Jun-00	679.1	6.0	5.9	1.8	24.1	14.7
Jul-00	679.7	6.7	6.5	0.1	1.0	12.5
Aug-00	678.1	5.9	6.4	-0.2	-2.8	6.8
Sep-00	690.7	7.1	6.4	1.9	24.8	7.0
Oct-00	689.5	6.6	6.3	-0.2	-2.2	5.9
Nov-00	693.2	7.7	6.2	0.5	6.7	9.2
Dec-00	692.5	7.5	6.2	-0.1	-1.1	1.1
Jan-01	690.7	6.0	6.0	-0.3	-3.1	0.7
Feb-01	686.3	5.2	6.0	-0.6	-7.4	-3.9
Mar-01	682.0	3.9	6.0	-0.6	-7.2	-5.9
Apr-01	684.1	3.6	5.9	0.3	3.7	-3.8
May-01	681.1	2.1	5.7	-0.4	-5.2	-3.0
Jun-01	680.7	0.2	5.2	-0.1	-0.7	-0.8
Jul-01	680.7	0.2	4.6	0.0	0.1	-1.9
Aug-01	676.3	-0.3	4.1	-0.7	-7.5	-2.8
Sep-01	675.7	-2.2	3.3	-0.1	-1.2	-2.9
Oct-01	673.0	-2.4	2.6	-0.4	-4.6	-4.5
Nov-01	673.0	-2.8	1.7	0.1	0.8	-1.7
Dec-01	671.2	-3.1	0.8	-0.3	-3.9	-2.6

Source: Kenyan authorities and Fund staff calculations.

19.   **For the same reason, growth rates based on nonsmoothed data are subject to
base effects, which, particularly for growth rates over longer horizons, may cause
confusion.** This base effect can be clearly seen in Table 3 (bolded data), where the drop in
the 12-month rate from 7.2 percent in August 2001 to 2.6 percent in September 2001 is
entirely caused by the dropping out of the 12-month average of the sharp increase in the

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[10] Caused by an 11.8 percent increase in fuel and power prices.

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Table 3. Kenya: Developments In the Underlying CPI,[1] January 2000-December 2001
(In percent unless otherwise indicated)

	Index (1986=100)	12-Month Growth Rate	Average Annual Growth Rate	1-Month Growth Rate	1-Month Growth Rate at Annualized Rate in Trend-Cycle Estimate [2]	3-Month Growth Rate at Annualized Rate
Jan-99	529.6	5.7	9.8	-0.4	3.7	0.2
Feb-99	531.5	1.8	9.0	0.4	7.3	2.9
Mar-99	541.9	1.3	8.0	2.0	10.2	8.1
Apr-99	543.0	1.5	7.0	0.2	10.6	10.5
May-99	546.1	4.1	6.5	0.6	8.5	11.5
Jun-99	550.8	4.8	6.0	0.9	5.8	6.7
Jul-99	551.3	4.6	5.4	0.1	5.7	6.3
Aug-99	553.4	5.8	5.1	0.4	6.9	5.4
Sep-99	559.8	6.3	5.0	1.2	7.7	6.7
Oct-99	562.6	6.3	4.8	0.5	8.4	8.5
Nov-99	565.0	7.1	4.7	0.4	8.3	8.7
Dec-99	570.8	7.4	4.7	1.0	8.1	8.1
Jan-00	572.8	8.2	4.9	0.4	9.1	7.4
Feb-00	571.8	7.6	5.4	-0.2	10.3	4.9
Mar-00	589.0	8.7	6.0	3.0	10.9	13.4
Apr-00	588.9	8.5	6.6	0.0	11.1	11.7
May-00	592.0	8.4	7.0	0.5	9.2	14.9
Jun-00	597.9	8.6	7.3	1.0	6.1	6.2
Jul-00	598.8	8.6	7.6	0.1	4.6	6.9
Aug-00	596.9	7.9	7.8	-0.3	4.4	3.4
Sep-00	625.2	**11.7**	8.3	**4.7**	**60.0**	**19.5**
Oct-00	628.6	**11.7**	8.7	0.5	5.9	**21.4**
Nov-00	628.9	**11.3**	9.1	0.0	5.1	**23.2**
Dec-00	632.5	**10.8**	9.4	0.6	2.3	4.7
Jan-01	630.4	**10.1**	9.5	-0.3	0.2	1.2
Feb-01	632.2	**10.6**	9.7	0.3	-0.2	2.1
Mar-01	629.5	**6.9**	9.6	-0.4	0.4	-1.9
Apr-01	633.6	**7.6**	9.5	0.7	2.8	2.0
May-01	633.9	**7.1**	9.4	0.0	5.2	1.1
Jun-01	638.7	**6.8**	9.2	0.8	5.5	6.0
Jul-01	643.0	**7.4**	9.1	0.7	4.1	6.0
Aug-01	639.7	**7.2**	9.0	-0.5	1.9	3.7
Sep-01	641.5	**2.6**	8.3	0.3	0.5	1.8
Oct-01	641.7	2.1	7.4	0.0	-0.1	-0.8
Nov-01	642.3	2.1	6.7	0.1	-0.3	1.6
Dec-01	641.3	1.4	5.9	-0.2	0.3	-0.1

Sources: Kenyan authorities; and Fund staff estimates and calculations.

[1] Equal to the overall CPI excluding rent and food.
[2] From the X-12-ARIMA seasonal adjustment program. Automatic selection of 9-term Henderson filter and adjustment for level shift in September 2000.

index between August and September 2000 (the index actually increased by 0.3 percent between August and September 2001). As a rule, period–to-period changes in the 12-month rate reflect both the 1-month change for the current month of the current year and the 1-month change for the same month of the previous year.

20.   **Several authors[11] have argued that 3-month growth rates, preferably based on seasonally adjusted data,** may provide a better balance between timeliness and noise than the 1-month and 12-month growth rates (see Annex I). The 3-month growth rate lags the current development by only one month and, as illustrated in Annex I, provides a reasonably close approximation of trend-cycle estimates based on the shorter versions of the moving-average filters applied by the most widely used seasonal adjustment packages. As explained in Annex II, the trend-cycle estimates obtained by using these packages, however, offer several advantages over simple 3-month and 12-month growth rates for assessing the current inflationary pressure.

21.   **Trend-filter smoothing can help highlight the underlying trend in the data. It can, however, suppress or blur key signals in the data,** such as the precise magnitude, duration and timing of the effect of exchange rate, monetary, or supply shocks on the series. As can be seen from Table 3, this is particularly the case if 3-month and 12-month growth rates, or other nonintervention trend filters,[12] are used for smoothing the data.

22.   **Simple trend extrapolations of the index level can provide relatively robust projections of the annual average and 12-month growth rates several months ahead.** Because the 12-month rate is equivalent to the geometric average monthly inflation rate at an annualized rate for the last 12 months, past developments account for a large part of the near-term changes in the rate. For instance, in a 1-month ahead forecast of the 12-month rate, the past 11 1-month rates will account for eleven-twelfths, and the next month's 1-month rate one-twelfth, of the next month's 12-month rate.

23.   **Extrapolating highly seasonal series requires that the seasonal variation in the 1-month growth rate be taken into account as well.** Annex II explains how trend extrapolations based on seasonally adjusted and trend-cycle data can overcome this problem. The method described will give similar forecasts to those obtained based on ARIMA[13] modeling of the time series, as long as no major change in the underlying trend is assumed. It is, however, simpler to use and allows for incorporating into the forecasts assumed changes

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[11] See, among others, Blinder (1997) and Cecchetti (1997).

[12] That is, without temporary removal of any level shifts or outliers in the series before smoothing the series. X-12-ARIMA provides options for temporarily removing such effects. In the trend-cycle estimate in Table 3, a level shift in September 2000 was temporarily removed before smoothing the series.

[13] Autoregressive moving average.

in the underlying trend. ARIMA models are well suited for projecting repeated patterns in the series but not for forecasting changes in the underlying trend in the series.

D. Core Inflation Measures[14]

24.   The term "core inflation" enjoys widespread use, but **more than one definition of core inflation is used in the literature.**[15] In general, core inflation tends to be defined in terms of the particular method used to construct a practical measure, for instance, the CPI excluding certain items, rather than in terms of what the measure is trying to capture. The Kenyan core inflation measure is constructed as the overall CPI excluding rent and food.

25.   Nonetheless, according to Roger (1998), most efforts to measure **core inflation can be seen as trying to extract signals from the measured CPI about possible future inflation trends by quantifying one of two broad concepts.** One concept views core inflation as the *persistent* component of the CPI, that is, the measured CPI inflation rate excluding the effect of any transient shocks. The second concept views core inflation as the *generalized* component of the CPI, that is, the measured CPI inflation rate excluding the effect of relative price shocks. This generalized component may, or may not, be persistent.[16] In both views, core inflation is generally assumed to be associated with expectations and demand pressure components of the measured inflation rate, and to exclude the first-round impact of any supply shocks. The impact of expectations and demand pressure on inflation is generally assumed to be persistent, influence all prices evenly, and largely a monetary phenomenon, while the impact of supply shocks on inflation is assumed to be transient and influence particular prices.

26.   **The Kenyan, exclusion-based core inflation measure represents one of several approaches to measure the *general* component of the CPI.** Alternative measures of the general component include volatility-adjusted measures; specific adjustment measures; and the use of robust, or limited-influence estimators, such as the median and various weighted trimmed means.[17] Unfortunately, these alternative measures cannot be applied to Kenyan data because the Kenyan CPI is not prepared at a sufficiently detailed level. **The overall CPI**

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[14] In Kenya referred to as "underlying inflation."

[15] See, among others, Taillon (1997), Roger (1998), and Wynne (1999) for an extensive discussion of the concept and measurement of core inflation.

[16] Examples of generalized but transient shocks to the CPI inflation rate include changes in sales or value added taxes, as well as exchange rate and money supply shocks.

[17] In weighted trimmed mean measures, a fixed proportion of the price changes at each end of the distribution (i.e,. the extreme price changes) are zeroweighted for that period, and the mean or the remaining price changes recomputed.

is also a measure of the *general* component of the CPI, but the stochastic approach to index numbers, as well as empirical studies, suggests that it may not be the most robust and efficient estimate of the general component (see Annex III).

27.   **Measures of core inflation need to satisfy four key criteria if they are to help detect possible future CPI inflation trends.** They need to be (i) timely; (ii) not subject to any significant revisions; (iii) closely associated with the overall CPI in the long run; and (iv) forward looking, that is, leading indicators for the overall CPI, and not the other way around.[18] The latter criterion should also imply that the core measures should be less volatile than the overall CPI. In addition, the core measures should be easier to model than the overall CPI. Finally, the core measures would need to be readily understood by the public and externally verifiable, if they also are to help explain monetary policy decisions.

28.   **Evidence from other countries suggests that exclusion-based core inflation measures—such as the current Kenyan measure—often perform poorly,** while measures based on trimmed means may help improve the signal-to-noise ratio in the data (see Annex III). The exclusion-based measures may offer little reduction in volatility and a significant loss of signal, sometimes to the degree that they become lagging and not leading indicators of the overall index.

29.   **Exclusion-based measures constructed at a highly aggregate level, such as the Kenyan measure, may perform particularly poorly.**[19] Constructing these measures at a highly aggregate level creates the danger of excluding detailed components that may be among the least volatile elements of the series, while increasing the effective weight of some highly volatile components. The Kenyan underlying inflation measure is constructed on a highly aggregated level by excluding two of the ten main components. Furthermore, as is evident from Table 1 above, the two components excluded (food and rent) are among those that show the least short-term volatility. This, suggests that the Kenyan underlying inflation measure may be a poor indicator of the short- to medium-term inflation outlook.

30.   **The Kenyan measure of underlying inflation may, nonetheless, be a useful indicator of the longer-term developments in the price level and thus the longer-term inflation outlook.** From Figure 2 below, it appears that

- the underlying index in the long run is relatively unbiased compared with the overall CPI;

- food prices, most likely affected by drought, have caused the overall CPI to increase faster than the underlying index for sustained periods over the past decade;

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[18] See Marques, Neves, and Sarmento (2000) for an extensive discussion of these issues.

[19] See Roger (1997).

- subsequent falls in food prices cause the overall CPI to decline for periods of significant duration; and

- the level of the overall CPI tends to revert to the level of the underlying index in the long run.

Non-exclusion-based measures may not properly filter out these large semitransient swings, at least not if they occur gradually.

Figure 2. Kenya: Main CPI Components, 1990-2001
(Indices, January 1999=100)
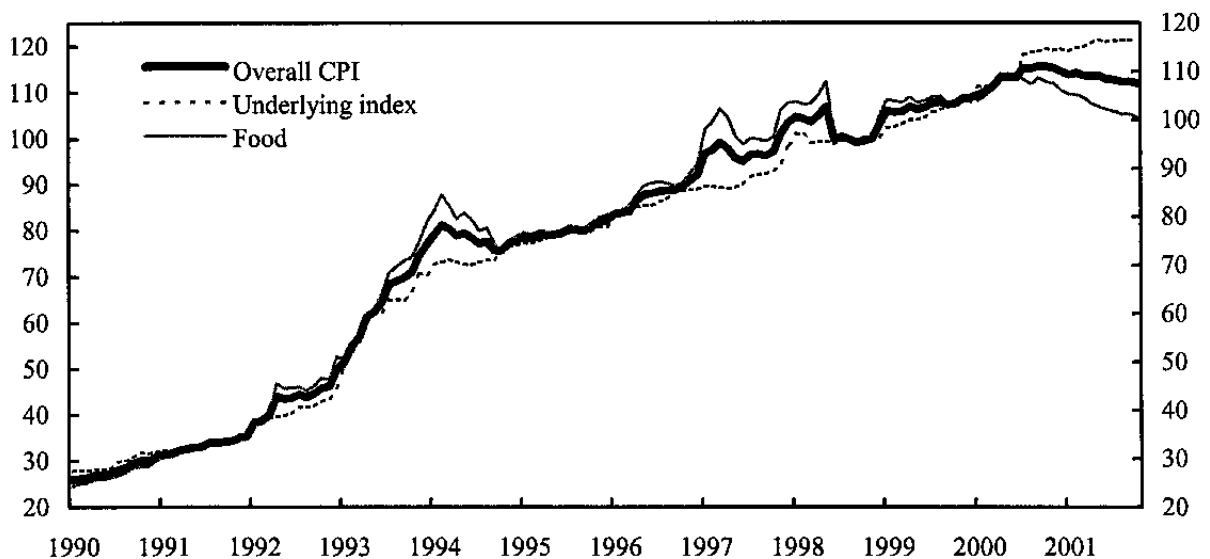
Sources: Kenyan authorities; and staff calculations.

31.   **From Figure 2 it appears also that the current deviation between the overall CPI and the underlying index may differ from the past episodes.** Currently, the overall index is lower than the underlying index. In contrast to the previous episodes, the current fall does not appear to be characterized by food prices' reverting to their "natural" level after a preceding sharp increase. The sharp decline in food prices, however, has likely bottomed out, and the high energy prices may finally start coming down following the strong decline in world oil prices during 2001. The fundamental reforms of Kenya's trade regime that have taken place over the past ten years are likely to have reduced the impact of droughts on food prices, and thus altered relationship between the overall CPI and the underlying index.

32.   **It should be possible to improve the Kenyan underlying inflation measure if the CPI were to be prepared at a more detailed level.** Several improvements can be envisaged. First, the information content of all core measures discussed above can be improved by using seasonally adjusted data for those series that show seasonal variations. Second, for exclusion-based measures, the information content should be improved by making sure that only the

detailed subcomponents that show the largest short-term nonseasonal volatility, as well as those food subcomponents responsible for the large semitransient swings, are excluded. Third, the signal-to-noise ratio in the data may be improved by use of the trimmed-mean method. Finally, it may be possible to combine exclusion and trimmed-mean methods: first, those food subcomponents responsible for the above-mentioned large semitransient swings could be excluded, and then for each period, a fixed proportion of the remaining items at each end of the distribution of price changes could be zero-weighted.

E. Conclusion

33.   There is no "best measure of inflation." Different measures provide different perspectives on the inflation process. **The key inflation rates monitored and published in Kenya, however, failed to adequately indicate that prices were falling during 2001.**

34.   **Consequently, when monitoring and publishing inflation data in Kenya the authorities should give more attention to 1-month and 3-month growth rates in the data, and less to the 12-month and annual average growth rates.** More attention should also be given to the detailed CPI components. Experience from other countries has shown that the key information for predicting future inflation may sometimes be found in the tails of the price change distribution, and thus be excluded from trimmed-mean based core measures. Therefore, monitoring the detailed component series, and not only aggregate measures, often proves to be critical. In addition, it would be useful to start compiling and publishing seasonally adjusted and trend-cycle estimates in Kenya using one of the standard seasonal adjustment packages.

35.   Finally, the discussion suggests that one **should be careful in labeling particular measures as the "underlying"—or "core"—inflation rate** because those labels may promise more than the measures can deliver. Evidence from other countries suggests that exclusion-based core inflation measures—such as the current Kenyan measure of underlying inflation—often perform poorly.

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GROWTH RATES AND SIGNAL EXTRACTION

36.   The 12-month growth rate represents the cumulative rate of change from the same month in the previous year or, put differently, the 1-month rate cumulated over the last 12 months:

$$\left(\frac{X_t}{X_{t-12}}-1\right)\cdot 100 = \left(\frac{X_{t-11}}{X_{t-12}}\cdot\frac{X_{t-10}}{X_{t-11}}\cdot\ldots\cdot\frac{X_t}{X_{t-1}}-1\right)\cdot 100 \ , \tag{1}$$

where X_t is the value of the index in period t.

37.   It follows that the 12-month growth rate also is equivalent to the geometric average monthly inflation rate for the last 12 months at an annualized rate: the geometric average for the last 12 months is

$$\bar{r}_t = \left(\left(\frac{X_t}{X_{t-12}}\right)^{\frac{1}{12}}-1\right)\cdot 100 = \left(\left(\frac{X_{t-11}}{X_{t-12}}\cdot\frac{X_{t-10}}{X_{t-11}}\cdot\ldots\cdot\frac{X_t}{X_{t-1}}\right)^{\frac{1}{12}}-1\right)\cdot 100 \ ; \tag{2}$$

at an annualized rate is

$$ar_t = \left[\left(1+\frac{\bar{r}_t}{100}\right)^{12}-1\right]\cdot 100 = \left[\left(\left(\frac{X_t}{X_{t-12}}\right)^{\frac{1}{12}}\right)^{12}-1\right]\cdot 100 . \tag{3}$$

38.   The 12-month rate lagged five-six months provides a close approximation of the basic centered 2×12 moving-average trend filter[20] used in the first iteration of the X-11, X-11-ARIMA, and X-12-ARIMA seasonal adjustment packages. It provides, however, only a rough approximation of the final trend estimates obtained by these programs, which use the more responsive Henderson moving-average filters.[21] This is particularly the case if the trend is relatively unstable, outliers are present, and, consequently, the seasonal adjustment program chooses shorter version of the Henderson filter.

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[20] A 2×12 moving average is a 2-term moving average of a 12-term moving average:
$$\bar{X}_t^{2x12} = \frac{1}{2}\left(\bar{X}_t^{1x12}+\bar{X}_{t+1}^{1x12}\right) = 1/24\ X_{t-6}+1/12\ X_{t-5}+\ldots+1/12\ X_t+\ldots+1/12\ X_{t+5}+1/24\ X_{t+6} .$$

[21] A Henderson moving average is a special type of weighted moving average in which the weights are constructed to produce the smoothest possible trend-cycle estimate. In X-11 and X-11-ARIMA, for monthly series, Henderson filters with lengths of 7, 9, and 13 months could be automatically chosen or determined by the user. In X-12-ARIMA, the users can specify Henderson filters of any odd-number length.

39.   As illustrated in Figure 3 below, centered 3-month growth rates provide a reasonable close approximation of trend-cycle estimates based on the shorter versions of the Henderson moving-average filters.[22]

Figure 3. Kenya: the Trend-Cycle Component and Approximations to the Trend-Cycle Component of the Overall CPI, January 1999-December 2001
(Annualized percentage change)
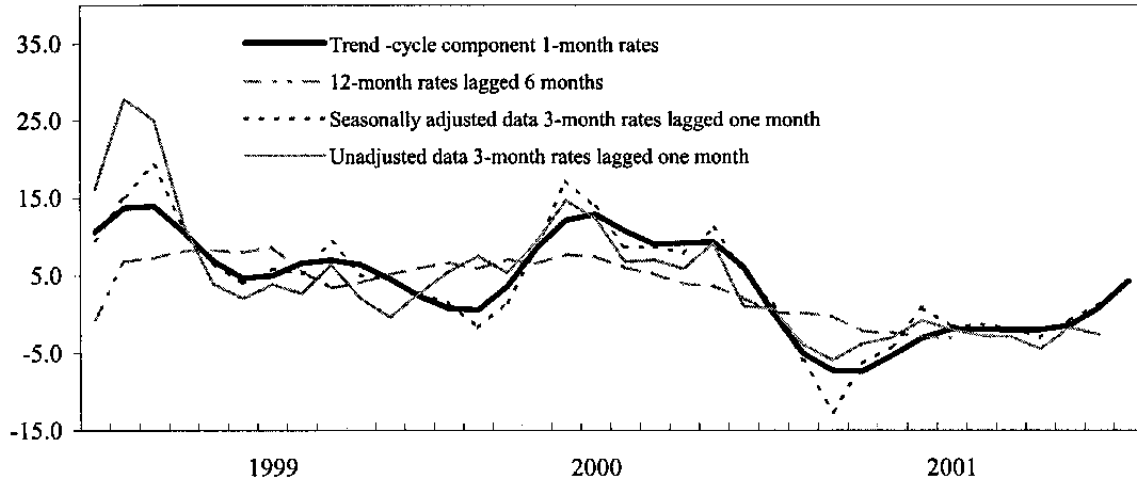
Sources: Kenyan authorities; and staff estimates and calculations.

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[22] The three center months obtain 67 percent of the weights in the 13-term Henderson filter.

SEASONAL ADJUSTMENT AND ESTIMATION OF TREND-CYCLES

40.   **Seasonal adjustment means using analytical techniques to identify the main components of the time series**—the three main ones being the trend-cycle component, the seasonal component, and the irregular component, each of which may be made up of several subcomponents. The purpose is to provide a better understanding of the behavior of the time series and help forecast the series. In seasonally adjusted data, the impact of the regular within-year seasonal pattern, the influences of moving holidays, and the number of working/trading days and the weekday composition in each period (the trading-day effect) are removed. By removing the repeated impact of these effects, seasonally adjusted data highlight the underlying trends and short-run movements (including any irregular movements) in the series. Seasonal adjustment is not a smoothing technique, and, if the impact of irregular events is strong, seasonally adjusted data may not represent a smooth series.

41.   **In trend-cycle estimates, the impact of irregular events in addition to seasonal variations is removed.** Adjusting a series for seasonal variations removes the identifiable, regularly repeated influences on the series but not the impact of any irregular events. To further highlight the underlying trend-cycle, most standard seasonal adjustment packages provide a smoothed trend line running through the seasonally adjusted data (representing a combined estimate of the underlying long-term trend and the business-cycle movements in the series).

42.   **Various well-established techniques are available for removing the seasonal patterns from the series.** The most commonly used technique is the Census X-11/X-12 method, which is based on a series of centered moving-average filters.[23]

43.   Seasonal adjustment and trend-cycle estimation using centered moving-average filters allow the seasonal pattern of the series to change over time and allow for a gradual update of the seasonal pattern. This results in a more correct identification of the seasonal effects influencing different parts of the series, but also implies that the final seasonally adjusted and trend-cycle values depend on both past and future values of the series. Thus, at the beginning and end, the series has to be either explicitly extended by use of backcasts and forecasts based on the pattern of the time series, or implicitly through the use of asymmetric filters. In either case, this leads to a **constant revision of the most recent seasonally adjusted and the trend-cycle estimates as new observations replace the forecasts.** These revisions to the seasonally adjusted and trend-cycle estimates, owing to new observations, are commonly referred to as the "wagging tail" problem, from which all major seasonal adjustment methods suffer. To avoid systematically biased estimates, the use of symmetric filters is required, and revisions are an unavoidable consequence.

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[23] For an introduction to seasonal adjustment and trend-cycle estimation, and to the X-12-ARIMA package, see Chapter VIII of Bloem, Dippelsman, and Maehle (2001).

44.   **The revision problem should not be exaggerated.** Although seasonally adjusted data may be subject to nonnegligible revisions even after one to two years,[24] these revisions will generally be small, particularly for series with a stable seasonal pattern. Furthermore, although estimates of the underlying trend-cycle component may be subject to large revisions at the first updates, they will—especially if based on the shorter versions of the Henderson trend filter—converge relatively quickly to their final values. Moreover, it is not possible to distinguish between an outlier and a change in the underlying trend-cycle from a single observation, unless a particular event generating an outlier is known to have occurred. In general, several observations are needed to verify the change in the trend-cycle indicated by the first observation.

45.   **Trend-cycle estimates obtained through seasonal adjustment offer several advantages over simple 3-month and 12-month growth rates for assessing the current inflationary pressure,** particularly if these estimates are based on one of the newest seasonal adjustment packages. First, the estimates obtained should be more precise and robust, and less influenced ex post by disturbances from outliers through the following:

- automatic selection of filter length based on degree of noise relative to trend-cyclical variations in the data—that is, the "noise-to-signal ratio"; [25]

- automatic, as well as user-determined, outlier detection and adjustment;

- automatic, as well as user determined, level shift detection and adjustment; and

- user-determined adjustment for the effect of known irregular events.

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[24] The seasonal factors will be final after two years with the default 5-term (3×3) moving average seasonal filter (as long as any preadjustments for calendar effects and outliers are not revised later on).

[25] In each iteration, a 13-term Henderson filter is used to temporarily decompose the seasonally adjusted series into a trend-cycle and an irregular component. From these components the noise-to-signal ratio is estimated as $\hat{R} = \bar{I}/\bar{C}$, where $\bar{C}$ is the sample mean of the absolute change in the estimated trend based on the 13-term Henderson filter $\left|\hat{T}_t - \hat{T}_{t-1}\right|$ and $\bar{I}$ is the sample mean of the absolute change in the corresponding irregular component $\left|\hat{I}_t - \hat{I}_{t-1}\right|$. In the final iteration, a 9-term Henderson filter will be used if $\hat{R} \leq 1.0$, a 13-term Henderson filter if $1.0 < \hat{R} < 3.5$, and a 23-term Henderson filter if $\hat{R} \geq 3.5$.

46.   Second, the estimates should be smoother and provide a clearer signal than the 3-month growth rates. Third, seasonal adjustment reduces the amount of short-term volatility and thus should allow for the use of shorter and more responsive filters. Assuming a stable seasonally adjusted series, estimates based on the 9-term weighted Henderson filter will be close to final within one-two months, while those based on the 3-term weighted Henderson filter will be close to final within two-three months because of the distribution of the weights in the filters. For this reason, the trend-cycle estimates should provide a quicker and more robust indication of turning points in the data than the 12-month growth rates.

47.   **Decomposing the series into its main components should help forecast the series.** For instance, near-term forecasts of highly seasonal series may be best done simply by projecting the level of the trend-cycle component (e.g., by extrapolating using the most recent 1-month growth in the trend-cycle component) and multiplying (assuming a multiplicative seasonal model) the projected trend-cycle by a forecast of the seasonal factors.[26] This procedure implicitly assumes that the future multiplicative irregular factors are equal to one (that is, equal to their by-definition average value), which is equivalent to assuming no future irregular impact on the series. This assumption is reasonable since it generally is not possible to forecast the irregular component. Similarly, the simplest and most robust near-term forecast of the level of non-seasonal series may be as equal to the projected level of the trend-cycle component.

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[26] Most standard seasonal adjustment packages, including X-12-ARIMA, provide one-year-ahead forecasts of the seasonal factors.

CORE INFLATION

48.   As discussed in Subsection D, most efforts to measure core inflation can be seen as trying to extract signals from the measured CPI about possible future inflation trends by quantifying either the *persistent* or the *generalized* component of the CPI. Core inflation defined as the persistent or generalized component of a selected measure of inflation (the CPI) should not be confused with the related, but somewhat different, issues of constructing "a general measure of inflation," measuring "monetary inflation," and measuring the "purchasing power of money," which may all require inclusion of prices of a much broader group of products than those covered by the CPI. These measures may also require the use of different weighting procedures than those used for constructing the CPI. The CPI is not designed as a general measure of inflation, but as a measure of changes in the households' cost of living. It is in practice, however, often used as a general measure of inflation. Core inflation defined as the persistent or generalized component of the CPI should also not be confused with the related, but different, issue of which price domain is controlled by monetary policy, or the normative issue of which price index inflation-targeting central banks should officially target. The term core inflation is, however, often used as if the CPI were a general measure of inflation.

49.   Core inflation as persistent inflation can be associated with Milton Friedman's (1963) definition of inflation as a "steady and sustained increase in the general price level," according to Roger (1998). Friedman emphasizes the distinction "between a steady inflation, one that proceeds at a more or less constant rate, and an intermittent inflation, one that proceeds by fits and starts...." According to Friedman, the steady or persistent element of inflation will tend to be incorporated into expectations and thus, consistent with Quah and Vahey's (1995) definition of core inflation, have no medium- to long-term impact on real output. The definition of core inflation as the persistent element is reflected in a common tendency to describe core inflation and trend[27] inflation as essentially synonymous.

50.   Examples of approaches to measuring core inflation as the *persistent* component of the CPI includes univariate smoothing techniques and (multivariate) structural vector autoregressive (VAR) models. The simplest measures obtained by smoothing are the 3-month and 12-month growth rates, which, as discussed above, are simply averages of the 1-month inflation rate over the past 3 and 12 months, respectively. Other such measures include the trend-cycle estimates obtained through seasonal adjustment and trend measures obtained by using trend filters, such as the Hodrick-Prescott filter. The structural VAR approach (first presented in Quah and Vahey 1995) decomposes aggregate inflation into a measure of core inflation that is not associated with medium-or long-term changes in output volume and a residual element that is associated with persistent effects on output volume. The decomposition is based on an estimated structural VAR model, including the measured CPI growth rate and a measure of aggregated output volume, together with restrictions on the

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[27] Often meaning the long-run trend, as distinct from the trend-cycle in Annex II.

properties of disturbances to the system. Measures based on this approach may, depending on how the distinction between the short and medium term is drawn, include cyclical movements in inflation associated with excess demand pressures. The lack of monthly or quarterly GDP estimates prevents the structural VAR model approach from being applied to Kenyan data.

51.   **Core inflation as generalized inflation can be associated with, among others,** Arthur Okun's (1970) definition of inflation as "a condition of generally rising prices" and John Flemming's (1976) as "the rate at which the *general level of prices* in [the] economy is changing," according to Roger (1998). In this conception, relative price disturbances are regarded as "noise" blurring the more general or "underlying" evolution of prices. The notion that relative price movements driven by supply shocks may "distort" the aggregate inflation rate has been controversial for almost as long as aggregate price measures have existed (Roger, 1998). Basically, it is argued that, unless there is monetary accommodation, the quantity theory of money suggest that rises in some relative prices should be offset in terms of the impact on the aggregate price level by falls in other relative prices. If they are not, this must reflect genuine, core inflation. The argument assumes, however, a measure of monetary inflation covering all prices, however defined, and not a cost-of-living-based measure like the CPI, which covers consumer products only.

52.   **Examples of approaches to measuring core inflation as the *general* component of the CPI include exclusion-based measures, volatility-adjusted measures, specific adjustment measures, the use of robust, or limited-influence, estimators, such as the median and various trimmed means.** Exclusion-based measures involve reweighting the CPI to exclude, or zero weight, particular items, such as fresh fruit and vegetables, petrol, and, sometimes, prices that are deemed to be largely determined by supply-side and nonmarket forces. This is probably the most common approach, but it is crude and ad hoc. Volatility-adjusted measures involve adjusting the CPI weights in inverse proportion to past volatility of the various price series. The historical pattern of relative volatility in prices is assumed to hold in the future—which may not be valid. Specific adjustment measures involve adjusting price movements to remove the effects of specific shocks that are judged to be essentially transient in character. The use of robust estimators involves down-weighting extreme price movements whenever they occur—without regard to the identity of the good or service involved. Most robust measures used in the core inflation context are based on weighted trimmed means, in which a fixed proportion of prices at each end of the distribution of price changes (i.e., the extreme price changes) are zero weighted for that period, and the mean or the remaining price changes recomputed. The lack of sufficiently detailed CPI components prevents the volatility-adjusted and robust estimator measures from being applied to Kenyan data.

53.   **The overall CPI is also a measure of the *general* component of the index, but practice and the stochastic approach to index numbers suggest that it may not be the most robust and efficient estimate of the general component.** The stochastic approach to

index numbers,[28] which has gained renewed popularity in the core inflation literature, treats individual price changes as reflecting a generalized trend–the core inflation rate–plus relative price shocks, and possibly a constant rate of long-term changes in relative prices. The standard theory of statistical inference says that the arithmetic sample mean–that is, the measured inflation rate–is the best (most efficient) estimator of the true mean or core inflation rate if the distribution of price changes is normal (Gaussian). However, in almost every country and period over the entire history of price collection, the distribution of price movements has been characterized by high kurtosis[29] and right skewness. Extensive simulation analysis in the 1970s indicated that the arithmetic mean is an extremely poor estimator of the central tendency for even quite small departures from Normality, and that the sample median or other forms of trimmed means[30] may provide a better estimator of the true mean of the distribution in those circumstances. The use of asymmetric trimmed means may be required to avoid a systematic bias compared with the published aggregated CPI inflation rate, if the skewness appears to be significant and chronic.

54.   **Studies suggest that measures based on trimmed means may improve the signal-to-noise ratio, while other measures often perform poorly.** Folkertsma and Hubrich (2001) in a study of measures based on structural VAR models of aggregate data from a group of European countries, find that none of the measures seemed "to yield core inflation estimates which are sufficiently accurate to be useful for monetary policy purposes." One of the main shortcomings of measures based on structural VAR models is their instability— history tends to change each time a new observation is added. Marques, Neves, and Sarmento (2000), in a study on Portuguese data, find that the exclusion-based measure is a lagging, not leading, indicator of the overall CPI inflation rate, while the trimmed-mean and volatility-adjusted measures appear to be leading indicators of the CPI rate. Similarly, Vega and Wynne (2001), in a study on aggregate data for the euro area find, that trimmed-mean measures "may be a useful input to the monetary policy process" and find evidence that they outperform the alternative core measures. He finds also, however, that non of the measures does particularly well in forecasting CPI inflation. Cecchetti (1997) also finds, based on US data, that "the CPI excluding food and energy is an extremely poor measure of any underlying or core component of the CPI" and that it is not less volatile but often more volatile that the overall CPI. He also concludes that "limited-influence estimators are more

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[28] The stochastic approach to index numbers originates according to Diewert (1995), with Jevons (1863), Edgeworth (1887), and Bowley (1901), and was driven by the quantity theory of money. It has been controversial for most of this time, however. Diewert (1995), following up on earlier critiques of the stochastic approach by Keynes (1930), asserts that the basic assumptions underlying the stochastic approach contradict well-established empirical facts.

[29] Distributions with a high kurtosis tend to have a distinct peak near the mean, decline rather rapidly, and have long or heavy tails, compared with the normal distribution.

[30] The median represent the 50 percent trimmed mean.

efficient estimators of the central tendency of the price-change distribution than is the overall mean." Aucremanne (2001), however, finds, based on Belgian data, that for the whole sample all core measures tested were lagging rather than leading the overall CPI. He attributes this surprising finding to the effects of the second positive oil price shock in 1979-82 and the negative oil price shock of 1985-86, which had a direct impact on the observed inflation and a significant but only indirect impact on the core measures through the second- and third-round effects. Aucremanne's example shows that **the key information for future inflation may sometimes be located in the tails of the distribution, and thus excluded from trimmed-mean based core measures.** Therefore, monitoring the detailed component series, and not only aggregate measures, often proves to be critical. Also, it follows that the core measures should never be the only policy indicator.

55.   The studies show that volatility-adjusted measures, while often showing the biggest reduction in volatility, often result in a disappointing loss of signal. These measures may often be biased compared with the overall CPI, and show poor out-of-sample performance unless the pattern of relative volatility in prices is stable.

III. EXPORT PERFORMANCE IN KENYA SINCE 1995[31]

A. Introduction

56.   **Kenya's exports have performed poorly since 1995, in spite of a more liberalized trade and exchange rate regime.** As the economy has stagnated and investor confidence fallen, exports have also suffered. The analysis in this section shows that Kenya faces both price and nonprice constraints on export performance. Price constraints include a decline in the terms of trade, excluding coffee, over 1996-98, a decrease in the ratio of the price of tradable to that of nontradable goods, and rising unit labor costs. Beyond these traditional measures of competitiveness, Kenyan exporters also face a variety of nonprice constraints, particularly related to physical infrastructure. These constraints increase the costs and risks of doing business in Kenya.

57.   This section is organized as follows: Subsection B discusses recent trends in export performance; Subsection C examines constraints on exports; Subsections D and E examine the performance of traditional and nontraditional exports of goods, respectively; Subsection F briefly discusses the tourism exports; and Subsection G concludes.

B. Trends in Goods Export Performance

58.   **Kenya's export of goods in current U.S. dollars since 1995 has been marked by an early increase between 1995 and 1996, followed by sluggish performance toward the end of the decade** (Figure 4). Kenya has also seen significant shifts in the composition of its exports of goods, particularly away from one of its traditional exports, coffee, and toward other (nontraditional) products such as horticulture.

Composition of exports of goods

59.   **Broadly speaking, Kenya's exports of goods can be divided into seven groups: coffee, tea, horticulture, oil products, processed foods and vegetables, manufactured products, and other products.** In 1995 and 1996, the largest share of exports of goods was held by manufactured products, followed closely by other products, which include pyrethrum and soda ash. Coffee exports, as a share of total exports of goods, fell significantly from 15 percent in 1995 to less than 10 percent in 2000. Tea's share in total exports of goods has gradually risen, replacing manufactured products as the largest contributor, and made up over one-fourth of total exports of goods in 2000. Horticulture rose steadily over the period 1995-2000, while oil maintained a modest share. Over this period, manufactured products and other products gradually fell as a share of total exports of goods (Table 4).

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[31] Prepared by Julie Kozack.

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Figure 4. Kenya: Contribution of Commodities to Exports of Goods, 1995-2000
(In millions of U.S. dollars)
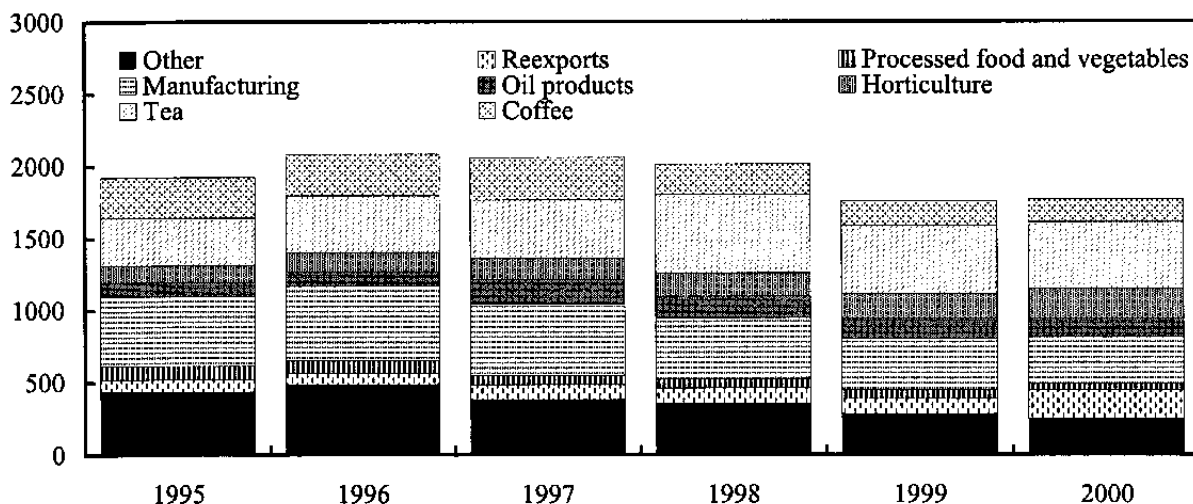
Sources: Kenyan authorities; and Fund staff estimates.

Table 4. Kenya: Share of Selected Products in Exports of Goods, 1995-2000 1/
(In percent)

	1995	1996	1997	1998	1999	2000
Coffee	15.3	14.3	15.1	11.1	10.4	9.8
Tea	18.0	19.7	20.8	28.7	28.6	29.5
Horticulture	6.5	6.8	7.5	8.5	10.5	13.3
Oil products	5.1	4.8	8.7	7.8	8.3	8.1
Processed food and vegetables	5.1	4.3	3.3	3.3	3.6	2.9
Manufactured products	26.3	25.9	25.2	22.1	21.6	20.7
Other	23.7	24.2	19.4	18.5	17.0	15.8

Sources: Kenyan authorities; and Fund staff estimates.

1/ Excluding reexports.

60.   **The shift in the composition of exports of goods likely reflects the pace of structural reforms in particular sectors.** A clear example of this is the erosion of coffee's share in exports, as well as its decline in current U.S. dollar terms. The reasons for coffee's dismal performance, as discussed below (Subsection D), are closely linked to bottlenecks and inefficiencies in the coffee sector, as well as drought conditions and declining world coffee prices in recent years. The rise in the share of tea exports over the period 1996-2000 may reflect the anticipation and actual restructuring of the tea sector (Subsection D). Overall, exports of goods as a share of GDP rose slightly from 1995 to 1996, only to fall rather dramatically over the 1997-2000 period (Figure 5).

Figure 5. Kenya: Exports of Goods as Share of GDP at Current Prices, 1995-2000
(In percent)
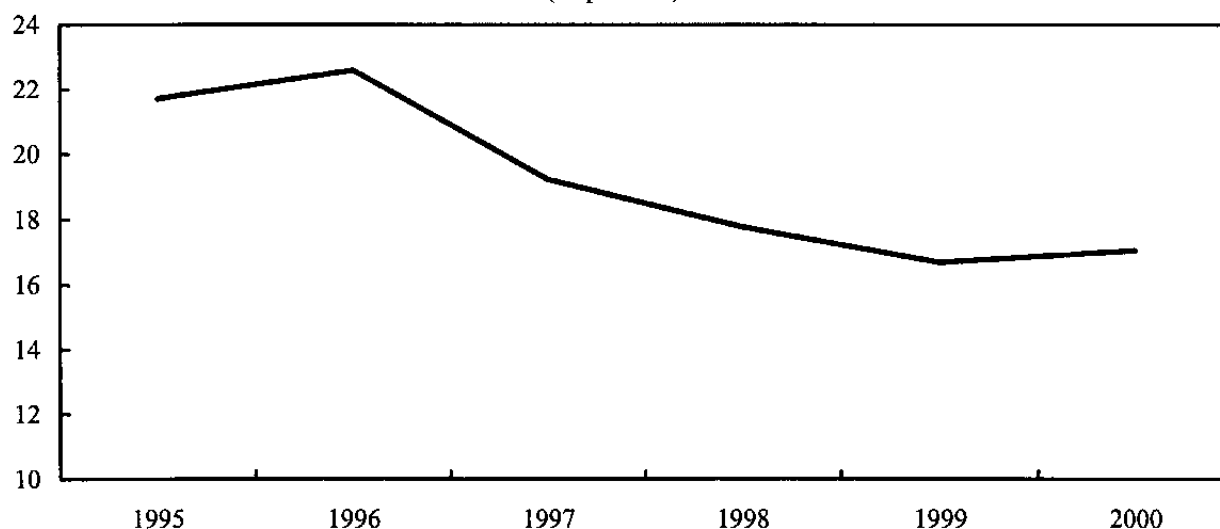
Sources: Kenyan authorities; and Fund staff estimates.

Goods export growth

61.   **Goods export growth in current U.S. dollar terms broadly followed the path of growth in volumes (Figure 6).** After 1996, goods export volumes declined dramatically, largely owing to adverse weather conditions in 1997[32] and a severe drought in 2000. Goods export prices, however, fluctuated quite a bit, rising at first and then falling before ticking up again. A goods export price boom in 1997, mainly reflecting surging coffee prices, allowed goods export value growth to remain roughly unchanged between 1996 and 1997, notwithstanding the sharp decline in volumes.

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[32] The adverse weather conditions affecting Kenya in 1997 caused goods export volumes to continue to decline into 1998.

Figure 6. Kenya: Export Performance, 1995-2000

Merchandise Exports
(U.S. dollars terms; annual percentage change)

Merchandise Exports
(Volume index; annual percentage change)

Merchandise Exports
(Price index; annual percentage change)
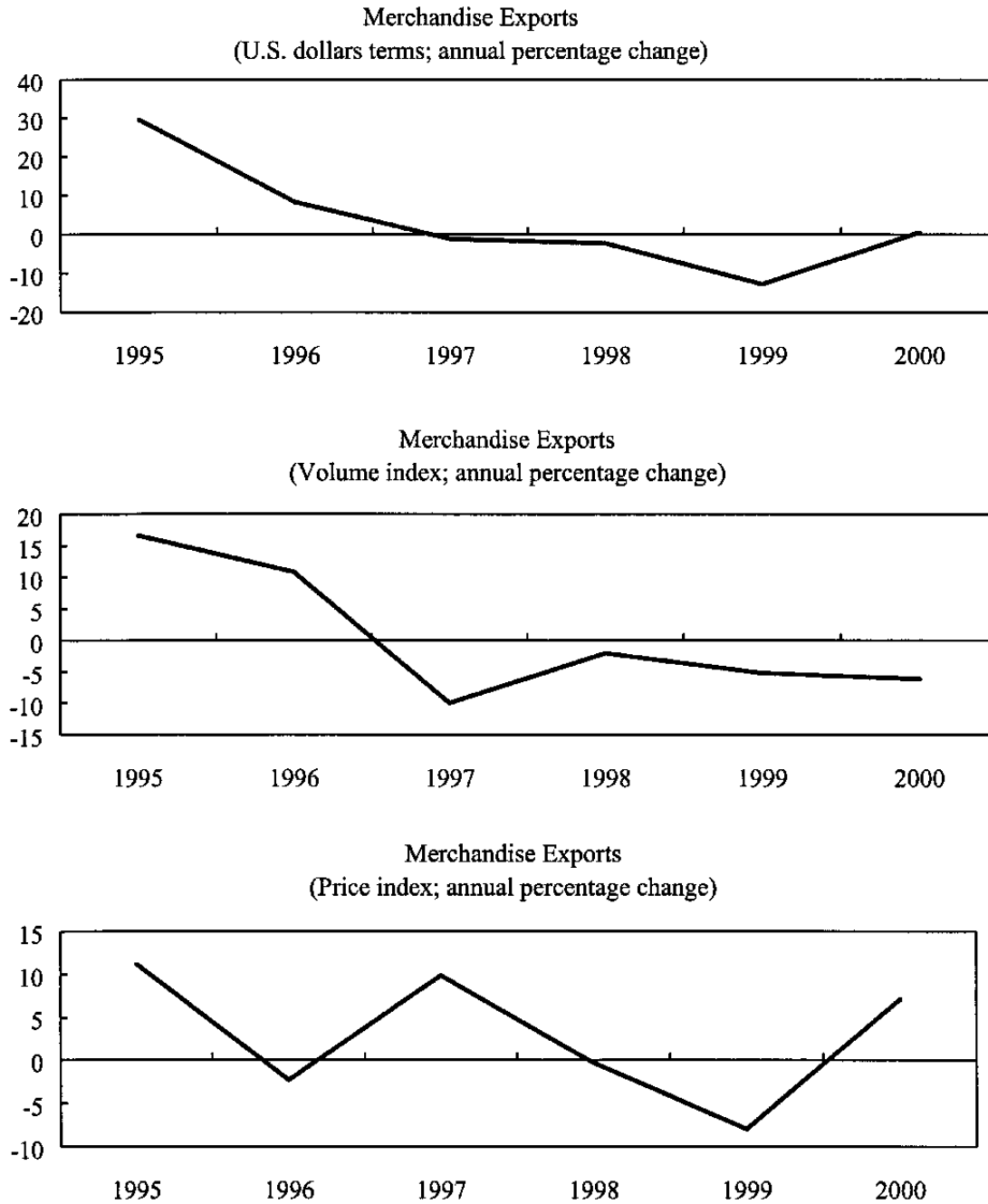
Sources: Kenyan authorities; and Fund staff estimates.

62.   Although the sharp reduction in goods export volumes can be partly explained by the drought conditions, which severely affected production of agricultural commodities, other factors, such as poor infrastructure and other high costs of doing business, also likely contributed to this outcome (see Subsection C below).

Destination of Kenya's exports of goods

63.   **Nearly half of Kenya's exports of goods find their destination in Africa, with Uganda and Tanzania absorbing the majority of these exports, owing to their geographic proximity and close trade relations.** Exports of goods to western Europe (mainly the United Kingdom, Germany, and the Netherlands) constitute nearly one-third of total exports of goods, while Asia receives about 10 percent of Kenya's exports of goods. This pattern has remained roughly unchanged since 1995, with exports to Asia picking up and export to Europe falling slightly.

64.   Kenya's relationship with its regional trading partners is described in more detail in Section IV, which describes the various regional and multilateral trade areas of which Kenya is a member. Currently, Kenya's policymakers are contemplating ways to deal with Kenya's membership in both the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA).

C. Constraints on Export Performance

Traditional measures of competitiveness

65.   **After liberalizing its foreign exchange regime in the early part of the 1990s, Kenya experienced wild fluctuations in its real effective exchange rate** (Figure 7). These fluctuations continued into the later part of the decade and may have contributed to Kenya's deteriorating export performance. Over the same period, the nominal effective exchange rate fluctuated much less. It is difficult to gauge any trend or pattern in the real effective exchange rate because of its sharp fluctuations. Since its low in mid-1993, Kenya's exchange rate has appreciated by nearly 45 percent in real effective terms, while the nominal effective exchange rate has remained relatively constant. However, the entire appreciation in real effective terms took place between 1993 and 1995. The real effective exchange rate continued to show considerable volatility after 1995, before finally settling down in 2001.

Figure 7. Kenya: Real and Nominal Effective Exchange Rates,
January 1990 - December 2001
(Indices, January 1990=100)
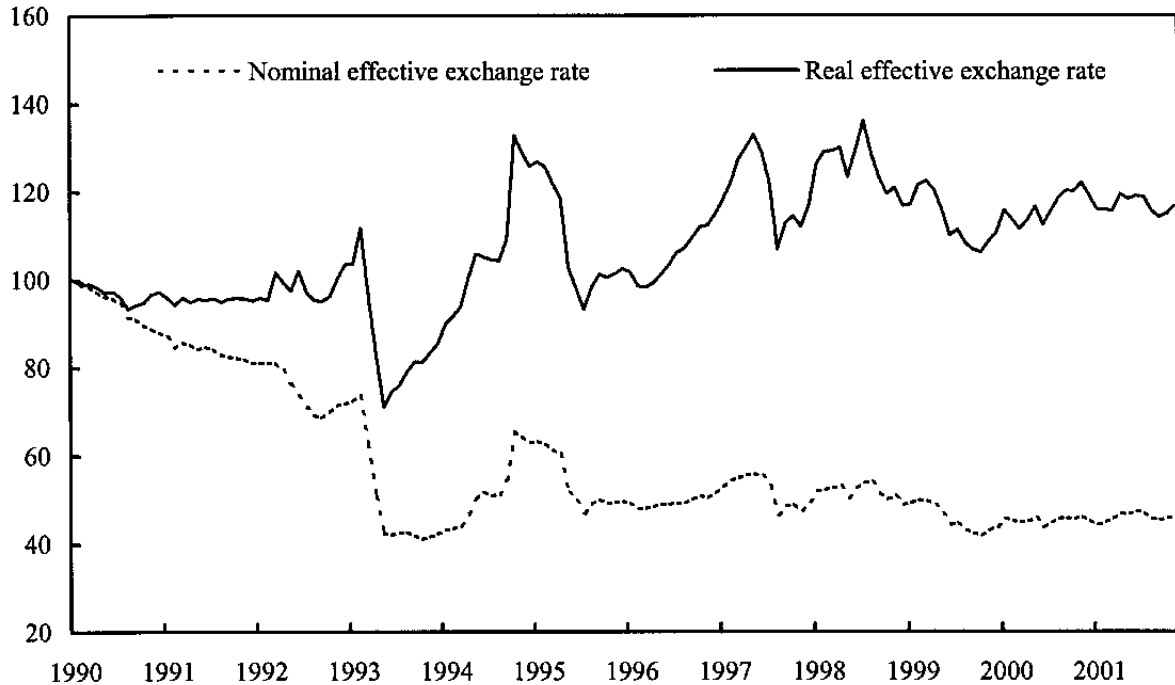
Sources: Kenyan authorities; and Fund staff estimates.

66.   **Kenya's terms of trade have remained roughly steady since 1995, with fluctuations typically of less than 5 percent** (Figure 8). The terms of trade have been stable in spite of the coffee boom in 1997 and a generally upward trend in tea prices since 1995. Offsetting this movement has been a rising trend in oil prices, particularly in 1999 and 2000. Excluding the wild fluctuations in coffee prices, the terms of trade improved by 15 percent in the first part of the 1990s, but worsened by over 10 percent between 1996 and 1998. In 1999 and 2000, however, the terms of trade excluding coffee improved slightly. Overall, changes in the terms of trade do not explain the fluctuations of the real effective exchange rate.

Figure 8. Kenya: Terms of Trade, 1990-2000
(Indices, 1990=100)
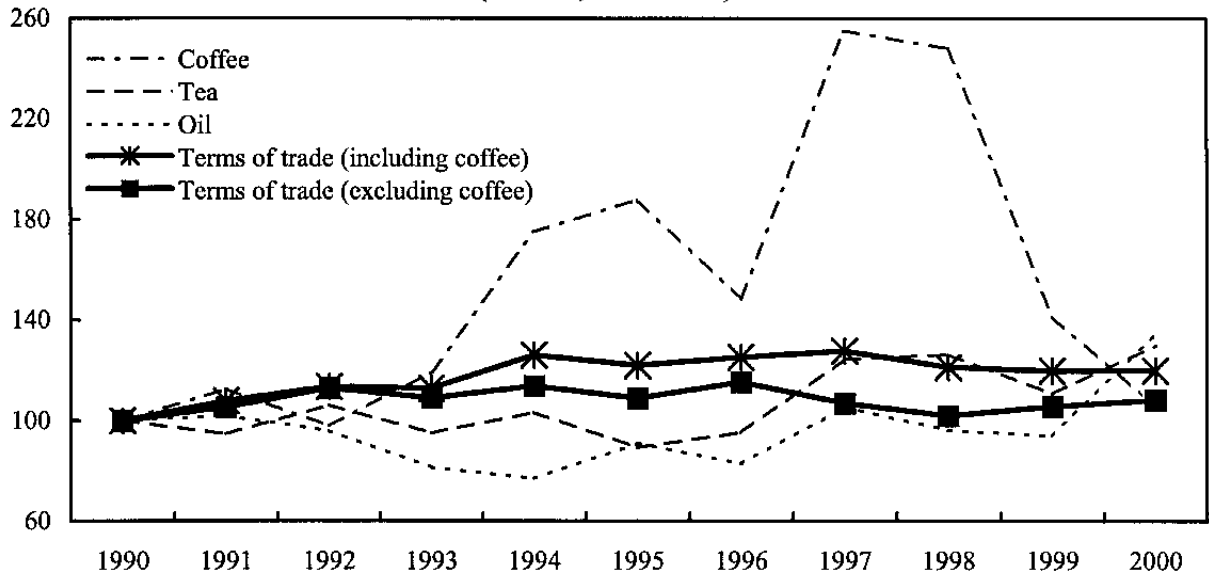
Sources: Kenyan authorities, and Fund staff estimates.

67.   Another indicator of competitiveness is the ratio of tradable prices to nontradable prices. This ratio reflects the prices faced by producers of exports and import-substituting goods, relative to those faced by producers of goods that are not traded. **In Kenya, over the period 1990-2000, the relative price of tradables to nontradables fell dramatically, by over 30 percent between 1993 and 2000** (Figure 9). Similarly, when looking at the relative price of exports to nontradables, relative export prices have fallen substantially since the coffee boom in 1997. This decline has decreased the attractiveness of production for export or import substitution, and has squeezed profit margins in the tradable sector relative to the nontradable sector.

Figure 9. Kenya: Ratio of Tradable to Nontradable Prices, 1990-2000
(Indices, 1990=100)
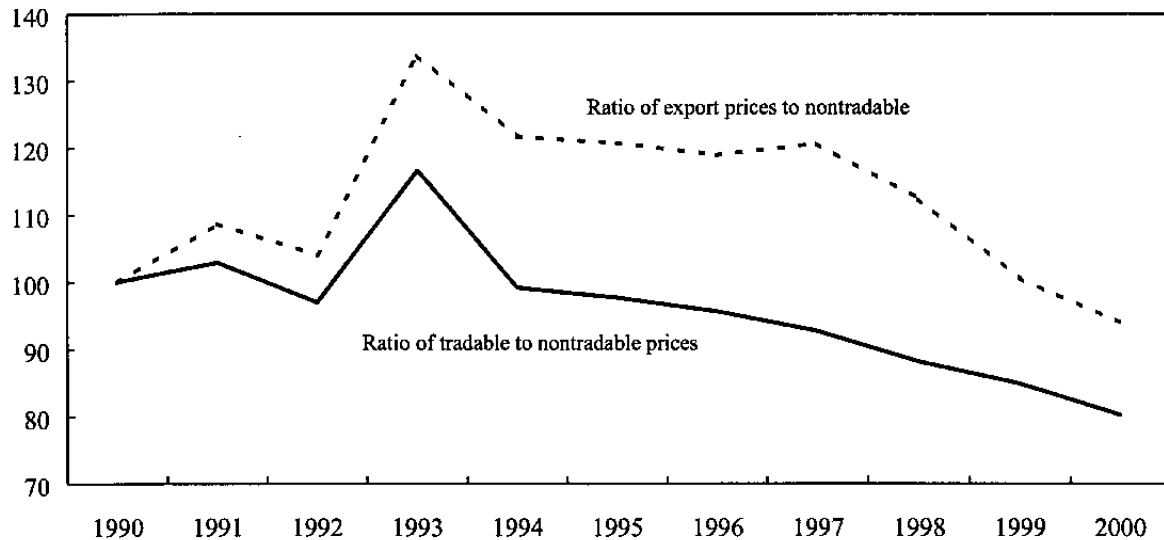
68.   Finally, in order to assess the effects that cost dynamics have had on export industries, unit labor costs—defined as wage costs per unit of output—are analyzed (Figure 10). The data on unit labor costs cover a variety of sectors for both exporting and non-exporting production (export-intensive sectors such as manufacturing are highlighted below). It is clear from Figure 10 that unit labor costs in many industries in Kenya have increased substantially during the 1990s. **Overall (total) unit labor costs increased by about 30 percent from 1990 to 1999.** Unit labor costs declined in only the finance, insurance, and business sector and the wholesale and retail trade sector. All other sectors saw a rapid increase in costs. The effects of such an increase, coupled with developments in the relative price of tradables to nontradables surely decreased profitability in the export sector in Kenya.

69.   **Although data on price determinants of competitiveness in Kenya are scarce, this section shows that, even with limited data, the results are clear. The incentive for producers to move into the export sector has diminished over the 1990s, particularly in the second half.** Compounding this is the rapid increase in unit labor costs, which would have squeezed profit margins of exporters.

Figure 10. Kenya: Unit Labor Costs by Sector, 1990-99
(Indices, 1990=100)
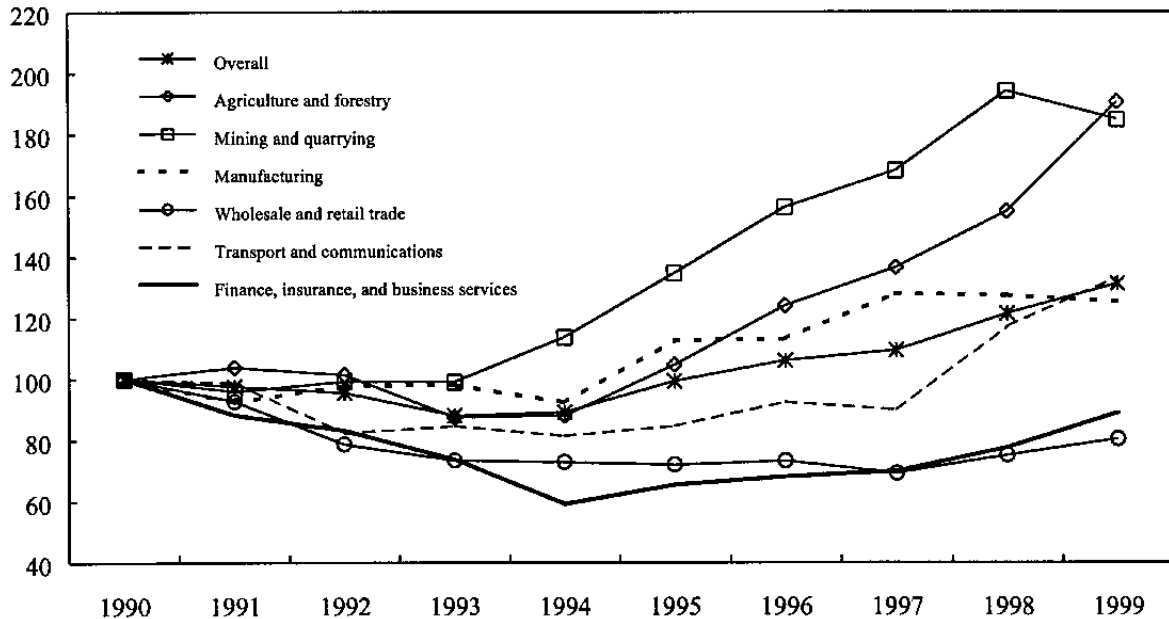
Sources: Kenyan authorities; and Fund staff estimates.

Nonprice and other measures of competitiveness

70. **Nonprice constraints are prevalent in Kenya and perhaps more distortionary than the price constraints on the competitiveness of the country's exports.** These factors have contributed to the high costs of doing business in Kenya and do not appear to have abated in recent years. The costs of doing business in Kenya have increased over the years owing to pervasive governance problems,[33] high real interest rates, and an inefficient utility sector. In addition, delays in reforming key sectors—such as coffee, telecommunications, and ports and railways—and the deteriorating security situation have increased the cost of doing business.

71. **Governance has been a key factor in the deterioration of Kenya's economy over the 1990s.** As noted in Section VI of this paper, governance problems can reduce growth by limiting investment incentives and encouraging poor economic management. The effects of Kenya's governance problems can be seen throughout the economy and have most likely contributed both directly and indirectly to the high costs of doing business. Direct effects of

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[33] See Section VI of this selected issues paper for details of the impact of governance problems on growth and economic performance.

governance on costs come from, for example, the need to bribe. Indirect effects, caused by poor economic management, particularly of public enterprises, can be seen in the poor state of roads in Kenya and the inefficient telecommunications sector (see below).

72.   **Kenya's telephone system is inefficient and in a state of disrepair.** In an attempt to reduce government involvement in this sector, the World Bank's IDA credit has focused on the privatization of Kenya's Telkom—so far without success. The continued involvement of the government in the telecommunications sector has led to widespread government interference, weak management, and the poor financial state of Telkom. Compounding this has been a lack of investment and modernization of Kenya's telecommunications system. In contrast to the poor state of the fixed-line system in Kenya, mobile phone licensing appears to have been successful at creating a competitive market environment in that industry (see below).

73.   **Over many years, the problems in the telecommunications sector have led to long waiting times for telephone mainline and a relatively low number of telephone mainlines per employee, indicating that the quality of telecommunications services in Kenya is low.** The cost of a local call has remained below the average for other African countries (Table 5).

Table 5. Africa: Telecommunications Development Indicators

	Telephone Mainlines, Waiting Time (Years), 1999	Average Cost of Local Call (U.S. dollars), 1999	Telephone Mainlines per Employee, 1997
Cameroon 1/	6.2	0.06	40.5
Cote d'Ivoire	1.1	0.07	39.8
Egypt, Arab Rep. of	2.3	0.03	66.3
Ethiopia	10.0	0.03	27.8
Ghana 2/	1.5	0.08	29.6
Kenya	**9.6**	**0.05**	**19.8**
Malawi	10.0	0.03	7.7
Mozambique	7.1	0.09	29.1
Nigeria 3/	10.0	...	34.7
Tanzania	1.6	0.08	22.0
Uganda	3.0	0.15	37.9
Zambia	7.2	0.05	23.5
Memorandum items:			
Sub-Saharan Africa	6.0	0.07	68.5
Norway	0.0	0.08	132.6

Source: World Bank, *World Development Indicators*, 2001.

1/ Average cost of local call in 1998.
2/ Waiting time for telephone mainlines in 1997.
3/ Waiting time for telephone mainlines and telephone mainlines per employee in 1998.

74. **Related to the poor quality of the telecommunications system in Kenya, are the use of mobile telephones and access to the Internet.** Both of these forms of communication are becoming increasingly necessary for day-to-day business transactions. For exporters, in particular, the ability to quickly communicate with local suppliers and overseas contacts is crucial to maintaining a competitive advantage. The data indicate that Kenya's progress (particularly in Internet services) is about average— Kenya is behind some African countries and ahead of others (Table 6). In order to attract investors and new business into Kenya, the telecommunications system will need to be upgraded, both to enable quick internet access and to encourage more individuals to use the Internet. Although the numbers for mobile phone usage are low in 1999,

Table 6. Africa: Access to the Internet and Mobile Telephones, 1999			
	Per 10,000 People		
	Internet users	Internet hosts	Mobile phones
Cote d'Ivoire	12.9	0.24	177.2
Egypt, Arab Rep. of	31.9	0.28	80.0
Ghana	10.7	0.06	35.5
Kenya	**11.9**	**0.19**	**8.1**
Mozambique	8.7	0.09	6.3
Tanzania	7.6	0.05	15.6
Zambia	25.3	0.06	26.1
Zimbabwe	12.6	0.48	31.4
Memorandum item:			
Norway	4,484.3	753.10	6,130.0
Source: World Bank, *World Development Indicators*, 2001.			

recent anecdotal information suggests that this usage is on the rise in Kenya, as the sale of mobile phone licenses appears to have successfully at created a competitive market; as a result, user fees have recently come down.

75. **Other constraints attributable to poor physical infrastructure arise from inadequate electricity and the dismal condition of the road network.** The electricity system in Kenya is controlled by two parastatals—Kengen, which generates electricity through hydroelectric and geothermal power plants, and the Kenya Power and Lighting Company (KPLC), which distributes electricity. In addition, there are a small number of independent power producers but they currently capture only a very small fraction of the market. The lack of progress in reforming the power sector in Kenya has led to an inefficient system for power distribution, in particular. Electric power distribution losses in Kenya are among the highest in Africa, while its power-generating capacity is among the lowest (Table 7). Similarly, Kenya's road system is a serious impediment to export performance, especially since many products need to be transported from the agricultural areas to the main shipping areas (Nairobi and Mombasa).

Table 7. Africa: Comparative Infrastructure Development Indicators

	Electricity Distribution Losses (Percent of output), 1998	Electricity Capacity (kwh. per capita), 1998	Paved Roads (Percent of total roads), 1996	Paved Roads (km per thousand capita), 1996
Cameroon 1/	19.5	229.7	12.5	2.6
Egypt, Arab Rep. of	12.2	1,023.4	78.1	1.1
Ghana	0.7	394.9	24.1	2.2
Kenya	**25.0**	**166.9**	**13.9**	**2.3**
Mozambique	10.4	404.6	18.7	1.9
Nigeria	31.8	130.1	18.8	1.7
Tanzania	22.3	67.1	4.2	2.9
Zambia	11.3	814.8	...	7.2
Zimbabwe	17.0	565.3	47.4	1.6
Memorandum item:				
Norway	7.6	26,192.0	75.5	20.4

Source: World Bank, *World Development Indicators*, 2001.

1/ Road indicators are for 1995.

76.   **Finally, the lack of access to credit and the high level of real interest rates in Kenya are additional constraints on exporters.** The high level of real interest rates has in particular been a constraint for exporters who typically have access to credit, as the real lending rate in Kenya has been quite high since 1995 (Table 8). Although this rate has come down recently, evidence suggests that real rates may have risen again in Kenya in 2001. Furthermore, many producers do not have access to credit at all. This is viewed as a serious constraint on small-scale producers of agricultural commodities, in particular. Serious deficiencies in Kenya's legal and financial systems,[34] particularly among the state-owned banks, have been a major factor contributing to the high real lending rates as well as to the inadequate access to credit.

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[34] Inefficiencies and political interference in the commercial court system undermine the efforts of creditors and liquidators (such as the Deposit Protection Fund) to enforce loan contracts. This has led to a poor credit culture and, as a result, inadequate access to credit for small and medium enterprises. For a detailed discussion of the Kenyan banking system, see Section V.

Table 8. Africa: Real Lending Rates for Selected Countries, 1995-2000
(In percent)

	1995	1996	1997	1998	1999	2000	Average
Cameroon	6.3	17.4	16.4	18.2	19.8	20.5	16.5
Chad	6.4	8.6	15.5	8.8	30.9	17.5	14.6
Egypt, Arab Rep. of	0.6	7.8	8.8	8.5	9.6	10.3	7.6
Ethiopia	4.6	20.0	7.9	7.7	4.5	10.9	9.3
Kenya	**27.8**	**22.9**	**16.3**	**22.4**	**19.2**	**15.6**	**20.7**
Tanzania	11.3	10.7	8.8	8.9	13.0	14.8	11.2
Uganda	10.7	12.2	13.5	20.9	14.3	19.5	15.2

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

D. Traditional Exports of Goods

Coffee

77.   **Coffee is one of Kenya's most popular and traditional exports. Kenyan coffee is renowned for its high quality and typically fetches a price higher than the world average.** Nearly all (about 95 percent) of the coffee grown in Kenya is exported. Over recent years, however, the coffee sector has suffered from drought and low world prices, as well as from delays in reforming the sector.

78.   **The coffee sector is regulated by the Coffee Board of Kenya (CBK), which was, until late 2001, the monopoly marketer of Kenyan coffee.** Recent revisions to the Coffee Act, whose legislation was passed by Parliament and signed by the President in late 2001, should come into effect by April 1, 2002. These revisions create room for competition in marketing, while retaining the central auction system. However, barriers to entry and other problems with the legislation may dilute the impact of the reform.

79.   **Most Kenyan coffee is produced by small-scale farmers, although there are a significant number of coffee-growing estates.** Coffee is processed in several stages, including picking, pulping, drying, and milling, and the level and type of regulation at each stage varies. The small-scale farms are organized into cooperative societies, which vary in size and efficiency, and are responsible for providing credit to farmers during the planting season. As stipulated by the Coffee Act,[35] farmers must deliver their (coffee) cherry to the cooperatives' pulping stations, giving each cooperative a monopoly over the pulping of its farmers' cherry. The final stage of coffee processing, milling, has been liberalized and works

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[35] The Coffee Act mandates that all small-scale farmers be members of a cooperative society.

quite efficiently. After milling, coffee is brought to the Nairobi Coffee Exchange where a weekly auction is held.

80.   **The cooperative system, while allowing small-scale farmers to benefit from economies of scale, has begun to be seen as a serious obstacle to reform in the sector and possibly as a reason for its recent weak performance.** For example, it is estimated that some cooperatives retain nearly 90 percent of the proceeds (after transactions costs) from the coffee auction, leaving farmers with only 10 percent. However, the most efficient cooperatives retain only slightly more than 10 percent, leaving farmers with nearly 90 percent of the proceeds. This high degree of variability in the efficiency of cooperative management and local governance issues have led some analysts to the conclusion that the geographical monopoly that the cooperative societies enjoy should be reconsidered.

81.   **Coffee volumes and prices fluctuated greatly over the period 1995-2000, leading to large changes in coffee exports in U.S. dollar terms (Figure 11).** In particular, coffee prices proved to be particularly volatile during that period, with a large upward spike in 1997 (72 percent) and sharp reductions more recently. Coffee volumes were adversely affected by drought in 1997 and 2000, although due to the long growing season for coffee, the effects of the drought in 2000 on coffee production will take place with a lag.

82.   **The overall trend in coffee has been disappointing, with coffee exports falling from US$282 million in 1995 to US$154 million in 2000—a nearly 50 percent decline.** After strong growth in coffee exports in 1995, growth has been stagnant or negative (Figure 11). In 1999 and 2000, although (value) growth rates stemmed their decline, they were still sharply negative owing to depressed world coffee prices. The low prices seen in recent years, along with bottlenecks in the coffee sector, have led many coffee farmers to uproot their coffee trees and begin planting tea.

83.   **Ensuring reform of the coffee sector should be a top priority of Kenyan policymakers.** The monopoly powers of the CBK and the cooperatives, poor management, drought, and weak infrastructure have all contributed to the decline of this sector. In response to many of the problems in the cooperatives, farmers have begun to develop small estates (5 acres) that have their own factories.[36] This step has allowed small-scale farmers to exercise some independence from the cooperatives. Successful implementation of the reforms which have been passed in the recent months will lessen the monopoly power of the CBK and the cooperatives, and provide incentives to farmers to improve decision making and increase profitability. The World Bank is working with the Kenyan authorities to increase the profitability of the sector by encouraging speedy implementation of reforms, both at the central and producer level.

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[36] According to the Coffee Act, a license is required for coffee planting, and only planters are allowed to own coffee. Planters are defined as cooperatives or estates of a least 5 acres, and are not permitted to plant outside their approved areas.

Figure 11. Kenya: Contribution of Price and Volume to Coffee Export Growth, 1995-2000
(In percent)
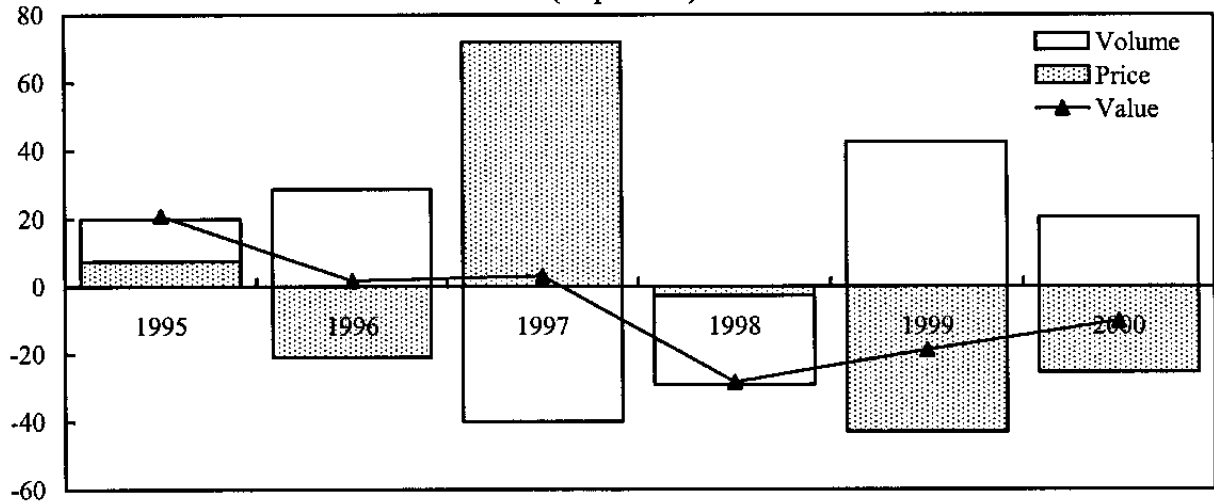
Tea

84.   **Since 1995, the tea sector has become the largest single contributor to Kenya's exports.** As with coffee, most Kenyan tea is exported. However, unlike coffee, delivering tea to market involves fewer steps (tea, for instance, does not need to be pulped), allowing for more independence on the part of tea farmers. In 2000, the tea sector was liberalized through an IDA-supported reform program. The salient features of the reform of the tea sector were the liberalization of tea marketing and the privatization of the Kenya Tea Development Authority (KTDA).

85.   **As with coffee, the growth of tea exports (in U.S. dollar terms) has fluctuated, although not nearly as much** (Figure 12). Tea volumes were adversely affected by drought in 1997 and 2000, although the effects were mitigated by high world tea prices in those years. Furthermore, over the period 1995-2000, tea exports increased from US$330 million to US$463 million, notwithstanding the decline in 1999 and 2000.

86.   **The liberalization of the tea sector, however, has not been without problems. Perhaps the biggest problem facing the tea sector since liberalization has been the "growing pains" associated with the transition to a decentralized system following the privatization of the KTDA.** Other problems include the lack of institutional and managerial capacity and poor infrastructure, particularly the road system. Notwithstanding these impediments, tea exports are expected to remain robust over the medium term, as the liberalization of the tea sector takes hold and the effects of the recent drought subside.

Figure 12. Kenya: Contribution of Price and Volume to Tea Export Growth,
1995-2000
(In percent)
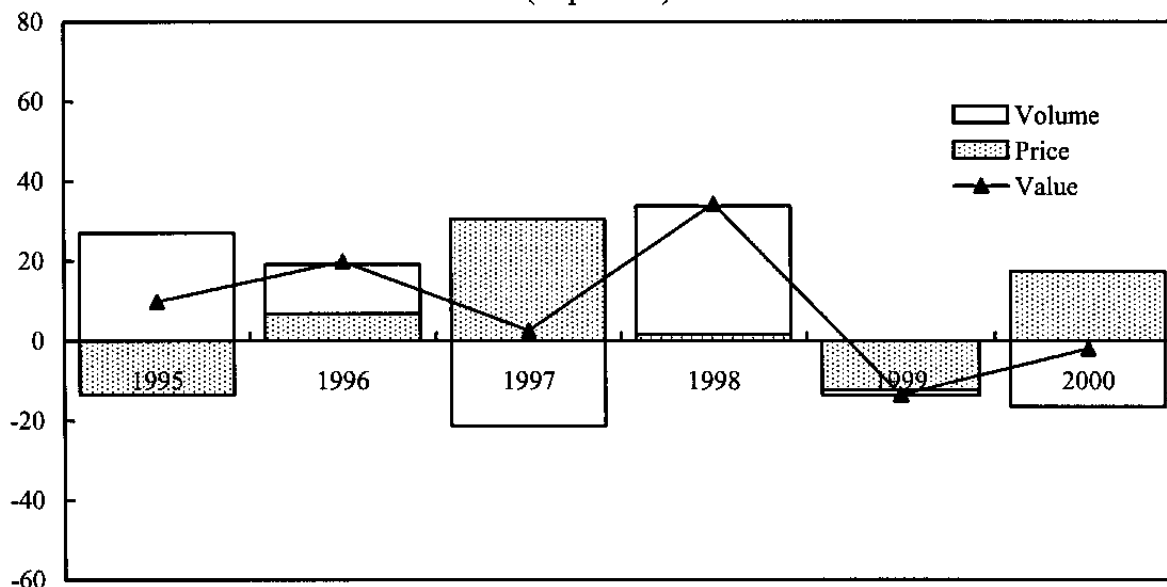
E. Nontraditional Exports of Goods

87.   Nontraditional exports contain a variety of products, including manufactured products, horticultural products, oil products, and others, such as processed food and vegetables. Of these, manufactured products and horticulture are the largest contributors to exports, followed by oil products.

Manufacturing

88.   **Manufactured exports have suffered since 1995.** After peaking in 1996, manufactured exports declined by an average of nearly 10 percent per year through 2000. The decline can be seen profoundly in a few products, particularly leather products, cement, iron and steel, and essential oils and perfumes. The decline in exports of these products has not been offset by increases in exports of other manufacturing products, which implies that the poor performance of some manufacturing exports may not be due to shifts away from certain products and toward others. Rather, the overall decline in manufacturing exports may represent a loss in competitiveness for Kenyan products.

89.   **As with most other sectors in Kenya, high costs of doing business are likely having a negative impact on the manufacturing sector.** High real interest rates and falling confidence have depressed investment, which, in turn, has led to the continued use of inefficient production technologies and low productivity. Costs associated with pervasive

governance problems and deteriorating security have exacerbated the situation, and an inefficient utility sector and poor infrastructure have increased the costs of production and shipping. In addition, power disruptions associated with the drought in 2000 also adversely affected the manufacturing sector.

90.   **Rising unit labor costs and dollar wages have also squeezed profit margins in manufacturing and have made producing in Kenya less attractive** (Table 9).[37] From 1990 to 1999, monthly dollar wages rose from US$134 to US$185, an increase of nearly 40 percent. This effect of this increase was compounded by the fact that dollar wages fell from 1990 to 1994 before returning to their 1990 level in 1996. Thus, between 1996 and 1999, monthly dollar wages increased by over 40 percent. Similarly, manufacturing unit labor costs increased by 25 percent during 1990-99 and by 11 percent during 1995-99. The trend in unit labor costs is slightly different than that in dollar wages, however, since unit labor costs increased dramatically between 1994 and 1997 before leveling off (and even falling slightly).

Table 9. Kenya: Manufacturing Unit Labor Costs and Dollar Wages, 1990-99

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Monthly dollar wages (per employee)	134.0	120.9	114.7	72.3	87.7	121.1	130.9	163.6	182.4	185.4
Unit labor costs (index, 1990=100)	100.0	92.3	97.9	98.1	92.3	112.6	113.1	127.9	127.3	125.3

Sources: Kenyan authorities; and Fund staff estimates.

91.   **The decline in manufacturing exports in Kenya represents the larger problems of the Kenyan economy.** Kenya is endowed with human capital and benefits from a good geographic location—both essential inputs to a successful manufacturing sector. In addition, Kenya has traditionally been the hub of economic activity in east Africa and has a reasonably well developed financial system. These factors should enable Kenya to develop a favorable business and investment climate; however the stop-go policies of the past decade have prevented this from materializing.

Horticulture

92.   **Kenya's climate and fertile land provide an excellent base for growing horticultural crops.** Horticulture exports contain a mixture of many products, including a

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[37] This phenomenon has been confirmed through discussions with industry representatives in Kenya, who have indicated that firms are considering moving their operations out of the country.

variety of fruits and cut flowers, with cut flowers accounting for the largest component. Kenya's diverse agro-ecological areas allow for a wide range of horticultural crops to be grown, including tropical crops (e.g., mangoes, bananas, and French beans), temperate crops (e.g., apples, carrots, and snow peas), and crops better suited to drier regions. These products in Kenya are both irrigated and rain fed.

93.   **Unlike other agricultural subsectors in Kenya, the horticulture industry has developed through strong involvement of the private sector and limited government intervention.** The horticulture business is dominated by large-scale growers, although the majority of horticulture farmers are small-scale operators who produce for home use and local domestic consumption. Currently, most horticulture production is used for local domestic consumption, although high-value crops are exported, mainly to Europe and the Middle East.

94.   **Horticulture nearly doubled its share of exports from 1995 to 2000, and it showed steady growth in U.S. dollar terms from US$119 million in 1995 to US$209 million in 2000.** Production of horticultural crops was adversely affected by drought in 2000, although favorable world prices mitigated the effects on the value of horticultural products in U.S. dollar terms. In particular, the rationing of electricity in 2000 on account of the drought had severe adverse effects on the flower industry. Horticulture production and exports face some of the same problems as the tea and coffee sectors, particularly poor infrastructure, although other problems exist as well (see below). It is estimated that up to 40 percent of horticultural products are lost because of poor road conditions.

95.   **According to the Ministry of Agriculture,[38] yields of horticultural crops are consistently below their potential.** This is mostly due to lack of proper irrigation, poor crop maintenance, and nonuse of appropriate fertilizers. There is scope for improving the yields of these crops by expanding irrigation, improving husbandry techniques, and increasing the use of inputs (including fertilizers). Other constraints include crop disease and pest incidence, poor road infrastructure, inadequate technical information at the small-scale farm level, and unpredictable weather conditions. In addition, poor marketing is cited as a major constraint on the horticulture industry. Most farmers have limited market outlets, inadequate market information, and lack of access to precooling and storage facilities. Discussions with industry leaders indicate that access to adequate air freight does not appear to be an impediment to development of the horticulture sector, although the lack of direct flight to the United States has limited Kenya's ability to access that market.

96.   **Several steps are being taken to address some of the problems in this industry.** Perhaps the largest projects involves the construction of cold storage facilities to be administered by the Horticultural and Crops Development Authority (HCDA). The HCDA

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[38] See the *Annual Report, 2000* of the Horticulture Division of the Ministry of Agriculture and Rural Development of Kenya.

will transport the produce from satellite depots to Nairobi, where produce will be auctioned. The goal of this project is to provide small-scale farmers with cold storage, transportation, and market outlets. This project is only one of several in which the government is increasing its involvement in the sector. Although there may be some role for government, especially in cases where markets are inefficient (as may be the case in the horticulture industry), it will be important for the government to avoid becoming too intrusive as it has done in the coffee sector and previously in the tea sector. With these steps, and the continued leadership of the private sector, the horticulture industry should continue to thrive and establish itself as one of the leading industries in Kenya.

Oil products and reexports

97.   **Oil products have captured an increasingly larger share of total exports, although in U.S. dollar terms they have fallen since 1998.** Kenya typically imported crude oil, refined it, and exported it to neighboring countries. In recent years, however, demand for oil refined in Kenya has fallen. In its place, particularly in 2000, reexports of refined oil products have emerged. Oil products enter Kenya and the port of Mombasa and are reexported to neighboring countries.

98.   The precise reasons for the decline in Kenyan oil exports are unclear at this stage. However, one can surmise that the high cost of electricity in Kenya, the poor infrastructure, and volatile oil prices are likely causes.

F. Tourism

99.   **Tourism has long been one of Kenya's largest export earners.** Kenya has two main tourist destinations—the coastal region and the game parks. The tourism industry has suffered in recent years, however, largely because of Kenya's security problems. The coastal region, in particular, has suffered as a result of deteriorating security. The game parks, however, have continued to do a robust business. From 1995 to 2000, tourism earnings have been on a downward trend (Table 10).

Table 10. Kenya: Exports of Tourism, 1995-2000
(In millions of U.S. dollars)

	1995	1996	1997	1998	1999	2000
Tourism	486.0	452.0	387.8	290.0	300.8	259.3

Sources: Kenyan authorities; and Fund staff estimates.

100.   **Insecurity in Kenya, or the perception thereof, has become a major impediment to the further development of the tourism industry.** The Kenya Tourist Federation (KTF) has taken steps to address the security problem, such as establishing a 24-hour security center for tour operators and a tourist police force. The security problems in Nairobi, including those related to the 1998 embassy bombing, have also contributed to the decline in tourism, even though Nairobi itself is not a major tourist destination.

101.   **To try to revitalize the tourism industry, the Kenya Tourist Board (KTB) has launched an aggressive marketing campaign and recruited new staff with marketing backgrounds.** Their strategy involves placing marketing representatives in four key markets that will act as hubs (the United States, Germany, the United Kingdom, and Japan). Currently, Germany is the primary source market for tourism to Kenya, although Japan and the United Kingdom are also large markets. Efforts by the KTB and others should allow the tourism industry to recover and regain some of the losses made in the past several years. Prospects for the future remain positive, albeit uncertain, as there is much scope for growth in this industry.

102.   **The lack of appropriate data hampers analysis of Kenya's tourism exports.** It is highly likely that tourism exports are severely underestimated, which impedes a proper evaluation of trends in these exports.[39] The Central Bureau of Statistics (CBS) has started conducting visitor exit surveys in an attempt to capture tourism receipts more fully. The survey will be ongoing and will be conducted semiannually. The KTB and the CBS are looking for ways to modify data collection on tourism.

G. Conclusion

103.   **Kenya's export performance has deteriorated since 1995.** Although this performance can be explained, in part, by volatility in export prices, the decline in export volumes is the primary explanatory factor. A major cause of the decline in export volumes has been the poor climatic conditions (prolonged drought) for production of agricultural commodities, namely, coffee, tea, and horticultural products.

104.   **Beyond the effects of the drought, separate price and nonprice effects on export volumes can be distilled.** Price constraints, such as a decrease in the price of tradable to nontradable goods and rising unit labor costs have weakened the competitive position of exporters. Kenyan exporters also face a variety of nonprice constraints which have increased the costs and risks of doing business in Kenya.

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[39] Underrecorded tourism earnings are thought to be the primary contributor to the large, positive net errors and omissions in Kenya's balance of payments.

105.   The costs of doing business in Kenya are high owing to pervasive governance problems, poor infrastructure—particularly the road system—high interest rates, an inefficient utility sector, and deteriorating security. These factors, coupled with slow and erratic macroeconomic reform efforts, have contributed significantly to Kenya's declining export performance.

IV. TRADE AND REGIONAL INTEGRATION POLICIES IN KENYA[40]

A. Introduction

106.   **Over the past two years, Kenya has made strides in establishing a more open and transparent trade regime.** The recently launched tariff reform aims at streamlining Kenya's tariff structure, while paving the way toward greater integration with Kenya's regional trading partners. This section describes Kenya's current trade regime, including recent developments, and the direction and composition of trade, discusses its involvement in regional free trade areas, and illustrates some of the potential obstacles to further regional integration. If Kenya is to fully realize the benefits from a more open and regionally integrated trade regime, it will be important to continue pursuing the tariff reform, while also dismantling the nontariff barriers that still exist.

B. The Current Trade Regime

107.   **Kenya's trade regime is moderately restrictive—it is rated 6 on the IMF's 10-point trade restrictiveness index, with 10 being the most restrictive.** It currently has eight tariff bands (0, 3, 5, 15, 20, 25, 30, and 35 percent); in addition, sugar is taxed at 100 percent. The simple (unweighted) average tariff rate is 16.6 percent, while the tariff item-weighted rate is 17.3 percent.[41] In addition, an import declaration form (IDF) fee of 2.75 percent is collected on all imports irrespective of their source. Moreover, some nontariff barriers (NTBs) exist, mainly in the form of special licenses required for the export of minerals and precious stones and state trading in strategic agricultural commodities. Kenya has removed, however, the requirement for licenses for the export of agricultural products.

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[40] Prepared by Julie Kozack.

[41] The tariff item-weighted duty rate is the average of the eight tariff bands weighted by the shares of tariff items for each band. This differs from the average effective duty rate, which is the ratio of import duty collected to imports.

108. **Kenya is a member of the World Trade Organization (WTO) and is party to the Regional Integration Facilitation Forum (RIFF) (formerly known as the Cross-Border Initiative), the Common Market for Eastern and Southern Africa (COMESA),**[42] **and the East African Community (EAC).**[43] Kenya also benefits from the U.S. African Growth and Opportunity Act (AGOA)[44] which allows qualifying countries to export certain products duty free to the United States. Kenya has seen a substantial increase in textile and apparel exports to the United States on account of AGOA, and there remains scope for further gains.

C. Recent Pace of Trade Liberalization

109. **Kenya's trade regime has been fundamentally reformed over the past ten years.** The authorities, in addition to introducing reforms in Kenya's exchange and payments regime, have abolished import licensing (except for a short negative list of goods prohibited for health, security, or environmental reasons), reduced the number of tariff bands and the top and average ad valorem tariff rate, and removed suspended duties (except on petroleum products). The most recent changes, which took effect under the 2001/02 (July-June) fiscal program, continued the process of trade liberalization.

110. **A comprehensive tariff reform strategy, which aims to improve Kenya's external competitive position and facilitate duty collection through a simpler and more uniform tariff structure, was formulated in mid-2001.** The tariff reform aims to reduce the top tariff rate in stages over the next four years from 40 percent at end-June 2001 to 25 percent with a view to ultimately adopting the common external tariff of COMESA and the EAC. The number of tariff bands will gradually be reduced from nine at end-2000 to four by 2004.

111. **The first phase of the reform was incorporated into the 2001/02 budget.** The main features of this new structure are (i) a reduction of the tariff rate from 40 percent to 35 percent; (ii) a reduction in the duty on some raw materials from 2.5 percent to 0 percent; (iii) a reduction in the duty on some raw materials and capital goods from 5 percent to 3 percent; and (iv) the elimination of import exemptions for university lecturers and civil

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[42] The members of COMESA are Angola, Burundi, Comoros, the Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Swaziland, Sudan, Zambia, and Zimbabwe.

[43] The EAC comprises Kenya, Tanzania, and Uganda. It was created by elevating the agreement that established the East African Cooperation into a treaty establishing the East African Community. The EAC was officially launched by the three heads of state in January 2001.

[44] Kenya was declared AGOA eligible on October 2, 2000 and was declared eligible for the apparel provision under AGOA, which allows for duty-free and quota-free benefits for a number of apparel and textile products, on January 18, 2001.

servants. These changes have led to a reduction in the number of tariff bands from nine to eight (the elimination of the 40 percent and 2.5 percent bands was offset in part by the introduction of the 3 percent band). However, the duty rates on some products, including food products and fabrics, were increased as these items were shifted from 25 percent or 30 percent tariff bands into the new top band of 35 percent.

112.   **These steps led to a reduction of the average unweighted tariff from 18 percent to 16.6 percent which, when contrasted with the 24 bands and the maximum tariff rate of 170 percent in fiscal-year 1987/88, shows significant progress.** However, prior to the 1999/2000 setback,[45] the number of tariff bands had been reduced to four, with a simple average tariff rate of 11.3 percent and a maximum rate of 25 percent. The average import duty rate has remained below 20 percent in most years, and has come down recently (Table 11). The low average import duty rate in 2001 likely reflects the impact of the COMESA free trade area on import duty collection.

Table 11. Kenya: Average Effective Import Duty Rates, 1995-2001 1/
(In percent)

	1995	1996	1997	1998	1999	2000	2001 2/
Average effective import duty rate	18.7	18.7	17.5	19.0	21.4	17.5	16.9

Sources: Kenyan authorities; and Fund staff estimates.

1/ Average effective duty rate based on imports, c.i.f.
2/ Imports for 2001 are estimates.

113.   **Kenya is also committed to further restricting the scope of import duty exemptions and, as noted above, has discontinued some major exemptions to the public sector.** It has not yet addressed the issue of exemptions for parliamentarians and the executive, however.

D.   Direction and Composition of Trade

114.   **When discussing trade policies, and regional integration policies in particular, it is important to understand the direction and composition of trade for the country in question.** The evolution of the direction and composition of trade can provide insights into potential gains from trade, as well as the possibility of trade diversion. Although the regional integration initiatives in which Kenya has become involved are relatively recent,

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[45] In 1999/2000 Kenya introduced suspended duties on many products and increased import duties on agricultural products.

understanding the direction and composition of trade over the past five years still provides a useful benchmark against which to assess future trade patterns.

115.   **There does not seem to be an indication of large shifts in the destination of Kenya's exports of goods.** In the early part of the 1990s, Kenya's main trading partner was Europe. By 1995, the main destination for its export of goods was Africa, with that continent accounting for nearly 50 percent of total exports of goods (Table 12). Over the period 1995-2000, the shares of exports of goods destined for Western Europe and Africa remained relatively constant, while the shares to Asia and the Middle East rose somewhat.

Table 12. Kenya: Destination of Exports of Goods, 1995-2000
(Share of total, in percent)

	1995	1996	1997	1998	1999	2000
Western Europe	32.3	34.0	33.7	30.7	31.7	30.6
Eastern Europe	0.1	0.2	0.3	0.3	0.5	0.5
United States and Canada	3.3	3.2	3.3	3.0	2.5	2.4
Africa	48.0	46.5	45.8	47.1	46.0	46.0
Asia	11.0	10.6	10.3	12.9	12.9	12.1
Middle East	2.3	3.2	3.2	4.0	4.4	4.9
Other	3.0	2.3	3.3	2.0	1.9	3.5

Sources: Kenyan authorities; and Fund staff estimates.

116.   **The evolution of the origin of Kenya's imports of goods, however, shows much more variation over the past five years.** In 1995, Western Europe provided most of Kenya's imports of goods, with over 40 percent of total imports of goods, while Asia provided 27 percent and the Middle East only 13 percent (Table 13). Since 1995, Western Europe's share of total imports has declined steadily, falling from 42 percent in 1995 to 32 percent by 2000; meanwhile, Asia's share dropped from 27 percent in 1995 to 21 percent in 2000. Conversely, the Middle East's share rose from 13 percent in 1995 to nearly 18 percent in 1998 and 16 percent in 1999.[46] Imports from Eastern Europe, although only a small share of total imports of goods, also climbed steadily over the period. Although these few trends can be picked out from the data, swings in import shares from the United States and Canada and the rest of Africa make it difficult to determine whether there have been permanent shifts in the origin of imports of goods. It is clear, however, that imports from Western Europe are declining.

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[46] Imports from the Middle East shot up in 2000, likely reflecting the high petroleum prices, combined with the effects of the drought-related energy shortages.

117. A casual reading of this data could suggest that regional integration policies in Africa may be trade diverting for Kenya. Over time, however, regionalism could be trade creating as suppliers respond to changing incentives and member countries pursue structural reforms. However, in order to fully determine the effects of trade liberalization and regional integration in Kenya, a much more detailed and thorough analysis of the data is needed. In addition, as the major shifts in trade and regional policy have taken place only very recently, a longer time series of data would be needed to properly make such an assessment.

Table 13. Kenya: Origin of Imports of Goods, 1995-2000
(Share of total, in percent)

	1995	1996	1997	1998	1999	2000
Western Europe	42.2	39.2	33.6	33.4	32.9	31.9
Eastern Europe	0.9	1.2	1.2	1.1	1.6	2.0
United States and Canada	4.5	6.1	8.1	8.9	7.3	4.5
Africa	8.8	9.4	14.9	8.5	10.7	9.2
Asia	26.7	27.8	22.6	23.8	24.6	20.9
Middle East	12.6	15.8	17.0	17.8	15.6	29.6
Other	4.4	0.6	2.6	6.5	7.2	2.0

Sources: Kenyan authorities; and Fund staff estimates.

118. **The composition of Kenyan exports has changed considerably over the past five years.** Kenya has seen a rise in the share of tea, horticulture, and oil products in total exports, while coffee exports, in particular, have declined. Structural constraints, along with various price constraints, have impeded further development of the export industry in Kenya and have particularly hurt the coffee and manufacturing sectors. A detailed discussion of the evolution of Kenyan exports is presented in Section III of this paper.

119. **The composition of imports has also changed quite dramatically since 1995.** Consumer goods as a share of total imports increased between 1995 and 1999 (Table 14).[47] Intermediate goods maintained a roughly constant share, while imports of capital goods fell over the same period. This move away from investment-related (capital) imports toward consumer goods is consistent with the sluggish economic growth observed over the period. In the subcategory of intermediate goods, there has been a clear shift over the period away from

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[47] In 2000, the share of consumer goods decreased while that of capital goods increased. This movement is likely related to the severe drought in that year, which required large imports of energy-related equipment. It is not expected that 2000 will represent a turning point in the composition of imports.

primary and processed intermediate goods toward fuels and lubricants. This shift could be indicative of both stagnation in the manufacturing sector and problems in Kenya's energy sector. Imports of fuels and lubricants could be used as substitutes for electricity, as there is little or no excess capacity in the energy sector.

Table 14. Kenya: Composition of Imports, 1995-2000
(Share of total, in percent)

	1995	1996	1997	1998	1999	2000
Consumer goods	12.9	15.8	11.9	14.3	14.7	9.9
Intermediate goods	54.0	57.0	58.9	54.1	52.3	52.9
Primary industrial goods	3.1	6.3	10.3	7.0	5.5	1.8
Processed industrial goods	38.2	35.0	33.3	31.2	32.0	25.6
Fuels and lubricants	12.6	15.8	15.3	15.8	14.8	25.5
Capital goods	30.4	24.9	27.7	29.5	27.6	32.4
Other	2.7	2.3	1.5	2.1	5.4	4.8

Sources: Kenyan authorities; and Fund staff estimates.

E. Regional Issues

COMESA and the EAC

120. **Kenya is one of the nine[48] founding members of the free trade area (FTA) in the COMESA region launched in October 2000, in which goods are traded on a duty-free basis.** Other reciprocating COMESA member countries receive a 60-90 percent preferential tariff. Kenya expects to join the customs union within COMESA by 2004. Membership in the COMESA customs union will include adoption of a common external tariff.

121. **As noted above, Kenya is also a member of the EAC, whose primary goal is the creation of a customs union to encourage trade and investment among its members.** Negotiations are under way for the establishment of a customs union within the EAC, which will also coincide with the adoption of a common external tariff. The establishment of a common external tariff will need to include the harmonization of customs exemptions and export support regimes. Discussions on the elimination of intra-EAC suspended duties[49] and

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[48] The other participating countries are Djibouti, Egypt, Madagascar, Malawi, Mauritius, Sudan, Zambia, and Zimbabwe.

[49] Kenya applies suspended duties on petroleum products, while Tanzania applies suspended duties on about 20 products. Uganda does not maintain any suspended duties; however, it does apply special "excise taxes" of about 10 percent on imported goods alone.

internal tariffs are under way, as is the process of coordinating monetary and fiscal policies is among the EAC member states (although this process is still in its early stages). The ministers for finance and planning of each of the three member countries hold pre- and post-budget consultations annually, and the three countries read their budgets on the same day. Also, the Monetary Affairs Committee, comprising the three governors of the partner states' central banks, meets annually to harmonize their monetary policies and banking regulations. Discussions were recently concluded for the creation of an East African Court and an East African Legislative Assembly. Table 15 provides a comparison of the trade regime of the three EAC member countries.

122.   **Membership in both the EAC and COMESA has made it difficult for Kenya to develop a coherent regional strategy.** Initially, the EAC was seen as a "fast track" to a more open trade regime, while further integration with other COMESA members was envisaged over a longer period. Over time, however, integration within COMESA sped up, and the two trade blocs are now on approximately the same path to adoption of a customs union and a common external tariff. Both regional trading blocs propose the adoption of a common external tariff and the formation of a customs union by 2004. The modalities of membership in both customs unions are unclear at this stage, especially since Tanzania is member of the EAC, but not COMESA, and Uganda is a member of COMESA, but not of the FTA. The Kenyan authorities expect that an understanding will be reached between EAC and COMESA members regarding the common external tariff.

Other aspects of regional integration

123.   **Through their actions over the past ten years, the authorities have displayed significant resolve in tackling the distortions in Kenya's trade regime.** As a member of COMESA, the EAC, and the RIFF, the Kenyan authorities are committed to undertaking further trade reforms over the medium term.

124.   **Although progress was made in trade liberalization, other measures aimed at enhancing the flow of trade and investment have been lagging in Kenya.** An area where progress has been slow is the reform and harmonization of investment regulations and judicial and legal frameworks (including registration procedures of enterprises). Moreover, there are lags in the development of efficient, harmonized, and integrated financial systems, as well as in the reformation of labor markets. Finally, adoption of harmonized and efficient domestic tax systems in the region (especially in the EAC) should be given priority to avoid wasteful tax competition.

Table 15. Features of Trade Regimes of Kenya, Tanzania, and Uganda

	Kenya 2001/02	Tanzania 2001/02	Uganda 2001/02
	bands=0, 3, 5, 15, 20, 25, 30, 35, 100	bands=0, 10, 15, 25	bands=0, 7, 15
Current tariff structure	0 (raw materials, health and safety items, seeds and fertilizers, farm equipment, electrical generators) 3 (selected capital equipment, selected minerals, chemicals, iron and steel products) 5 (selected capital equipment; some inputs, computers) 15 (intermediate goods, some finished products) 20 (tobacco, wire cable) 25 (meat and dairy products, fresh fruit and vegetables, paper products, metal products) 30 (alcohol and tobacco products; textiles, fabrics) 35 (includes goods formerly at 40%, consumer goods) 100 (raw, refined, and industrial sugar)	0 (Selected inputs,raw materials, capital goods) 10 (semi-process inputs & spare parts) 15 (processed input & vehicle parts) 25 (final consumer goods)	0 (plant and machinery) 7 (raw materials) 15 (consumer goods)
Unweighted average tariff	16.6	14.3	7.3
Weighted average tariff	...	9.5	...
Preferential tariff given to other EAC members	90 percent	80 percent	0, 4 and 6 percent
Suspended duties	none	12 categories of imports (but non for EAC members): the rate varies between 10% and 50%. 20% suspended duties from EAC region.	Imported sugar for final consumption (15 percent of decreed valuation of $410 per tonne).
Alternative minimum specific duties and minimum duty values (MDVs)	Specific duties are applied only to oil products. Alternative minimum duties are applied to maize, wheat, sugar, rice, and milk; alcohol and tobacco products; textiles, clothing, and footwear; and some manufactured items.	All MDVs have been abolished in January 2001 except sugar.	none
Other charges on imports	Import declaration fee of Ksh 5000 or 2.75 percent, whichever is higher.	Import licenses introduced in 2001 on sugar	VAT@17 percent; excise tax on selected products (some specific and some ad valorem).
Import exemptions	exemptions on lecturers and civil servants eliminated; exemptions provided for under the Customs and Excises Act and VAT Act eliminated; exemption on protective apparel limited.	Most of the public sector imports.	Imports for Presidents's use, imports by diplomats, imports of personal effects, and duty-free allowances
Trade restrictiveness indicator	6	5	2
Export duty drawbacks	none		yes
Export taxes	none	none (at cental level)	none
Membership in COMESA	yes	no (withdrew in 2000)	yes
Membership in COMESA FTA	yes	no	no
Restrictions on services	Some restrictions in financial services, insurance services. Kenya has ratified the 5th protocol of GATS (financial services).	?	none

1/ For Kenya, the alternative minimum duty rates are set as floor rates based on the lowest expected prices.

125.   **An important focus of the EAC and COMESA is on enhancing investment flows between its member countries.** It is also an area where coordination among member countries is crucial. Kenya currently imposes restrictions on foreign ownership of firms listed in the stock exchange.[50] Discussions have begun to ease these restrictions for investors in the EAC. The Capital Markets Development Committee (CMDC), comprising chief executives of the three partner states' capital markets regulatory agencies and stock exchanges, meets annually to coordinate the harmonization of their regulatory frameworks. The three partner states have set June 2003 as the deadline for countries to achieve full capital account convertibility.

126.   **Under COMESA, several initiatives have been launched to support the efforts to increase trade and investment in the region.** The Regional Trade Facilitation Project (RTFP) aims to reduce poverty through private sector-led growth by improving access to financing for investment and trade. The RTFP attempts to insure imports to, and exports from, the region against political risk. The implementing agency of the RTFP is the African Trade Insurance Agency, which is headquartered in Nairobi, Kenya. Thus far, seven countries—Burundi, Kenya, Malawi, Rwanda, Tanzania, Uganda, and Zambia—are participating. Other proposals include (i) establishing a cross-border payments system to reduce transactions costs and provide for better access to foreign currency; (ii) creating a fund to cushion COMESA members from losses incurred due to trade liberalization by redistributing the gains from regional integration; and (iii) developing a harmonized and integrated telecommunications system to reduce the costs of doing cross-border business.

F. Potential Obstacles

127.   **One possible source of difficulty in achieving the trade reform objectives is the perceived potential uneven distribution of liberalization benefits across countries, particularly in the EAC subregion.** With a relatively developed manufacturing base in the region, some trading partners have suggested that Kenya could stand to gain disproportionately from regional trade reforms, and this has been a source of tension and delay in reforms.[51] Accordingly, moves toward further liberalization should be accompanied, where feasible, by a detailed analysis of the regional impact of proposed reforms and by suggestions on how to make the reform process as equitable as possible.

128.   **Kenya's membership in COMESA has not been without difficulties.** In particular, Kenya views the trade of agricultural commodities (sugar and maize) as a key constraint on its realization of the benefits of COMESA. In the past, Kenya maintained high duties on

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[50] The restriction imposes a maximum of 40 percent ownership for foreign corporate investors and 5 percent for foreign individual investors.

[51] The perception of unequal distribution across countries arises primarily because Kenya's exports to the other EAC members are larger than its imports from these countries.

strategic commodities for the purpose of safeguarding its domestic industries. This protection was removed under the COMESA FTA, and Kenya has seen an increase of sugar and maize imports, which has led to claims of dumping and of a failure on the part of other COMESA to meet rules-of-origin standards. Recently, Kenya and Egypt became embroiled in a trade dispute over verification procedures under the rules-of-origin clause of COMESA, resulting in Egypt imposing punitive tariffs on imports of Kenyan tea. The tariffs were especially distressing since Kenya largely exports tea to Egypt. The dispute was quickly resolved, although more such disputes may be likely and could be very damaging to Kenya's export industries.

129.   **The loss of revenue already being realized because of Kenya's membership in the COMESA FTA has raised awareness in the country of the fiscal implications of trade liberalization.** Moreover, large multinational companies that have been headquartered in Kenya are considering moving to other COMESA countries because of their lower productions costs, and possibly lower corporate profit taxes.

130.   **On the domestic front, support for further trade reforms (and, in particular, further integration with COMESA) is hampered by the perception that these reforms have fostered unfair competition.** Weaknesses in the domestic import-competing industries' capability to adjust and absorb trade shocks and in the export industries' capability to benefit from new market opportunities have also undermined domestic support. There is resistance to further trade reform and regional integration among some interest groups in Kenya, as imports are perceived to have adversely affected certain local industries, resulting in the closure of many of them. The recent trade dispute with Egypt is a prime example of the perceived unfair trading practices, as are the problems in the sugar and maize industries. Factors other than trade liberalization, including high interest rates, other high costs of doing business, and poor infrastructure, have been the primary causes of Kenya's relatively poor competitive position, however.

G. Conclusion

131.   **Kenya's achievements in liberalizing its trade and exchange regime over the past ten years are considerable.** The progress made in simplifying the tariff structure and increasing regional integration over the past two years has been commendable. The formation of a comprehensive tariff reform strategy has been a major first step toward rationalization of Kenya's trade regime and has signaled its commitment to further pursuing trade liberalization and, ultimately, adopting the common external tariff under COMESA and the EAC. Additional streamlining of the tariff system, removal of the remaining duty exemptions and nontariff barriers, and enhanced coordination with partner countries will be important if Kenya is to achieve the full benefits of its membership in COMESA and the EAC.

V. The Health of the Banking Sector[52]

A. Introduction

132.   **Kenya's banking system has been in a fragile and deteriorating state for some years.** This largely reflects the belated recognition of nonperforming loans (NPLs) in government-owned and other small banks, mainly resulting from political interference with licensing and lending decisions. This section[53] summarizes the current health and prospects for the Kenyan banking sector. Subsection B describes the structure of the banking system and provides some standard indicators of banking system health. Subsection C describes the recently passed amendment to the Central Banking Act (the so-called Donde Act) and the potential implications of implementing the main elements of this act for banking sector performance.[54] Subsection D concludes by briefly discussing prudential regulations and the legal and judiciary system and the current policy challenges facing the Kenyan banking system.

B. Banking System Structure and Performance Indicators

133.   **The Kenyan banking system includes 47 banks and 5 nonbank financial institutions (NBFIs), including two mortgage finance companies.** In addition, there are 4 building societies, and 47 foreign exchange bureaus.[55] The banks, NBFIs and building societies are supervised by the Central Bank of Kenya (CBK). The four largest banks hold over 55 percent of the gross assets in the system and a similar share of deposits, while the ten largest banks account for over 74 percent of both assets and deposits.[56]

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[52] Prepared by Robert Powell.

[53] This section draws on the reports of MAE technical assistance missions in March and October 2001.

[54] On January 24, 2002 the High Court ruled that one element of the Donde Act was unconstitutional. The full implications of this ruling for the immediate applicability of the remainder of this act are unclear and the government is expected to issue guidance on this issue. In the circumstances, the eventual implementation of this law is still possible.

[55] Foreign exchange bureaus may buy or sell foreign exchange in cash, travelers checks, personal checks, and bank drafts. The sale of instruments other than cash is allowed only with explicit approval of the Central Bank of Kenya, which also acts as the licensing authority.

[56] Two of the four largest banks, the Kenya Commercial Bank (KCB) and the National Bank of Kenya (NBK), are partially government owned, and the other two are majority foreign
(continued)

134. **The NBFIs operate like banks, except that they are not allowed to accept demand deposits.** Many of the NBFIs were created as subsidiaries of banks during the era of interest rate controls, in order to circumvent caps on bank lending rates. After interest rate liberalization in the early 1990s and the introduction of cash ratios for both banks and the NBFIs, many of the NBFIs were converted to, or merged with, banks.

135. **The interbank market, with an average daily (gross) volume of about KSh 3 billion,** or US$38 million, of mainly overnight lending, is dominated by a number of the larger banks. These banks, however, are normally reluctant to deal with more than a handful of reliable counterparties.

Table 16. Kenya: Banking Industry Performance Indicators, 1999-2001
(Millions of Kenyan shillings, unless otherwise indicated)

Performance Indicators	June 1999	June 2000	June 2001	Change over June 2000 (In percent)
Assets	431,770	433,360	432,878	-0.1
Deposits	313,451	316,056	317,775	0.5
Total advances (gross)	277,773	289,180	302,122	4.5
NPLs	83,485	101,488	122,427	20.6
Provisions	44,269	64,934	77,222	18.9
Net NPLs	39,216	36,554	45,205	23.7
Net NPLs/total advances (in percent)	14	13	15	...
NPLs/total advances (in percent)	30	35	41	...
Provisions/NPLs (in percent)	53	64	63	...
Capital and reserves	50,075	51,213	55,917	9.1
Profit/(loss) before tax	1,859	4,211	5,035	...
Liquid assets/deposit liabilities (in percent)	41	44	42	...
Cash ratio (in percent)	12.8	13.5	10.2	...

Source: Annual Report of the Central Bank of Kenya.

owned. The government shareholdings in the KCB is 35 percent; in NBK direct government shareholding is 22.5 percent, while it indirectly holds 47.5 percent through the National Social Security Fund. Four more banks and one NBFI also have government shareholdings, while most of the numerous smaller banks are family owned and operated.

136.   **The overall share of NPLs in the banking system increased from 30 percent of total advances in June 1999 to 41 percent by June 2001 (Table 16).**[57] **NPLs net of suspended interest amount to about 30 percent of total loans, or 8.8 percent of GDP.** About two thirds of the NPLs are concentrated in the public sector banks. Recovery of NPLs and liquidation of collateral are extremely difficult in Kenya. Courts routinely issue last-minute injunctions against such actions, thereby allowing the recovery process to be drawn out. Assets, meanwhile, are stripped or decline in value. A large and increasing backlog of cases in commercial courts also contributes to delays in their finalization.

137.   **The largest foreign-owned banks have relatively high-quality assets and thus provide an element of needed stability in a fragile banking sector.** In some smaller banks however, insider loans, many of them nonperforming, amount to a substantial share of capital, suggesting that CBK regulations on large exposures and insider lending are not always effectively enforced.

138.   **Despite the difficult economic environment, preliminary numbers suggest that most banks appear to have remained profitable through December 2001 (Table 17).** However, profitability indicators may decline after the audit of banks' financial statements due to be completed by March 31, 2002. It will be important for banks to make adequate provisions for NPLs. At end-2000, most banks and the NBFIs were generating gross interest income of about 15 percent of interest-earning assets, with lower returns of about 4–5 percent for the weaker banks. Whereas most of the foreign banks can raise funds at low rates (interest expense to deposit ratios of 3-5 percent), domestic banks face substantially higher funding costs of between 7 percent and 12 percent.[58] Actual provisioning expenses vary significantly among banks, reflecting in part the uneven application of provisioning standards by the institutions.[59]

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[57] Provisional data for end December 2001 indicate that the share of NPLs has increased to 42 percent.

[58] For some of the smaller banks, low ratios may be primarily due to smaller deposit-taking operations.

[59] Underprovisioning also distorts the profitability figures and capital asset ratios for some institutions.

Table 17. Trends in Profits/(Losses), 2000-01
(In millions of Kenyan Shillings)

Item	June 2000 (6 months)	Dec. 2000 (12 months)	June 2001 (6 months)	Dec. 2001 (12 months)
Total income	36,465	67,689	33,077	61,491
Expense before provisions	(28,039)	(51,172)	(24,251)	(36,903)
Profit before provisions	8,426	16,517	8,826	24,588
Provision for bad debts	(4,215)	(13,721)	(3,791)	(14,017)
Profit before tax	4,211	2,796	5,035	10,571

Source: Central Bank of Kenya.

Figure 13. Kenya: Commercial Bank Interest Rates, 1997-2001
(In percent)
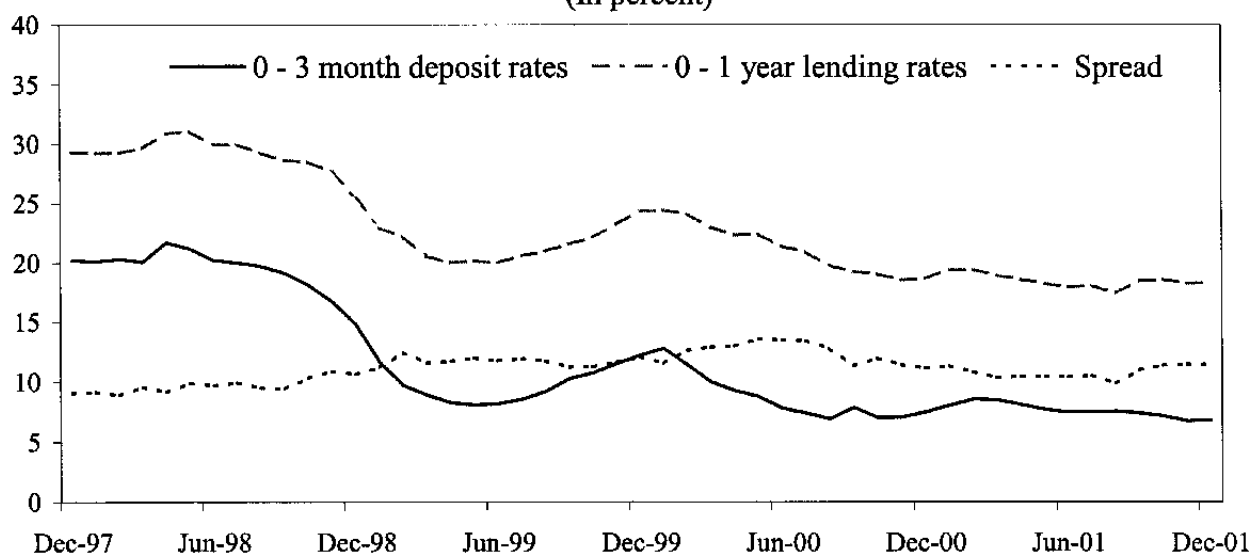
Source: Central Bank of Kenya

139.   **Spreads between deposit and lending rates have declined since June 2000, but are still relatively wide (Figure 13).** The spread between average 0-3-month deposit rates and average 0-1-year lending rates increased from about 9 percent in late 1998 to reach a peak of 14 percent in June 2000. The wide spreads are in part a reflection of the very high level of NPLs and the need for banks to make provisions for past losses. At end-December 2001, the average lending rate was 18.8 percent, and the average deposit rate was 6.9 percent, implying a spread of about 12 percent.

140.   Most banks comply with the minimum required liquidity ratio of 20 percent. The liquidity ratios (as measured by the average monthly ratio of liquid assets over net deposit liabilities) vary substantially among institutions, but the average for both banks and the

NBFIs was about 45 percent at December 2001, reflecting the weak economy and high credit risks.

141. The net foreign assets of the commercial banking sector increased to almost US$390 million at the end of January 2001, before falling to about US$230 million by December 2001. Foreign currency deposits account for 16 percent of total deposits, and credit denominated in foreign currency amounted to 9 percent of total domestic credit.

C. The Amendment to the Central Bank Act[60]

142. In July 2001, the National Assembly passed a revised version of the Central Bank of Kenya (Amendment) Act (the so called "Donde Act"). The act reintroduced controls on lending and deposit rates. It was to have retroactive effect from January 1, 2001, thereby creating a potential liability for banks to both borrowers and depositors from that date. On January 24, 2002, the High Court ruled that the retroactive application of the act was unconstitutional.

143. **Contents of the law**

The Donde Act contains the following five main provisions:

- The maximum rate of interest on loans must not exceed 4 percent over the (91-day) treasury bill rate, and the minimum rate of interest-earning deposits must be 70 percent of the treasury bill rate.

- Total interest charged on a loan may not exceed the principal sum loaned or advanced.

- No loan or advance made by a bank can be guaranteed by a director of the borrower.

- No fees can be charged except for legal fees, valuation fees, and charges on securities.

- The Minister of Finance will establish a Monetary Policy Advisory Committee, which will be responsible for advising on monetary policy, including the level of interest rates.

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[60] The Act is also known as the "Donde" Act, named after the member of parliament who initiated it.

Potential effects of the Donde Act, if implemented

144. Implementation of this law would likely have a number of adverse implications, especially for the small domestic banks and their depositors. It will exacerbate credit constraints for individuals, and small and medium-sized enterprises, and it is ultimately likely to affect the long-term growth of the economy, increasing unemployment and poverty:

- The cap on loan interest rates is likely to induce banks to be much more selective in their lending policies. Potential borrowers may be forced to turn to informal lenders that charge much higher rates and are not subject to supervision, causing bank disintermediation.

- The floor on deposit interest rates is unlikely to increase the rates that the largest deposit-taking banks pay, since these banks are able to redenominate the accounts of smaller depositors as non-interest bearing, without losing many of their deposits. For smaller banks, however, interest rates play a much larger role in attracting deposits; therefore the setting of a floor will force them to either lose deposits or pay the higher rate, because of the quality of bank services provided, and thus endanger their profitability.[61]

- The cap on the total absolute amount of interest will make it more difficult for companies to obtain predictable and stable financing for medium- and longer-term investments.

- The ban on directors' guarantees will likewise cut off financing from smaller companies. In light of the difficulties associated with obtaining reliable accounts and liquidating collateral, banks in Kenya rely heavily on such guarantees in their lending to small companies. If guarantees are banned, banks may no longer lend to those firms.

- All these provisions would affect the smaller domestic banks much more severely than the larger banks, since the former are more dependent on interest income, and on deposit funding at moderate rates. Smaller banks will likely be forced out of the market, while larger banks may close more marginal branches; both factors will reduce competition and the provision of banking services to the population.

- To the extent that lower profitability and levels of bank intermediation will reduce the franchise value of banks, privatization efforts could be hampered, through reduced investor interest and depreciating bank stock prices. Thus, implementing the new law

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[61] The mandatory reference to the 91-day treasury bill rate also complicates the setting of rates for deposits with other maturities.

will likely reduce competition in banking, which is key to fostering efficiency and lower interest rate spreads.

- Finally, linking commercial bank interest rates to prevailing treasury bill rates raises the prospect of banks' attempting to influence the treasury bill rate.

D. Prudential Regulations, Legal System, and Policy Challenges

145. The CBK has made a considerable effort over the past few years to strengthen its supervisory capacity. Several revised and/or new prudential regulations were issued during 2000 covering most of the major risk activities in banks. The minimum capital level was increased to KSh 300 million with effect from January 2002 and will be increased by an additional KSh 50 million annually to KSh 500 million by end-2005. A revision of provisioning requirements for loan losses is also being considered; if adopted it will require banks to set aside more realistic amounts for potential loan losses.

146. The CBK is relatively proficient at anticipating problem areas or banks and also at identifying problems through a combination of on-site inspections and off-site surveillance. However, prompt regulatory responses and, especially, the use of defined corrective programs and regulatory enforcement actions are often lacking or not timely. As a result, the problems in banks have worsened.

147. Continued inefficiencies and political interference in the commercial court system hinder the efforts of banks, creditors, and liquidators (such as the Deposit Protection Fund) in enforcing contracts, collecting on loans, and realizing collateral. The commercial courts have a backlog of 4,000 cases and this is increasing by about 300–400 monthly. Borrowers are able to obtain injunctions for little or no cost and thus are able to considerably delay debt recovery efforts. Furthermore, it is reported that it may take from nine months to ten years to settle a case; only one in ten cases is successfully settled; and the recovery rate on security is only about 50 percent of appraised value. Moreover, this rate declines significantly if the settlement time is delayed. Clearly there is a need to change the currently poor credit culture to one of accountability for incurred debts, and a need for public policy to actively promote responsible behavior among borrowers.

148. In conclusion, the main policy challenges facing the authorities include removing the uncertainty currently surrounding the potentially damaging reintroduction of interest rate controls. The authorities need to begin creating a fairer environment for the protection of both creditors and debtors through judicial reforms, and to facilitate the closure of irredeemably weak financial institutions. They should avoid interfering in this process through providing support with CBK liquidity, parastatal deposits, or other means. Finally, there is a need to strengthen the regulatory and safety net institutions to ensure that they are able to effectively carry out their mandates.

VI. CORRUPTION AND KENYAN ECONOMIC PERFORMANCE[62]

A. Introduction

149.   **Corruption is the abuse of position or office for private gain. It exists in both public and private sectors.** Corruption in Kenya is widely thought to have reached endemic proportions. Examples of corruption include bribery, extortion, nepotism, fraud, and embezzlement. In a nationwide opinion poll of Kenyans published recently[63] corruption was cited more often than both poverty and unemployment as the single most important issue facing the country.

150.   In recent years, the IMF has increasingly recognized the adverse impact of corruption and poor governance on macroeconomic performance and the success of economic reforms. This section surveys some of the recent research on the economic impact of corruption to illustrate the potential benefits of reducing corruption for growth and poverty reduction in Kenya. This research suggests that pervasive corruption tends to be associated with poorly enforced property rights, a weak rule of law, and low incentives for productive investment. All of this is very damaging to economic growth.

151.   **A considerable amount of research work in recent years has focused on the links between the level of corruption in a country and its economic growth performance.** Among the different aspects of poor governance, corruption has received particular attention since the availability of corruption indices has helped to quantify its extent and allows for international comparisons. Most studies have relied on measures of corruption developed by Business International, International Country Risk Guide, and Transparency International (TI).

B. What Form Does Corruption Take?

152.   **The Nairobi-based Institute of Economic Affairs (1998) has suggested that corruption can be broken into three types: (i) looting, (ii) grand corruption, and (iii) petty corruption.** Looting is the most extreme form of corruption; it involves the kind of scams whose financial consequences are so large that, when they are successfully implemented, they have macroeconomic implications fairly quickly, as banks collapse, inflation rises, or the currency depreciates. Looting is often politically motivated and takes place with the acquiescence of important political players. It can involve the printing of money to fund fictitious projects, or the paying of large sums to individuals who never supply goods and services. In the Kenyan context, a high-profile example of looting was the so-called Goldenberg scam of 1992 which involved making large export subsidy payments for fictitious exports of gold and cost Kenyan taxpayers hundreds of millions of dollars. The

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[62] Prepared by Robert Powell.

[63] International Republican Institute, October 2001.

very large sums of public money involved in the Goldenberg scam have been a significant factor in focusing the attention of the international donor community on the problem of corruption in Kenya.

153.   **Grand corruption generally involves senior government officials and significant sums of money.** Public procurement may be the area where most grand corruption occurs, and this is why an important element of the Fund- and Bank-supported program in Kenya has been to revise and strengthen procurement regulations and systems. Examples here would include collusion among bidders for government contracts, leading to higher prices; kickbacks by firms to "fix" procurement competition; or bribes to officials who regulate contractors' behavior. This can encourage abnormally low bids that win the contract, but which are then "rectified" through the acceptance of subsequent cost overruns and project extensions that circumvent the normal competitive bidding procedures. When the government has arrears on domestic or external payments obligations, there is also the opportunity for abuse of funds as these obligations are cleared.

154.   Other forms of grand corruption, for example, can involve bribing government officials to obtain licenses, bailing out failing institutions through publicly guaranteed loans or overdraft facilities, applying political pressure not to carry out normal prudential banking supervision, directed lending for political purposes, paying bribes to obtain commercial bank loans with no expectation of making repayments, or granting duty exemptions in return for payoffs. Corruption in the court system can hinder the efforts of banks, creditors and liquidators to enforce contracts, which in turn exacerbates the problem of nonperforming loans, and puts upward pressure on the spread between bank deposit rates and bank lending rates. All these factors fuel inefficiency and undermine macroeconomic performance.

155.   Petty corruption, while highly prevalent, typically involves relatively junior officials and minor amounts of money, for example, paying a policeman a few shillings to ignore a traffic violation. This problem has been exacerbated by a police and court system that has in the past been largely ineffective at investigating and prosecuting serious cases of corruption. The recent Transparency International-Kenya Urban Bribery Survey published in January 2002[64] suggested that the general experience of the Kenyan public is that corruption may be increasing. The survey also suggests that bribery is most prevalent in law enforcement and local authorities (Table 18). Officials at the Ministry of Public Works are reported as demanding the largest bribes, while the police are by far the most frequently bribed officials in Kenya.

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[64] Survey of 1,164 individuals conducted in March and April 2001. The survey was a pilot study and the sample was not sufficiently representative to allow for firm conclusions about the urban population as a whole.

C. Where Does Kenya Rank Against Other Countries?

157.   **It is very difficult to quantify corruption precisely and inter-country comparisons are notoriously unreliable.** Table 19 shows that in the 2001 TI survey of corruption perceptions, Kenya ranked joint 84th out of the 91 countries surveyed.

Table 19. Selected Countries: 2001 Corruption Perceptions Index 1/

Country Rank	Country	2001 Score	Surveys Used	Standard Deviation	High- Low Range
1	Finland	9.9	7	0.6	9.2-10.0
2	Denmark	9.5	7	0.7	8.8-10.0
26	Botswana	6.0	3	0.5	5.6 - 6.6
30	Namibia	5.4	3	1.4	3.8 - 6.7
38	South Africa	4.8	10	0.7	3.8 - 5.6
40	Mauritius	4.5	5	0.7	3.9 - 5.6
59	Ghana	3.4	3	0.5	2.9 - 3.8
61	Malawi	3.2	3	1.0	2.0 - 3.9
65	Senegal	2.9	3	0.8	22 - 3.8
65	Zimbabwe	2.9	6	1.1	1.6 - 4.7
75	Zambia	2.6	3	0.5	2.0 - 3.0
77	Côte d'Ivoire	2.4	3	1.0	1.5 - 3.6
82	Tanzania	2.2	3	0.6	1.6 - 2.9
84	Cameroon	2.0	3	0.8	1.2 - 2.9
84	Kenya	2.0	4	0.7	0.9 - 2.6
88	Uganda	1.9	3	0.6	1.3 - 2.4
90	Nigeria	1.0	4	0.9	0.0 - 2.0

Source: Transparency International.

1/ Highest two scores and sub-Saharan Africa.

158.   **Since the TI survey was first published in 1996, Kenya's highest rating was 73rd out of the 85 countries surveyed in 1998.**[65] In the years since 1998 it has been in the bottom decile of the surveyed countries. TI's corruption perceptions index score reflects the degree of corruption as observed by business people, academics, and risk analysts, and ranges from 10 (highly clean) to 0 (highly corrupt). In 2001, some of the richest countries in the world—Finland, Denmark, New Zealand, Iceland, Singapore and Sweden scored 9 or higher out of a possible clean score of 10, indicating very low levels of perceived corruption in government

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[65] Kenya was not surveyed in 1997.

and public administration. The eight countries with a score of 2 or less were Azerbaijan, Bolivia, Cameroon, Kenya, Indonesia, Uganda, Nigeria and Bangladesh. Among the sub-Saharan Africa countries covered, Kenya was ranked above Uganda and Nigeria, at the same level as Cameroon, but below the eleven other countries surveyed. While the degree of precision of these surveys would not be sufficient to argue that corruption perceptions in Kenya are significantly different from those in Tanzania, Uganda or Cameroon, there is more of a consensus that corruption is becoming more prevalent in Kenya.

D. The Impact of Corruption on Economic Performance

159. **Recent empirical research by Fund staff has highlighted the impact of corruption on growth, public finances, poverty, income inequality, and the provision of social services.** Table 20 summarizes the results. A number of studies have explicitly identified the negative impact of corruption on economic growth. Mauro (1996) finds that increasing corruption by one unit (on a scale from 1 to 10) would lower real per capita GDP growth by 0.3 to 1.8 percentage points, while Leite and Weidmann (1999) and Abed and Davoodi (2000) have reported a somewhat narrower range also centered on about 1 percent.

160. In these studies corruption was shown to lower growth by reducing private investment, attracting talented individuals into unproductive activities, and encouraging poor management of natural resources. Abed and Davoodi argue that structural reforms aimed at rationalizing the role of the state, increasing reliance on market-based pricing and creating a sound regulatory environment should contribute to growth directly and indirectly by lowering the incidence of corruption, and provide supporting evidence from the former Soviet Union and Eastern Europe.

161. A number of other studies have also found that corruption distorts the composition of public expenditures in favor of sectors where bribes are easier to collect. Corruption typically shifts spending away from routine maintenance and repair, education and health to excessive and inefficient public investments and higher military spending. Gupta, Davoodi and Tiongson (2000) find that higher corruption has adverse consequences for social indicators such as child mortality rates, and student dropout rates. Ghura (1998) suggests that corruption in the form of abuse of public funds and resulting in weak social indicators also weakens revenues because it contributes to tax evasion, improper tax exemptions, and weak tax administration.

162. **Real growth rates in Kenya have been relatively weak and declining for the past decade, and this in large part is a reflection of weak and deteriorating governance.** Growth of real GDP per capita has on average been minus 0.3 percent per year from 1992-2001, leading to a declining level of real incomes and increased poverty. Based on the lower bound of the estimates outlined in Table 20 below, one might suggest that raising the corruption perceptions index from 2 to 4, that is, to the level of corruption thought to exist in Ghana or Mauritius, might help to raise GDP per capita growth by at least 1 percent and perhaps significantly more. Improving the perceived level of corruption to the level of South

Africa might increase GDP per capita growth by 1 and a half percent or more. Figure 14 illustrates the potential implications for income.

Table 20. Impact of Increasing Corruption by One Unit 1/

Author(s)	Impact on	Finding
Mauro (1996)	Real per capita GDP growth	-0.3 to –1.8 percentage points
Leite and Weidmann (1999)	Real per capita GDP growth	-0.7 to –1.2 percentage points
Tanzi and Davoodi (2000)	Real per capita GDP growth	-0.6 percentage points
Abed and Davoodi (2000)	Real per capita GDP growth	-1 to –1.3 percentage points
Mauro (1996)	Ratio of investment to GDP	-1 to –2.8 percentage points
Mauro (1998)	Ratio of public education spending to GDP	-0.7 to –0.9 percentage points
Mauro (1998)	Ratio of public health spending to GDP	-0.6 to –1.7 percentage points
Gupta, Davoodi and Alonso-Terme (1998)	Income inequality (Gini coefficient)	+0.9 to +2.1 Gini points
Gupta, Davoodi and Alonso-Terme (1998)	Income growth of the poor	-2 to -10 percentage points
Ghura (1998)	Ratio of tax revenues to GDP	-1 to –2.9 percentage points
Tanzi and Davoodi (2000)	Measures of government revenues to GDP ratio	-0.1 to –4.5 percentage points
Gupta, de Mello and Sharan (2000)	Ratio of military spending	+ 1 percentage point
Gupta, Davoodi and Tiongson (2000)	Child mortality rate	+ 1.1 to 2.7 deaths per 1000 live births
Gupta, Davoodi and Tiongson (2000)	Primary student dropout rate	+1.4 to 4.8 percentage points
Tanzi and Davoodi (1997)	Ratio of public investment to GDP	+0.5 percentage points
Tanzi and Davoodi (1997)	Percent of paved roads in good condition	-2.2 to –3.9 percentage points

Source: IMF Fiscal Affairs Department; and Transparency International (2001).

1/ Corruption is measured on a scale of 0 (highly clean) to 10 (highly corrupt).

163. **Kenyan GDP per capita in 1991 is estimated to have been about US$333.** The lower line in Figure 14 illustrates the level of GDP per capita implied by the actual growth rates of GDP per capita achieved over the past decade and is thus an estimate of GDP per capita in 1991 prices. The trend has been down, implying falling income and increased poverty levels. By 2001, the estimate of real GDP per capita in 1991 prices had fallen to US$320. The middle line illustrates what would have been the path real income, if, ceteris paribus, corruption was one unit lower during the last decade, and therefore the growth of real income per capita been 1 percent higher. It would have implied a slight increase in real per capita income reaching about US$350. In order to achieve significantly higher incomes, however, the chart suggests that growth rates at least 2 percent higher would have been

needed. Clearly, this requires a significant improvement in the actual and perceived level of corruption in Kenya. Raising the growth rate of GDP per capita from, for example, 1 percent to 3 percent would reduce the number of years required to double per capita income from about 70 to about 25.

Figure 14. Kenya: Real GDP per Capita, 1991-2001
(U.S. dollars)
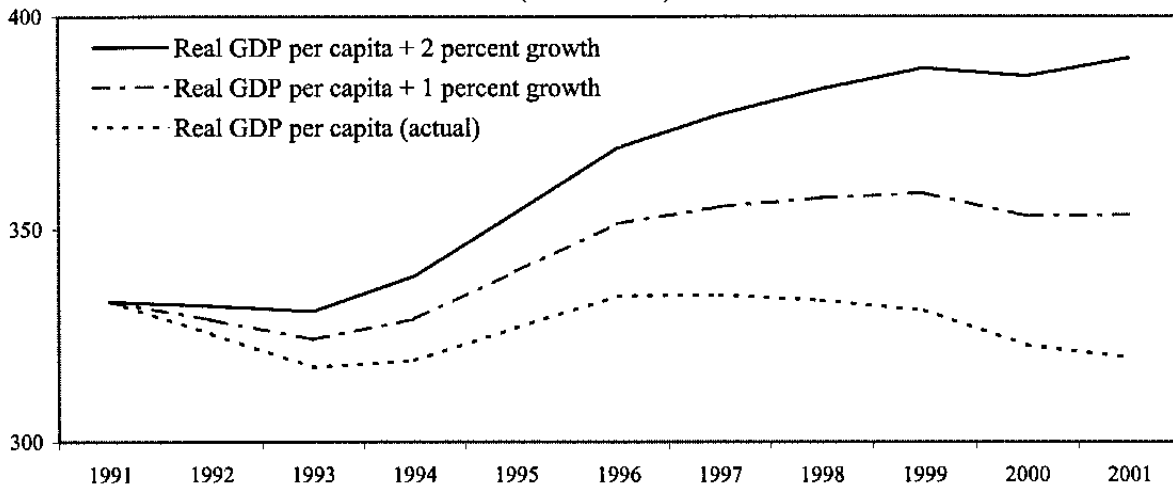
E. AntiCorruption Strategy

164.   **The Kenyan government has recognized that a vigorous anti-corruption campaign is required to generate the conditions for stronger growth of per capita income in Kenya.** Successful anti-corruption strategies have typically been predicated on there being a real and effective deterrent in place to curb the individual's instinct to abuse his or her public office for personal gain. It is widely accepted that, to be effective, public officials need to believe that if they abuse their office, there is a substantial prospect that they will be caught, convicted, and punished. Moreover, Klitgaard, Maclean-Abaroa, and Parris (2000) point out that experience indicates that prosecuting serious high-profile corrupt actors is "an essential element of an anti-corruption strategy so that a cynical citizenry believes that an anti-corruption drive is more than just words." This needs to be supplemented with an ongoing education program that informs the public about the negative implications of corruption, and with a system that allows the public to report acts of corruption without fear of retaliation. It is also critically important to liberalize and reform institutions and practices to reduce the opportunities for rent seeking and corruption, and to significantly strengthen public audit functions.

165.   Since the demise of the Kenya Anti-Corruption Authority (KACA), the Kenyan authorities have developed an new anti-corruption strategy (see staff report Box 3). The authorities' plan involves the introduction and enforcement of codes of ethics for all public

officials, including the civil service, the judiciary, and the legislature. Public officers would be required to file annual declarations of all their assets and liabilities. The legal status of the Anti-Corruption Police Unit would be strengthened to ensure that all the elements of the structure of the former KACA remain active and operationally autonomous and to ensure that there are appropriate safeguards against political interference. The Attorney General's office would be strengthened to ensure timely action on all pending corruption cases, and measures will be taken to ensure that the Attorney General's actions and decisions relating to the prosecution of corruption cases are held publicly accountable. Special courts are to be established to deal with corruption cases on a fast-track basis, and reputable judges will be appointed specifically to these courts, and the authorities plan to suspend all public officials whose cases are brought to trial, irrespective of their seniority or position.

166.   These actions will have to be reinforced by substantially strengthening other institutions whose operations have a significant bearing on corruption. These include, in particular, the office of the Controller and Auditor General, the internal audit, the procurement system, and the judiciary (see staff report para.20). The anti-corruption measures need to be complemented by other structural reforms, including privatization, liberalization of the coffee sector, and civil service reforms that make abuse of public funds and other rent-seeking activity more difficult. If implemented vigorously, and if major cases of corruption are seen by the public to be effectively prosecuted this governance plan has the potential to start changing attitudes towards corruption in Kenya. The evidence suggests that this could in turn have significantly beneficial effects on economic growth and the level of poverty.

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VII. FISCAL SUSTAINABILITY AND FISCAL RISK IN KENYA[66]

A. Introduction

167.   **This section analyzes fiscal sustainability and fiscal risk in Kenya.** The framework used for this analysis takes into account the contingent liabilities of the central government and the fiscal burden of the HIV/AIDS pandemic.

168.   **The current fiscal position of the central government is very fragile.** The level of indebtedness is high, and the overall magnitude of fiscal risks the central government assumes is also large.

169.   **The results of the analysis show that Kenya needs an extended period of rapid growth combined with an up-front fiscal consolidation in order to restore fiscal sustainability.** Rapid growth can be achieved by implementing a strong structural reform program - including wide-ranging governance reforms—which would also encourage foreign concessional financing. **A combination of strong growth, fiscal adjustment, and the availability of foreign concessional financing will allow the government to restore fiscal sustainability, to reduce and better manage fiscal risk, and to gradually increase the amount of resources available to finance new poverty reduction strategy paper (PRSP) priorities without endangering the quality and availability of core government services.**

B. Macroeconomic Scenarios and Sustainability of Fiscal Policies

170.   In order to provide a range for possible outcomes and to gauge the sensitivity of the results to underlying assumptions, **the sustainability analysis presented here is carried out for two scenarios, called high-growth and low-growth scenarios.**[67]

171.   **In the high-growth scenario, the government is assumed to pursue sound macroeconomic policies, including a strong fiscal adjustment at the beginning of the period, and ambitious structural and governance reforms.** The economic program of the government is supported by adequate grant and concessional loan financing from international financial institutions and donors. Public investment is kept at an adequate level, while its efficiency is improved as a result of public finance and governance reforms. Structural reforms and credible macroeconomic policies attract an increasing amount of foreign and domestic private investment, thereby increasing the growth potential of the economy. The latter is further enhanced by reducing poverty and dealing with the HIV/AIDS pandemic. Fiscal policy is geared toward providing sufficient financing for these programs. The average real growth in the scenario is 4.5 percent per year, some 1.7 percentage points

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[66] Prepared by István P. Székely.

[67] For a description of the framework used to this analysis and the special factors that were incorporated see Annexes I and II.

higher than the historical average for the last two decades, and some 2.8 percentage points higher than the average for the last decade. As Section VI suggests, such an increase in the growth performance is achievable through structural and governance reforms.[68]

172.   **In the low-growth scenario, it is assumed that the policies of the last decade are continued, resulting in a growth performance similar to that observed in the past.** Average real growth is 1.7 percent per year, which is equal to the average growth between 1991 and 2001. In the absence of structural and governance reforms, foreign financing is low and gradually declining as the government's credibility further erodes.

173.   **Fiscal sustainability is fully restored in the high-growth scenario** (Table 21 and Figure 15). The net augmented debt-to-GDP ratio declines from above 75 percent in 2001/02 (July-June) to below 39 percent by 2014/15, the end of the simulation period. The interest cost is almost halved, allowing for a full accommodation of HIV/AIDS-related government expenditure without endangering the overall fiscal position.

Figure 15. Kenya: Central Government Net Augmented Debt, High-Growth Scenario, 2000/01-2014/15 1/
(In percent of GDP)
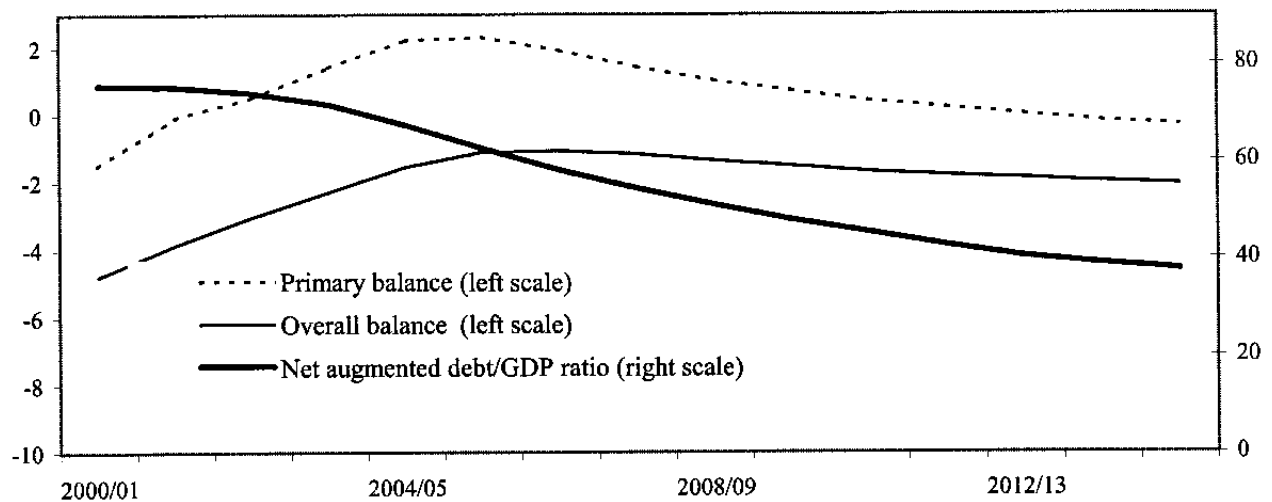
Source: Staff estimates.
1/ Fiscal year ending June 30.

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[68] In fact, Kenya had a period of rapid growth in the second half of the 1980s, when average real growth (between 1985 and 1990) reached 5.5 percent per year. Experiences of other African countries also suggest that good polices and ambitious reforms do result in sustained high growth and macroeconomic stability.

Table 21. Kenya: Fiscal Sustainability High-Growth Scenario, 2001/02-2014/15 \1

(In percent of GDP, unless otherwise indicated)

	2001/02	2002/03	2003/04	2004/05	2005/06	2010/11	2014/15
Budget deficit							
Primary revenue	24.2	24.3	24.1	23.9	23.7	23.5	23.5
Primary expenditure 2/	24.3	23.8	22.7	21.7	21.4	23.1	23.8
AIDS-related primary expenditure	0.0	0.1	0.2	0.3	0.5	1.7	2.0
Other primary expenditure	24.3	23.7	22.5	21.4	20.9	21.4	21.8
Primary balance	-0.1	0.5	1.4	2.2	2.3	0.4	-0.3
Interest costs 3/	3.8	3.5	3.7	3.8	3.4	2.1	1.8
Overall balance	-3.8	-3.0	-2.3	-1.5	-1.1	-1.7	-2.0
Financing	3.8	3.0	2.3	1.5	1.1	1.7	2.0
Foreign grants	1.2	1.1	1.1	0.8	0.7	0.5	0.4
Foreign borrowing	-0.1	0.2	0.5	0.8	0.8	0.3	0.1
Domestic borrowing	2.6	0.5	0.5	-0.1	-0.5	0.8	1.5
Privatization receipts	0.1	1.3	0.2	0.0	0.1	0.0	0.0
Debt sustainability indicators							
Central government debt (end-of-year stock)	75.8	74.8	73.0	69.4	64.8	46.4	38.4
Net augmented central government debt (end-of-year stock)	75.1	73.8	71.5	67.2	62.4	45.2	37.7
Net augmented central government debt (as percent of own primary revenue)	310.4	303.9	296.5	281.2	263.3	192.5	160.6
Vulnerability indicators							
Central government gross borrowing requirement	26.8	23.5	22.0	19.8	16.8	9.9	8.0
Central government gross borrowing requirement, including renewal of short-term domestic debt	67.2	57.2	51.1	42.4	33.0	12.2	8.0
Gross borrowing requirement (as percent of primary own revenue)	110.6	96.7	91.4	82.8	70.8	41.9	34.2
Interest expenditure (as percent of primary own revenue)	15.6	14.6	15.3	15.8	14.5	8.9	7.5
Assumptions							
Real growth (annual percentage change)	1.3	1.9	2.9	4.1	4.9	5.3	5.4
Average effective nominal interest rate on total central government debt (in percent)	5.4	5.3	5.7	6.0	5.8	5.1	5.4
90-day treasury bill rate (in percent)	12.0	11.5	12.0	11.7	10.8	10.5	10.5
Rate of real appreciation (CPI based; annual percentage change)	-1.0	1.0	1.0	0.5	0.4	0.0	0.0

Sources: Kenyan authorities; and Fund staff estimates and projections.

1/ Central government.

2/ Excludes payments on called guarantees.

3/ Includes payments on called guarantees.

174.   **Three important factors are at play in this scenario: high growth, sufficient foreign concessional financing, and a strong fiscal consolidation at the beginning of the simulation period.** These factors reinforce each other, and it is their combined effect that leads to a dramatic decline in net augmented government debt. The lack of even one of these factors could well lead to increasing indebtedness[69] and a high and rising level of vulnerability. While adequate resources are allocated to new PRSP priorities, in particular to HIV/AIDS-related public programs, real non-AIDS-related primary expenditure increases by 3 percent per year during the simulation period. Thus, **in this scenario, fiscal consolidation and the reprioritization of budget programs do not have to result in a deterioration of traditional public services and welfare programs.**

175.   **Although the level of indebtedness temporarily decreases in the low-growth-scenario, fiscal sustainability is not restored.** The level of indebtedness increases towards the end of the simulation period, and the degree of fiscal risk reaches dangerous levels (Table 22 and Figure 16). As the pressing need for poverty-reducing and HIV/AIDS-related public expenditure forces the government to relax the fiscal position, the gains from the large up-front fiscal consolidation are eaten up, and, after a few years, the unsustainability of macroeconomic policies becomes evident. **In this scenario, there is a clear conflict between the need for fiscal consolidation and financing for new budget programs, on the one hand, and the need to provide adequate finance for traditional public services and welfare programs, on the other hand.** The average growth of non-AIDS-related real primary expenditure is 0.3 percent per year, which suggests a potentially serious conflict between new PRSP priorities and traditional budget programs.

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[69] If the fiscal adjustment assumed in the high-growth scenario is not carried out, that is, if the share of primary expenditure (including HIV/AIDS-related expenditure) in GDP remains unchanged, the net augmented debt-to-GDP ratio rises above 80 percent, up from 75 percent at the beginning of the simulation period. It is questionable whether in such circumstances the high rate of growth assumed in this scenario can be maintained. A more realistic assumption on the average rate of real GDP growth would most likely result in a continuously increasing net augmented debt-to-GDP ratio.

Table 22. Kenya: Fiscal Sustainability Low-Growth Senario, 2001/02-2014/15 1/

(In percent of GDP, unless otherwise indicated)

	2001/02	2002/03	2003/04	2004/05	2005/06	2010/11	2014/15
Budget deficit							
Primary revenue	24.2	24.3	24.1	23.9	23.7	23.5	23.5
Primary expenditure 2/	24.3	23.8	22.7	21.7	21.4	23.1	23.8
AIDS-related primary expenditure	0.0	0.1	0.2	0.3	0.5	1.8	2.3
Other primary expenditure	24.3	23.7	22.5	21.4	20.9	21.2	21.5
Primary balance	-0.1	0.5	1.4	2.2	2.3	0.4	-0.3
Interest costs 3/	3.8	3.6	3.8	4.0	3.8	3.8	6.7
Overall balance	-3.8	-3.1	-2.4	-1.8	-1.5	-3.4	-7.0
Financing	3.8	3.1	2.4	1.8	1.5	3.4	7.0
Foreign grants	1.2	1.0	1.0	0.7	0.5	0.2	0.1
Foreign borrowing	-0.1	0.1	0.4	0.6	0.0	-0.9	-1.0
Domestic borrowing	2.6	0.6	0.8	0.5	0.9	4.1	7.9
Privatization receipts	0.1	1.3	0.2	0.0	0.1	0.0	0.0
Debt sustainability indicators							
Central government debt (end-of-year stock)	75.8	75.2	74.5	72.9	71.2	65.6	73.0
Net augmented central government debt (end-of-year stock)	75.1	74.2	73.0	70.7	68.6	64.1	72.0
Net augmented central government debt (as percent of own primary revenue)	310.4	305.3	302.8	295.7	289.3	272.6	306.5
Vulnerability indicators							
Central government gross borrowing requirement	26.8	23.6	22.6	21.2	19.3	25.5	44.8
Central government gross borrowing requirement, including renewal of short-term domestic debt	67.2	57.5	52.5	45.8	39.7	68.7	151.4
Gross borrowing requirement (as percent of primary own revenue)	110.6	97.1	93.6	88.7	81.5	108.4	190.7
Interest expenditure (as percent of primary own revenue)	15.6	14.8	15.7	16.7	16.2	16.2	28.6
Assumptions							
Real growth (annual percentage change)	1.3	1.8	1.8	1.8	1.8	1.8	1.8
Average effective nominal interest rate on total central government debt (in percent)	5.4	5.4	5.7	6.1	6.0	6.6	10.9
90-day treasury bill rate (in percent)	12.0	11.7	12.0	11.7	10.8	10.9	15.7
Rate of real appreciation (CPI based; annual percentage change)	-1.0	1.0	1.0	0.5	0.4	0.0	0.0

Sources: Kenyan authorities; and Fund staff estimates and projections.

1/ Central government.

2/ Excludes payments on called guarantees.

3/ Includes payments on called guarantees.

Figure 16. Kenya: Central Government Net Augmented Debt, Low-Growth Scenario,
2000/01-2014/15 1/
(In percent of GDP)
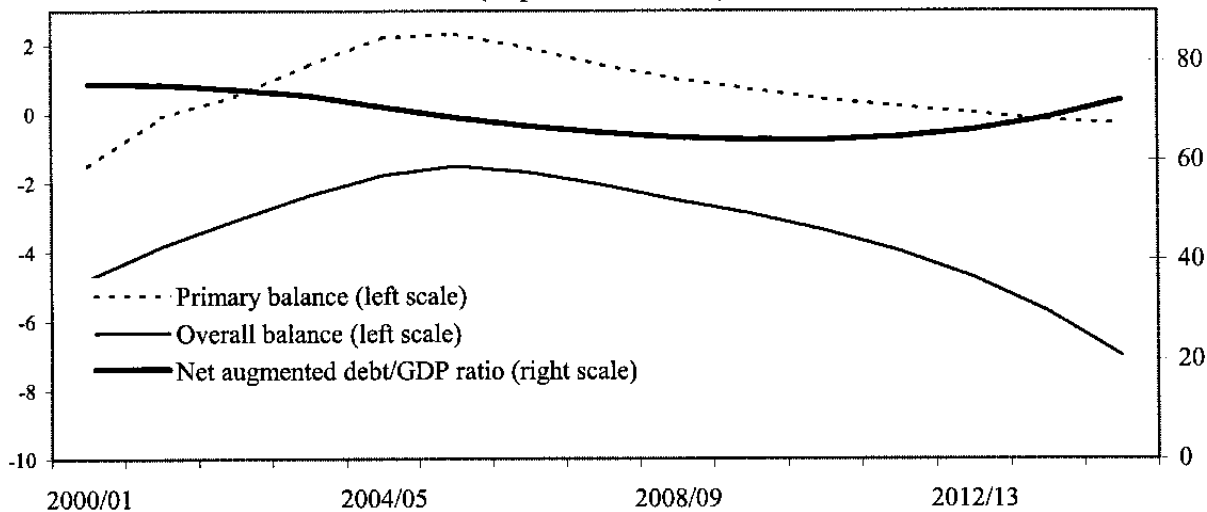
Source: Staff estimates.
1/ Fiscal year ending June 30.

C. Fiscal Risk

176.   Budgets are exposed to several types of risks that endanger fiscal policy implementation. It is thus important to consider a wide variety of fiscal risks when analyzing the sustainability of fiscal policies, and to try to gauge their magnitude. Depending on the starting position and the fiscal policies pursued, the nature and size of the fiscal risks faced by different countries may be markedly different. Four types of fiscal risk are analyzed in this paper: exchange rate risk, interest rate risk, refinancing risk, and risk originating from supply shocks. As most of the foreign debt is long-term concessional debt, only domestic interest rate risk is analyzed. The sizes of the shocks that the model is subjected to are calibrated based on historical data.

177.   Exchange rate risk is one of the most important sorts of fiscal risk in developing countries. A low-income, primary goods-exporting economy is exposed to large fluctuations in the terms of trade, resulting in a volatile real exchange rate. The volatility of the real exchange rate is further increased by other exogenous factors, such as drought, and by poorly designed macroeconomic policies and uneven implementation of structural and governance reforms. Therefore, it is of considerable importance to quantify the degree of foreign exchange risk the government assumes. The two upper panels of Figures 17 show the impact of a 10 percent real depreciation of the Kenya schilling against the U.S. dollar for two years relative to the paths assumed under the two scenarios. As the upper left panel of Figure 17 shows, even though the share of foreign debt in total debt increases under the **high-growth** scenario, the overall impact of an exchange rate shock is declining over time because the overall level of indebtedness is reduced dramatically under this scenario.

Figure 17. Kenya: Central Government Net Augmented Debt, The Impact of Various Shocks on
Indebtedness 2000/01-2014/15 1/
(In percent of GDP)

The Impact of a 10% Real Exchange Rate Shock

The Impact of a Real Domestic Interest Rate Shock
(300 bps increase for two years)

The Impact of a Real Growth Shock
(zero growth for two years)
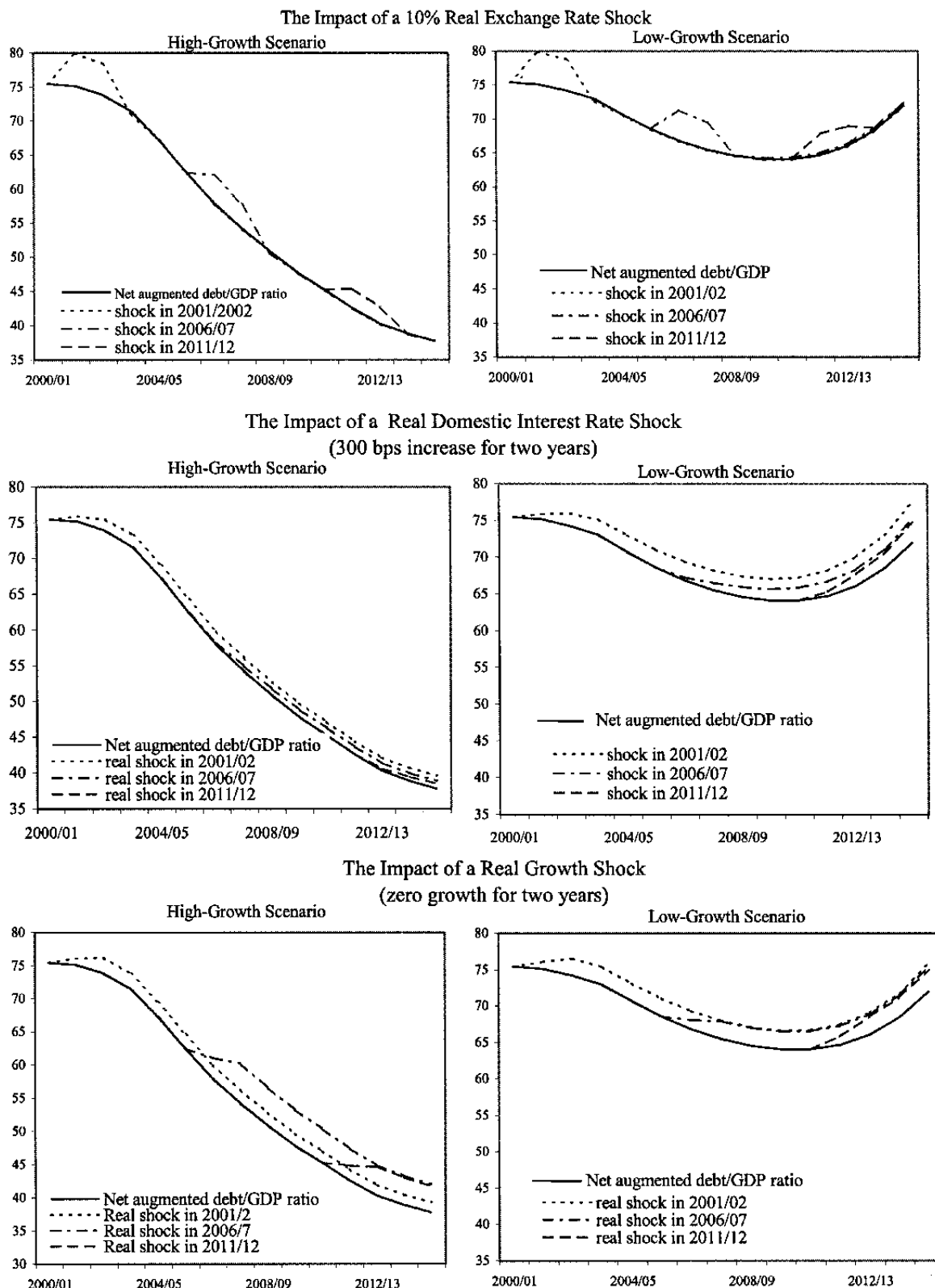
Source: Staff estimates.
1/ Fiscal year ending June 30.

178.   **Domestic interest rate risk is of considerable importance for fiscal policy implementation because of the large size and short average maturity of domestic debt at the start.** The two middle panels of Figures 17 show the impact on the level of indebtedness of an increase of 300 basis points in the domestic real interest rate (relative to the path assumed in the scenarios) for two years. In the **high-growth** scenario (left middle panel of Figure 17), the impact of an interest rate shock in the beginning of the simulation period is small, but persistent; however, it almost completely diminishes after five years. This outcome is explained by the reduction under this scenario of gross domestic borrowing from 22.9 percent of GDP in 2001/02 to 12 percent in 2006/07. At the same time, the average maturity of newly contracted debt is increased from 0.7 year in 2000/01 to 3.2 years in 2011/12, thereby substantially reducing the sensitivity of total interest cost to short–term fluctuations in market rates. Trends in this regard are dramatically different in the low-growth scenario, under which the size of this kind of fiscal risk is much greater and increasing over time.

179.   **Droughts and other exogenous supply shocks are frequent in Kenya and result in a marked slowdown in the economy for two-three years.** The strong pressure such supply shocks put on the budget is another important form of fiscal risk. The two lower panels of Figures 17 quantify the size of this risk in the two scenarios, showing the impact of zero real GDP growth for two consecutive years on indebtedness. The impact is greater in the high-growth scenario because the size of such a shock is considerably larger than in the low-growth scenario.

180.   **Refinancing risk is an important and frequently neglected type of fiscal risk in a highly indebted economy with a sizable stock of short-term debt.** The two scenarios presented here differ most dramatically in the degree of refinancing risk the budget is subjected to (see Figure 18). The starting position is difficult, as the government's relatively large stock of domestic debt with a very short average residual maturity (less than six months at the end of 2000/01) results in a very large gross refinancing need. In the high-growth scenario (left panel of Figure 18), however, the ratio of gross financing need to revenue, the indicator of refinancing risk used here, falls dramatically from over 100 percent to below 35 percent over the 2001/02-20014/15 simulation period. This is a combined result of a fast reduction in domestic debt (which has a shorter average contractual maturity) and a rapid increase in the average contractual maturity of new domestic borrowing. The latter reflects increasing confidence in government policies on the part of domestic investors and an growing presence of foreign investors in domestic securities markets. In the low-growth scenario, after a modest improvement, the average contractual maturity of new borrowing starts to decrease rapidly as gross domestic borrowing increases and confidence in government policies evaporates (right panel of Figure 18). **It is in fact the magnitude of the refinancing risk that is perhaps the most important factor rendering the low-growth scenario implausible, because that risk reaches an unmanageable level towards the end of the simulation period.**

Figure 18. Kenya: Gross Borrowing Requirement, 2000/01-2014/15 1/
(In percent of revenue)

High-Growth Scenario   Low-Growth Scenario
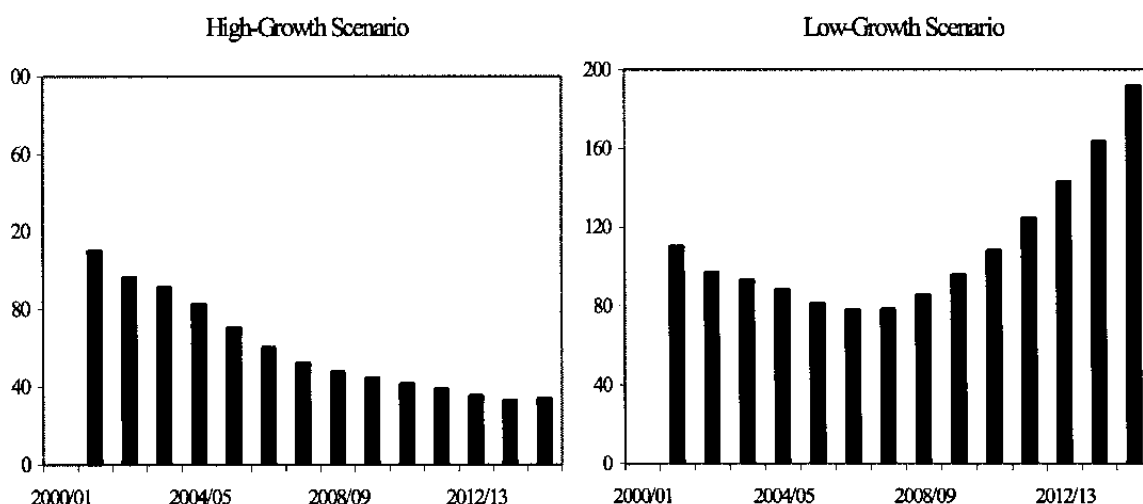
Source: Staff estimates.
1/ Fiscal year ending June 30.

D. Conclusions

181.   **The main conclusion of this analysis is that Kenya needs an extended period of rapid growth to restore fiscal sustainability and to reduce fiscal risk to a manageable level.** Under the high-growth scenario, characterized by high growth and the availability of foreign concessional finance, both goals are achieved. Government indebtedness and fiscal risk are greatly reduced. As a result of good policies and sufficient foreign support, public finances become much more resilient: in fact, none of the stress tests performed for the high-growth scenario suggests that even a large exogenous shock could endanger government solvency.

182.   **Both scenarios involve a period of fiscal consolidation at the beginning of the simulation period, which is also an important factor at play.** In the absence of an up-front fiscal consolidation, even strong growth and adequate foreign concessional finance may not be enough to restore fiscal sustainability.

183.   **Without implementing a strong structural reform program that would enhance growth and encourage foreign financing, the budget will remain extremely vulnerable.** After a period of decline, the level of indebtedness will start to increase rapidly as the primary position has to be relaxed to accommodate the additional expenditure required to cover the costs of HIV/AIDS- and poverty reduction-related budget programs. As the level of indebtedness starts to increase, the vulnerable of the budget will rise and, by the end of the simulation period, it will become more vulnerable than it is now.

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FRAMEWORK FOR ANALYSIS

184.   **This analysis is based on the framework developed by Horváth and Székely (2001).** Net worth of the government is measured by net augmented debt, which includes financial liabilities, financial assets that can be liquidated without endangering core government functions, guaranteed debt, contingent liabilities of the government, and the present value of future privatization receipts.[70] A fiscal policy is regarded as sustainable if the net augmented central government debt-to-GDP ratio is stabilized at a sufficiently low level during the simulation period and the overall magnitude of fiscal risk that the budget is exposed to is manageable.

185.   Owing to data availability, **the analysis is limited, at this stage, to the central government,** with the exception of contingent liabilities in the banking sector, which is included for the entire public sector, and the borrowing of the central bank from the IMF, which is treated as guaranteed debt. Future work in this area should concentrate on compiling a reliable database for the financial assets and liabilities of the social security fund and subnational governments to make the analysis more comprehensive.

186.   **The sustainability analysis is carried out for the two scenarios** described below. **Under the low-growth scenario,** fiscal policy is assumed to be unchanged,[71] but the pricing behavior and portfolio allocation of domestic investors is treated as endogenous. The real interest rate demanded by domestic investors is assumed to have a unit elasticity to the share of government gross domestic borrowing in GDP,[72] and a higher level of borrowing is assumed to induce a shift toward short-term instruments.

187.   **To gauge the extent of fiscal risks, a number of vulnerability indicators are introduced and a series of stress tests is performed.** The degree of refinancing risk is measured by the annual gross borrowing requirement of the central government, calculated as a share of GDP and own primary revenue.[73] Three stress tests are carried out to measure

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[70] This is used as a proxy for the value of government real assets that can be liquidated without reducing the capacity of the government to perform its core functions.

[71] Unchanged policy is defined as unchanged share of primary central government expenditure in GDP. The overall elasticity of revenue is assumed to be one.

[72] Relative to a threshold that is set equal to the peak value of this ratio at the beginning of the simulation period. A 1 percent (not percentage point) increase in the share of government gross borrowing over the threshold results in a 1 percent (not percentage point) increase in the domestic real interest rate. The yield curve is assumed to shift out but not to tilt.

[73] The indicators show the share of GDP or primary revenue the government would have to devote to repaying its maturing debt in the year concerned if it could not roll over its maturing debt obligations.

exchange rate and interest rate risks. The first test measures the impact of a 10 percent increase[74] in the real exchange rate for two years on the fiscal sustainability indicator. The second test traces the impact of an increase of 300 basis points in the domestic real interest rate[75] for two years. Finally, the third test quantifies the impact of having no real GDP growth for two consecutive years.

188.   As the impact of such shocks is changing over time, **three different starting points are chosen for the tests**: the first year of the simulation period, and five and ten years later, respectively. In our interpretation, fiscal sustainability is fully restored when such shocks do not result in an increasing net augmented debt-to-GDP ratio in the longer run.[76]

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[74] A 10 percent depreciation of the real exchange rate of the local currency against the U.S. dollar, compared with the original path of the real exchange rate, and returning to it after two years.

[75] Compared with the original path of domestic real interest rate, and returning to it after two years. The yield curve is assumed to shift out but not tilt, that is, the premium on longer maturities assumed to be unchanged. As the pricing behavior and portfolio allocation of domestic investors are endogenized, an increase in the domestic debt stock may induce a further increase in domestic interest rates and may change the maturity profile of newly issued domestic government debt.

[76] In the short run, it may increase.

SPECIAL FACTORS

189.   **AIDS is a major human health and development problem in Kenya** (see Box 1 in the staff report). The latest projections show that adult HIV prevalence will reach about 14 percent of the adult population by 2005 (Republic of Kenya, 2001). The recent PRSP process has identified the combating of the HIV/AIDS pandemic as one of the highest PRSP priorities. Based on this projection and the cost estimates for treatments (Haacker, 2001), we estimate that **HIV/AIDS-related public spending is likely to have to reach some 2 percent of GDP in the high-growth scenario in order to provide basic coverage for treatment.** This level is reached in the simulations by the end of the period, as the resources are assumed to become available gradually. In the **low-growth** scenario, the same level of services will require somewhat lower real expenditure[77] but a larger share of total primary expenditure, as economic growth will be considerably slower.

190.   **The potential fiscal cost of bank consolidation in Kenya limits fiscal policy choices and has a strong influence on debt dynamics.** Section V provides a description of the current state of the banking sector in Kenya. In this section, we concentrate on the fiscal implications of bank consolidation.

191.   **Negative equity in banks, in particular in large, state-owned banks, constitutes contingent liabilities for government.** The precise valuation of such liabilities is extremely difficult, as the quality of assets can change very quickly. Moreover, the actual cost to the public sector depends to a large extent on the specific approach taken to addressing the problems of the banks concerned. Liquidation is often the cheapest approach, although politically difficult.[78] Full cash recapitalization is typically the most expensive solution, as it protects all deposits.

192.   The total cost to the public sector shows up in the balance sheets of different parts of the public sector. Thus, depending on the coverage of the fiscal sustainability analysis, certain components of the total cost may not be captured. In the present case, as the analysis covers the central government, cash outlays by the Deposit Protection Fund (DPF)[79] and losses recognized by the central bank (written-off liquidity loans) and the National Social Security Fund (NSSF) will not immediately show up in the balance sheet of the central

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[77] Reflecting lower real wages in the health care sector as a result of slower economic growth. Two-thirds of the total cost is assumed to be wage cost and the real wage increase is assumed to be proportional to the rate of real GDP growth. Nonwage cost is assumed to be the same in the two scenarios.

[78] Among other things, the considerably lower cost of liquidation in Kenya is explained by the fact that deposit insurance is limited to K Sh 100,000 (about. US$1,265) per depositor.

[79] As long as DPF is properly capitalized and deposit insurance fees and charges are adequately set to replenish the fund.

government. However, losses of the central bank will translate into smaller transfers from the central bank, and losses of the NSSF will create new contingent liabilities of the central government. Because our analysis is based on the concept of net augmented debt of the government, which includes contingent liabilities, the distribution of cost among different parts of the public sector is largely irrelevant.

193.   For the purposes of this particular exercise, it is assumed that the total amount of government contingent liabilities in the banking sector may have reached about 5 percent of GDP at end-2000. It is assumed that the necessary intervention takes place in 2002-03, with costs equally distributed between the two years, and that the remaining contingent liabilities are converted into government debt in 2004-05. Government payments are assumed to be made with ten-year market interest bonds. The actual timing of the intervention and the realization of contingent liabilities has an impact on the gross borrowing requirement of the government, but it does not change its net augmented debt.[80]

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[80] Contingent liabilities are indexed using the average interest rate for government borrowing. If a delay results in a deterioration of asset quality or outright asset stripping, timing becomes a critical factor.

VIII. External Vulnerability Analysis[81]

A. Introduction

194.   **This section describes Kenya's external vulnerabilities, particularly those relating to its external debt.** The purpose of this exercise is to examine the composition and evolution of Kenya's external debt under two scenarios: a high-case scenario wherein GDP and export growth are robust throughout the projection period and the IMF- and IDA-supported program remains on track; and a low-case scenario wherein reforms are not implemented, the program is not brought back on track, and Kenya's situation deteriorates. The results show that Kenya's ability to withstand an external shock are vastly improved under conditions of strong economic growth and macroeconomic stability, while the country's vulnerability to external shocks[82] is worsened in a situation of stagnant growth.

195.   **The data used in this section were provided by the Kenyan authorities and have been augmented by staff estimates.** This exercise is based on aggregate external debt data (rather than loan-by-loan data) comprising broad categories of debt.[83] These data, including many of the assumptions in the exercise, have been discussed with the authorities. In addition, the results of an earlier version of this exercise were presented to the authorities in October.[84] The remainder of this section is organized as follows: the level and composition of external debt at end-2000 are discussed in subsection B, an analysis of Kenya's external vulnerability is provided in subsection C, and a conclusion follows.

B. Level and Composition of External Debt at End-2000

196.   **At end-2000, Kenya's external debt, including arrears, stood at US$5.3 billion, or 51 percent of GDP (Table 23).** The net present value (NPV)[85] of this debt is estimated to

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[81] This external vulnerability analysis has been shared with the World Bank.

[82] Since 1995, Kenya's terms of trade have remained relatively stable, in spite of the coffee price boom in 1997. Earlier in the decade, however, terms of trade swings of about 10 percent occurred in 1990, 1991, and 1994.

[83] Kenya is a heavily indebted poor country (HIPC). In order to determine Kenya's eligibility for debt relief under the HIPC Initiative, a loan-by-loan debt sustainability analysis will need to be undertaken.

[84] A seminar on Kenya's external debt position was presented to the authorities on October 24, 2001 in Nairobi, Kenya.

[85] The NPV of debt was calculated using currency-specific commercial interest reference rates (CIRRs) for the six-month period ended December 31, 2000.

have been US$3.9 billion, equivalent to about 38 percent of GDP and 143 percent of exports.[86] Arrears at end-2000 amounted to US$60 million, representing mainly reschedulable arrears to commercial creditors. Kenya's high domestic debt burden and its potential consequences for fiscal sustainability and vulnerability are discussed in Section VII.

Table 23. Kenya: Nominal Stock and Net Present Value of Debt at End-2000
(In millions of U.S. dollars)

	Nominal Stock	Net Present Value
Total	5,268	3,873
Multilateral	3,001	1,615
IMF	128	100
World Bank	2,356	1,181
African Development Bank/African Development Fund	355	197
Other	162	136
Bilateral	1,889	1,868
Paris Club 1/	1,845	1,832
Non-Paris Club	44	36
Commercial	378	390
Memorandum items:		
Stock of arrears	60	60
Total debt (including arrears)	5,327	3,933

Sources: Kenyan authorities; and Fund staff estimates.

1/ Figures for Kenya's NPV of debt vis-à-vis the Paris Club are affected by the current low CIRR for Japanese yen-denominated debt.

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[86] Kenya's external debt indicators have been improving over the past few years, likely as a result of the low levels of foreign program financing since 1995.

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Figure 19. Kenya: Composition of External Debt at End-2000
(In percent)

Nominal Stock of Debt

Net Present Value of Debt
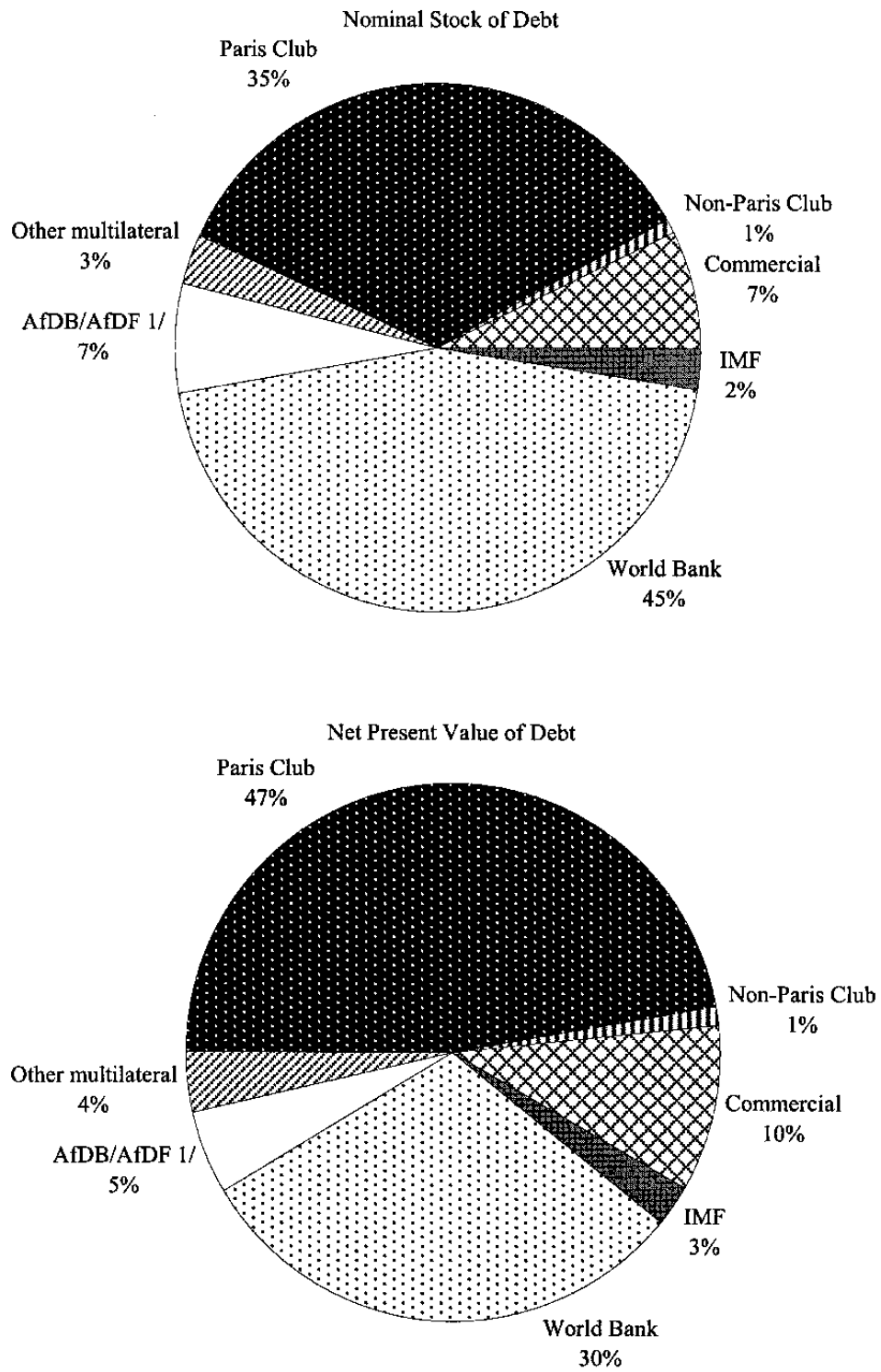
Sources: Kenyan authorities; and Fund staff estimates.

1/ African Development Bank/African Development Fund.

197.   **Multilateral creditors held about 57 percent of Kenya's debt at end-2000, while bilateral creditors accounted for 36 percent** (Figure 19). In NPV terms, the multilaterals' share was 42 percent, while the bilaterals' share was 48 percent. Commercial creditors constituted 7 percent of Kenya's debt in nominal terms, and 10 percent in NPV terms. The difference in shares between nominal stock and the NPV of debt is due to the relative degree of concessionality provided by each creditor group and the commercial interest reference rates (CIRRs) for certain currencies.[87]

198.   **With only a brief history of debt restructuring, Kenya has generally serviced its debts to all creditors.** In 1994, Kenya had its first rescheduling under the auspices of the Paris Club. The country was granted a rescheduling on nonconcessional terms by the Club, and made the final payment of this agreement in September 2001. In 1998, Kenya rescheduled a portion of its commercial debt with the London Club. The agreement provided for cancellation of US$21 million of arrears and rescheduling of US$49 million. In 1999 and 2000, Kenya accumulated arrears on official bilateral and commercial debt largely because of payment difficulties caused by the adverse effects of a prolonged drought on the economy. In November 2000, the Paris Club agreed to reschedule about US$300 million of Kenya's debt on nonconcessional terms.[88] Kenya is still pursuing comparable treatment from the London Club for this rescheduling.

C. External Vulnerability Analysis

199.   **The analysis presented in this section examines the evolution of Kenya's debt under two scenarios—a high-case scenario underpinned by strong macroeconomic performance and a low-case scenario in which the economy stagnates.** To examine Kenya's vulnerability to external shocks in the low-case scenario, the effects of a one-off terms of trade shock on the various debt indicators are examined. The macroeconomic assumptions for both the high-case and low-case scenarios are presented in Table 24.

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[87] The yen CIRR is currently low relative to its historical average, implying that the NPV of yen-denominated debt will increase, as the current CIRR is often below the interest rates at which loans were contracted. As Japan is a major creditor of Kenya, the current low CIRR relative to historical averages tends to increase the NPV of bilateral debt. Dollar- and euro-denominated debt is discounted at (annual CIRR) rates of 7.2 percent and 6.3 percent, respectively, while yen-denominated debt is discounted at 2 percent (all end-2000 CIRRs).

[88] Kenya's debt was rescheduled on Houston terms. Under the agreement official development assistance (ODA) debt was rescheduled over 20 years, with 10 years' grace at a rate of interest no less concessional than that of the original loan agreement. Non-ODA debt was rescheduled over 18 years, with 3 years' grace at market interest rates.

Table 24. Kenya: Macroeconomic Assumptions, 2000-15
(Percent change from previous year, unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
High-case scenario																
Nominal GDP (millions of U.S. dollars)	10,345	10,492	10,971	11,681	12,534	13,514	14,725	15,830	17,028	18,305	19,681	21,165	22,768	24,491	26,350	28,360
Real GDP growth	-0.2	1.1	1.4	2.4	3.5	4.6	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.3	5.4	5.4
Consumer price inflation	6.2	1.1	3.2	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Terms of trade	0.1	1.2	2.8	0.2	0.4	0.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Export volume growth	-5.6	4.0	2.4	4.0	5.2	6.0	6.3	6.3	6.4	6.4	6.4	6.5	6.5	6.5	6.5	6.6
Import volume growth	7.0	1.9	2.0	3.9	3.8	-0.7	5.9	6.0	6.1	6.2	6.2	6.2	6.2	6.3	6.3	6.3
Import volume growth, excluding special imports 1/	3.6	2.4	2.0	3.1	4.2	5.0	6.0	6.1	6.1	6.3	6.3	6.3	6.3	6.3	6.4	6.4
Current account balance, excluding official tranfers (percent of GDP)	-3.0	-3.2	-3.7	-4.3	-4.3	-3.0	-3.1	-3.3	-3.4	-3.6	-3.7	-3.7	-3.8	-3.9	-4.0	-4.0
Gross official reserves (millions of U.S. dollars)	897	1,064	1,233	1,344	1,417	1,568	1,754	1,925	2,086	2,260	2,449	2,653	2,876	3,117	3,379	3,636
Gross official reserves (in months of next years' imports)	3.0	3.6	3.8	3.9	4.0	4.1	4.3	4.4	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.8
Central government revenue, excluding grants (percent of GDP)	23.5	24.0	24.3	24.2	24.0	23.8	23.6	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Low-case scenario																
Nominal GDP (millions of U.S. dollars)	10,345	10,492	10,887	11,013	11,056	11,311	11,593	11,971	12,398	12,836	13,293	13,771	14,273	14,794	15,338	15,910
Real GDP growth	-0.2	1.1	0.7	0.7	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Consumer price inflation	6.2	1.1	4.8	21.3	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
Terms of trade	0.1	1.2	2.2	0.1	0.3	0.4	0.6	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Export volume growth	-5.6	4.0	1.6	1.8	1.9	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Import volume growth	7.0	1.9	0.6	2.1	2.5	-3.8	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Import volume growth, excluding special imports 1/	3.6	2.4	1.2	1.5	1.7	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Current account balance, excluding official tranfers (percent of GDP)	-3.0	-3.2	-3.4	-4.1	-4.7	-3.4	-3.3	-3.5	-3.7	-3.7	-3.8	-3.8	-3.9	-3.9	-4.0	-4.0
Gross official reserves (millions of U.S. dollars)	897	1,064	1,043	1,017	971	935	945	944	938	947	967	988	1,005	1,023	1,027	1,025
Gross official reserves (in months of next years' imports)	3.0	3.6	3.4	3.1	3.0	2.8	2.7	2.6	2.6	2.5	2.5	2.5	2.4	2.4	2.3	2.3
Central government revenue, excluding grants (percent of GDP)	23.5	24.0	24.3	24.2	24.0	23.8	23.6	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5

Sources: Kenyan authorities; and Fund staff estimates and projections.

1/ Includes defense-related imports, imports of maize, sugar, and airplanes, and imports related to rehabilitation of the energy sector. Special imports decline in 2005, causing total import growth to fall in that year.

Assumptions

200.   **The high-case scenario assumes that the IMF- and IDA-supported program is brought back on track by mid-2002 and that real GDP and export growth are robust throughout the projection period.** Macroeconomic conditions remain stable, with average consumer price inflation hovering around 5 percent per year. Average GDP growth over the period 2002-15 is roughly 4.6 percent while export (goods) volume growth is 5.9 percent. As the economy recovers, gross reserves continue to increase, rising to 4.8 months of import cover by end-2015, from 3.6 months of import cover at end-2001. The terms of trade are assumed to remain roughly constant, while the current account deficit continues to be sizeable, owing to high investment-related import demand. Foreign direct investment (FDI) is assumed to increase rapidly, although by 2015 it reaches only 2 percent of GDP.[89] Underpinning this scenario is an assumption that structural adjustment is pursued vigorously. The balance of payments financing gaps are assumed to be filled by concessional loans and grants (Table 25).[90]

201.   **The low-case scenario presents a situation in which the program is not brought back on track throughout the projection period and the Kenyan economy plunges into a vicious cycle of high inflation, a depreciating nominal exchange rate, low growth, and overall stagnation.** Real GDP growth averages a mere 1.1 percent over the period 2002-15, while inflation accelerates to an average of 20.5 percent over the same period. The lack of foreign financing, along with sluggish growth, causes gross official reserves to fall from 3.6 months of import cover at end-2001 to 2.3 months of import cover by end-2015. In addition, it is assumed that the modest financing gaps remaining are covered by borrowing on nonconcessional terms (Table 26).[91]

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[89] This is a conservative assumption. Although FDI is assumed to increase dramatically in dollar terms, in percent of GDP it remains rather low. According to data from the IMF's World Economic Outlook database, Tanzania, Mozambique, Uganda, and Zambia all had ratios of FDI to GDP well in excess of 2 percent of GDP in 2001.

[90] It is assumed that one-third of the financing gap in each year is filled by bilateral grants, while the remainder is filled by concessional loans. The loans are assumed to be by a combination of multilateral (two-thirds) and bilateral (one-third) lending. Multilateral (gap) lending is assumed to be on IDA terms (with the exception of the IMF), while bilateral (gap) lending is assumed to have a grant element of about 40 percent.

[91] It is assumed that the entire financing gap is filled by loans with a maturity of 10 years, with a 2 year grace period, and an interest rate of LIBOR plus 0.5 percent. The grant element of these loans is less than 10 percent.

Table 25. Kenya: Balance of Payments in the High-Case Scenario, 2000-15
(In millions of U.S. dollars, unless otherwise indicated)

	2000 Est.	2001 Proj.	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Current account	-220	-253	-404	-499	-545	-409	-453	-520	-587	-653	-721	-795	-874	-960	-1,046	-1,137
Excluding official transfers	-311	-340	-402	-497	-544	-408	-451	-519	-586	-651	-719	-793	-873	-959	-1,044	-1,135
Exports, f.o.b.	1,774	1,761	1,798	1,926	2,080	2,260	2,437	2,619	2,810	3,015	3,237	3,477	3,735	4,014	4,315	4,641
Coffee	154	86	83	98	126	159	191	218	240	265	291	321	353	389	428	471
Tea	463	456	474	508	546	587	626	666	717	771	829	892	959	1,032	1,110	1,196
Oil products	127	111	93	95	97	100	101	104	107	111	115	119	123	127	132	137
Other	1,030	1,107	1,147	1,226	1,311	1,414	1,519	1,631	1,745	1,869	2,002	2,145	2,300	2,466	2,645	2,837
Imports, f.o.b.	-2,965	-2,850	-2,820	-3,012	-3,198	-3,217	-3,430	-3,676	-3,934	-4,214	-4,516	-4,840	-5,188	-5,563	-5,966	-6,400
Public	-94	-94	-99	-103	-109	-114	-120	-127	-135	-143	-151	-160	-169	-179	-190	-201
Private	-2,871	-2,756	-2,721	-2,909	-3,089	-3,103	-3,309	-3,549	-3,799	-4,072	-4,365	-4,680	-5,019	-5,384	-5,777	-6,199
Oil	-850	-807	-687	-712	-743	-782	-811	-864	-924	-991	-1,062	-1,139	-1,222	-1,311	-1,407	-1,510
Other	-2,021	-1,949	-2,033	-2,197	-2,346	-2,320	-2,498	-2,685	-2,875	-3,081	-3,303	-3,541	-3,797	-4,073	-4,370	-4,689
Services (net)	245	241	218	209	190	166	133	105	90	85	81	76	71	65	64	65
Income (net)	-134	-154	-141	-134	-134	-134	-113	-93	-82	-73	-62	-51	-40	-29	-16	-6
Current transfers (net)	860	748	541	512	516	515	520	525	529	534	539	544	548	553	558	563
Capital and financial account	211	278	373	454	514	438	499	566	645	732	838	911	984	1,064	1,161	1,258
Capital account	63	62	78	80	83	87	91	96	100	105	110	115	121	127	133	139
Financial account	148	217	295	374	431	351	407	470	545	626	728	796	863	938	1,029	1,118
Investment assets and liabilities (net)	-314	-107	-35	42	78	-32	-10	17	59	111	182	217	261	313	377	449
Official, medium and long term	-170	-256	-94	-46	-22	-5	-4	-2	6	20	48	32	29	29	29	25
Commercial banks (net)	-235	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Private (net)	91	52	59	88	100	-26	-6	19	52	91	134	185	231	284	348	424
Short-term (net) and net errors and omissions 1/	462	324	330	332	353	383	417	453	487	516	546	579	603	625	652	669
Overall balance	-8	25	-30	-44	-31	29	46	46	58	79	117	117	110	104	116	121
Financing items	8	-25	30	44	31	-29	-46	-46	-58	-79	-117	-117	-110	-104	-116	-121
Reserve assets (gross)	-106	-167	-169	-111	-73	-151	-186	-171	-160	-174	-189	-205	-222	-241	-262	-257
Use of Fund credit and loans to the Fund (net)	2	-24	64	73	-12	-6	-12	-17	-34	-43	-43	-35	-27	-9	0	0
Change in arrears	-53	44	-103	0	0	0	0	0	0	0	0	0	0	0	0	0
Rescheduling	166	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Remaining gap	0	0	240	82	116	128	152	142	136	138	115	123	139	147	146	136

Sources: Kenyan authorities; and Fund staff estimates and projections.

1/ Includes underrecorded tourism earnings.

Table 26. Kenya: Balance of Payments in the Low-Case Scenario, 2000-15
(In millions of U.S. dollars, unless otherwise indicated)

	2000 Est.	2001 Proj.	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Current account	-220	-253	-376	-458	-526	-383	-389	-423	-456	-479	-501	-526	-553	-581	-610	-644
Excluding official transfers	-311	-340	-375	-456	-524	-381	-388	-422	-455	-478	-500	-524	-551	-580	-608	-643
Exports, f.o.b.	1,774	1,761	1,773	1,857	1,941	2,028	2,098	2,163	2,228	2,294	2,363	2,434	2,507	2,582	2,660	2,740
Coffee	154	86	83	91	107	125	141	150	155	160	164	169	174	180	185	191
Tea	463	456	474	498	521	544	560	577	600	625	650	676	703	732	761	792
Oil products	127	111	93	95	97	99	99	101	103	106	108	111	114	117	120	123
Other	1,030	1,107	1,122	1,173	1,216	1,260	1,298	1,335	1,369	1,404	1,440	1,477	1,515	1,554	1,594	1,635
Imports, f.o.b.	-2,965	-2,850	-2,780	-2,918	-3,058	-2,979	-3,056	-3,149	-3,239	-3,332	-3,428	-3,527	-3,629	-3,734	-3,842	-3,954
Public	-94	-94	-99	-102	-105	-109	-112	-118	-123	-129	-135	-141	-148	-155	-162	-170
Private	-2,871	-2,756	-2,682	-2,816	-2,953	-2,870	-2,944	-3,031	-3,116	-3,203	-3,293	-3,386	-3,481	-3,579	-3,680	-3,784
Oil	-850	-807	-677	-684	-694	-704	-696	-706	-722	-737	-753	-769	-786	-802	-820	-837
Other	-2,021	-1,949	-2,005	-2,132	-2,259	-2,167	-2,248	-2,324	-2,394	-2,466	-2,540	-2,617	-2,696	-2,777	-2,861	-2,947
Services (net)	245	241	220	208	198	181	165	140	126	123	121	117	113	109	104	98
Income (net)	-134	-154	-145	-144	-150	-155	-143	-131	-128	-127	-124	-122	-121	-121	-119	-122
Current transfers (net)	860	748	556	538	543	542	547	552	557	562	567	572	577	582	588	593
Capital and financial account	211	278	343	409	443	297	320	336	347	380	416	402	408	411	412	413
Capital account	63	62	71	73	76	80	84	89	93	98	103	108	114	120	126	132
Financial account	148	217	272	336	367	217	236	248	254	282	313	293	294	291	287	281
Investment assets and liabilities (net)	-314	-107	-60	16	43	-115	-114	-116	-117	-108	-88	-115	-121	-129	-138	-149
Official, medium and long term	-170	-256	-109	-61	-44	-36	-39	-42	-44	-40	-24	-53	-59	-69	-79	-94
Commercial banks (net)	-235	96	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Private (net)	91	52	49	77	87	-79	-75	-74	-73	-68	-64	-62	-61	-60	-59	-55
Short-term (net) and net errors and omissions 1/	462	324	332	319	324	332	350	364	371	390	401	408	415	421	424	430
Overall balance	-8	25	-33	-49	-82	-85	-69	-87	-109	-100	-85	-124	-145	-170	-198	-232
Financing items	8	-25	33	49	82	85	69	87	109	100	85	124	145	170	198	232
Reserve assets (gross)	-106	-167	21	27	46	36	-10	1	5	-9	-20	-21	-17	-17	-4	3
Use of Fund credit and loans to the Fund (net)	2	-24	-18	-18	-12	-6	-12	-9	-9	-9	-9	0	0	0	0	0
Change in arrears	-53	44	-103	0	0	0	0	0	0	0	0	0	0	0	0	0
Rescheduling	166	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Remaining gap	0	0	133	40	49	56	91	94	112	117	114	145	162	188	202	229

Sources: Kenyan authorities; and Fund staff estimates and projections.

1/ Includes underrecorded tourism earnings.

Impact on debt ratios in the high-case scenario

202.   **The results show a vast improvement in Kenya's external debt ratios in the high-case scenario, suggesting that the country's vulnerability to external shocks will be reduced over the medium and longer term.** As noted above, this scenario assumes that the relatively moderate financing gaps will be filled by concessional loans and grants. As this is a scenario in which the IMF- and IDA-supported program is implemented, it is likely that support from the IMF, as well as IDA, will catalyze additional resources from other sources.

203.   **The nominal stock of debt in the high-case scenario increases over the projection period from about US$5.3 billion at end-2000 to US$6.7 billion at end-2015.** This increase, however, is accompanied by a decline in the nominal stock of debt-to-GDP ratio from 51 percent at end-2000 to about 24 percent at end-2015. Both the NPV of debt and debt service are projected to fall over the period 2000-2005. This is due to several factors, including (i) the tailing off, by 2002, of a "hump" in debt service as a result of large payments due to commercial creditors and the Paris Club; (ii) the assumption that new loans are contracted on concessional terms; and (iii) the moderate amounts of new debt that are contracted. The NPV of debt falls from US$3.9 billion at end-2000 to below US$3.7 billion during 2002-05, before rising again to US$4.1 billion by end-2015. Projected debt service falls to a low of US$335 million in 2005 from US$511 million in 2000, before rising to US$384 million in 2015 (Table 27).

204.   **In determining whether a country is likely to run into solvency or liquidity problems, it is useful to examine two indicators[92]—the NPV of debt-to-exports ratio[93] and the debt-service ratio.** For open economies,[94] it is also important to track developments in the NPV of debt-to-fiscal revenue ratio and the debt service-to-fiscal revenue ratio as the high export base for these economies could lead to a low NPV of debt-to-exports ratio, potentially masking the fiscal debt burden. In the high-case scenario, all four of these ratios improve over the projection period (Figures 20-22). The ratios of the NPV of debt to exports and to fiscal revenue fall from 143 percent and 162 percent in 2000 to 60 percent and 61 percent by 2015, respectively. Similarly, the liquidity ratios (ratios of debt service to exports and to fiscal revenue) fall from 21 and 23 percent, respectively, to 6 percent (for both ratios) over the same period.

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[92] These ratios, of course, are only **indicators** of solvency and liquidity and need to be supplemented with a full analysis of a country's debt, external, and fiscal situation.

[93] The NPV of debt-to-exports ratio is reported as a percent of current year exports in this paper.

[94] With a ratio of exports (of goods and nonfactor services) to GDP of 27 percent in 2000, Kenya has a relatively open economy.

Table 27. Kenya: Debt Dynamics and Debt Indicators in the High-Case Scenario, 2000-15 1/
(In millions of US dollars, unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Nominal stock of debt 2/	5,327	5,257	5,191	5,328	5,398	5,500	5,620	5,728	5,822	5,921	6,027	6,134	6,260	6,410	6,569	6,715
Multilateral	3,001	3,022	3,173	3,362	3,480	3,617	3,768	3,912	4,038	4,158	4,268	4,386	4,518	4,672	4,835	4,992
Bilateral	1,889	1,754	1,703	1,681	1,666	1,663	1,666	1,667	1,665	1,673	1,678	1,676	1,679	1,683	1,688	1,688
Paris Club	1,845	1,704	1,635	1,594	1,563	1,543	1,529	1,512	1,494	1,484	1,471	1,449	1,432	1,415	1,401	1,381
Non-Paris Club	44	50	67	87	103	120	137	155	172	189	207	227	247	267	287	306
Commercial	378	378	316	285	252	220	186	149	118	90	82	72	64	55	46	36
Net present value (NPV) of debt 2/	3,933	3,792	3,638	3,667	3,664	3,682	3,722	3,752	3,773	3,781	3,822	3,860	3,904	3,966	4,034	4,093
Multilateral	1,615	1,596	1,669	1,769	1,826	1,897	1,981	2,061	2,126	2,184	2,241	2,300	2,364	2,445	2,533	2,617
Bilateral	1,868	1,767	1,697	1,651	1,614	1,586	1,571	1,553	1,536	1,511	1,502	1,489	1,476	1,465	1,454	1,438
Paris Club	1,832	1,726	1,645	1,585	1,538	1,498	1,473	1,442	1,414	1,381	1,360	1,332	1,304	1,279	1,252	1,222
Non-Paris Club	36	41	52	65	77	88	99	111	122	130	143	157	171	187	202	217
Commercial	390	325	271	247	223	198	170	138	111	85	79	71	64	56	47	37
Debt service due 3/	511	481	445	383	347	335	336	338	355	361	342	360	366	362	365	384
Principal	412	380	328	272	239	225	239	252	271	278	261	280	287	284	288	306
Interest	99	102	117	111	108	110	97	86	84	83	81	80	79	78	77	78
Stock of arrears	60	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ratios 2/																
NPV of debt to exports (in percent) 4/	143	139	132	129	123	115	108	102	96	90	85	80	75	71	68	64
NPV of debt to exports (in percent) 5/	143	139	131	123	115	107	101	95	89	84	79	75	70	67	63	60
NPV of debt to revenue (in percent)	162	151	137	130	122	114	107	101	94	88	83	78	73	69	65	61
NPV of debt to GDP (in percent)	38	36	33	31	29	27	25	24	22	21	19	18	17	16	15	14
Nominal stock of debt to GDP (in percent)	51	50	47	46	43	41	38	36	34	32	31	29	27	26	25	24
Debt-service ratio (in percent) 5/	21	21	16	13	11	10	9	9	8	8	7	7	7	6	6	6
Debt service to fiscal revenue (in percent)	23	23	17	14	12	10	10	9	9	8	7	7	7	6	6	6
Debt service to gross reserves (in percent)	64	55	36	28	24	21	19	18	17	16	14	14	13	12	11	11
Memorandum items:																
Exports of goods and nonfactor services	2,743	2,733	2,785	2,977	3,192	3,440	3,685	3,942	4,216	4,511	4,828	5,171	5,540	5,937	6,372	6,843
Three-year backward-looking average	2,757	2,721	2,754	2,832	2,985	3,203	3,439	3,689	3,948	4,223	4,518	4,837	5,180	5,549	5,949	6,384
Central government revenue, excluding grants	2,431	2,513	2,660	2,827	3,008	3,216	3,475	3,720	4,002	4,302	4,625	4,974	5,351	5,755	6,192	6,665
GDP	10,345	10,492	10,971	11,681	12,534	13,514	14,725	15,830	17,028	18,305	19,681	21,165	22,768	24,491	26,350	28,360
Gross official reserves	897	1,064	1,233	1,344	1,417	1,568	1,754	1,925	2,086	2,260	2,449	2,653	2,876	3,117	3,379	3,636

Sources: Kenyan authorities; and Fund staff estimates and projections.

1/ Includes the effects of the November 2000 rescheduling agreement with the Paris Club on Houston terms.
2/ Including arrears.
3/ Excluding arrears.
4/ Using three year backward looking average of exports.
5/ As a percentage of current year exports.

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Figure 20. Kenya: Ratio of Net Present Value of Debt to Exports, 2000-15
(In percent)
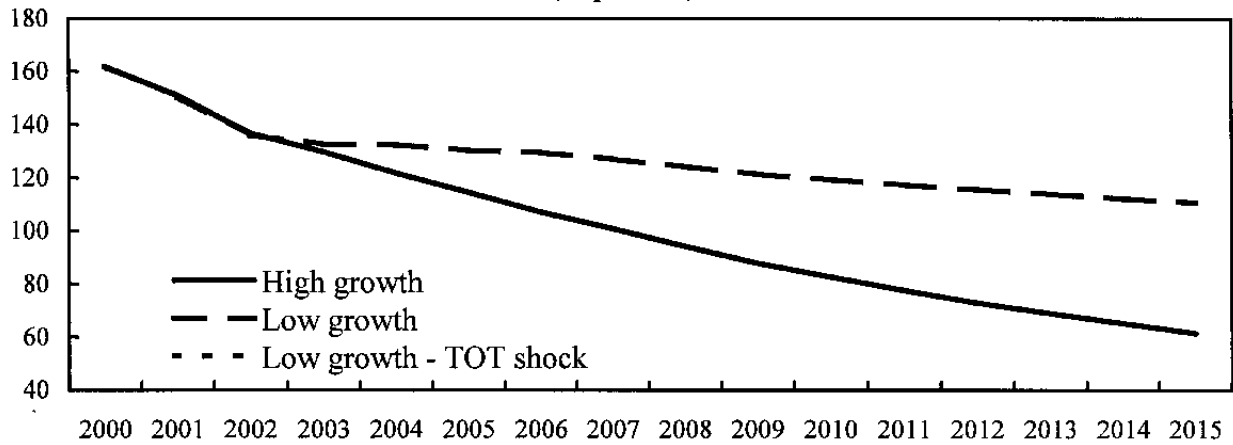
Figure 21. Kenya: Ratio of Debt Service to Exports, 2000-15
(In percent)
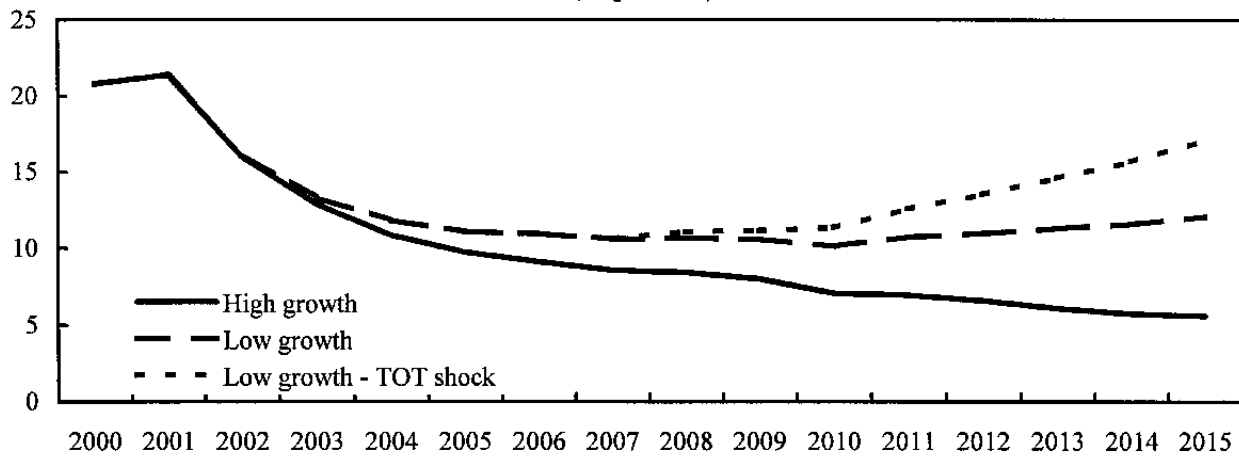
Figure 22. Kenya: Ratio of Debt Service to Fiscal Revenue, 2000-15
(In percent)
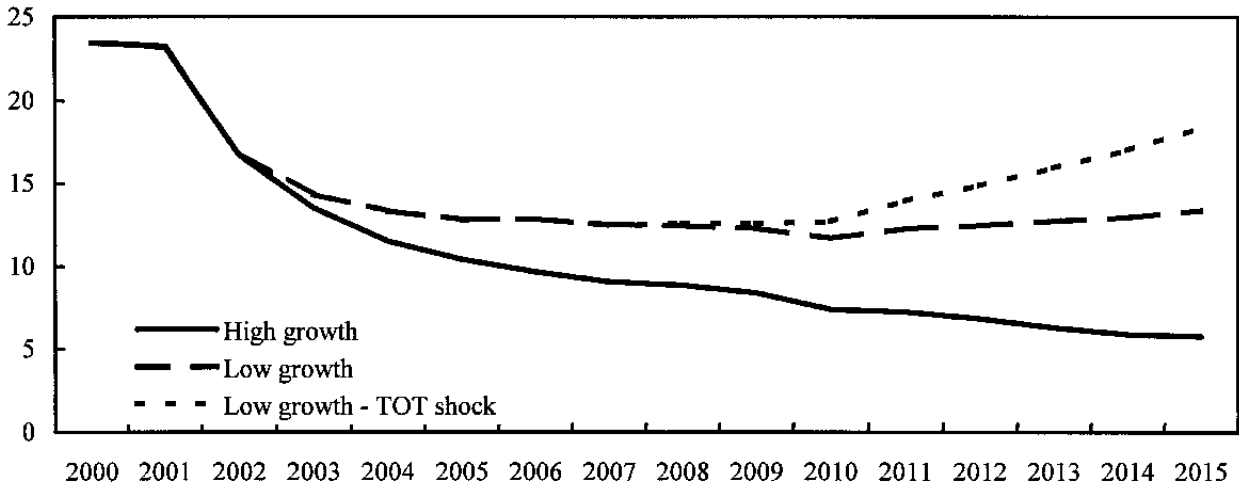
Source: Kenyan authorities and Fund staff estimates.

205. **The trends in these ratios indicate that, under a scenario of robust growth and a stable macroeconomic environment, Kenya's vulnerability to an external shock will lessen over the medium and longer terms.** The results of this scenario also point to the need to quickly bring the IMF- and IDA-supported program back on track and pursue the necessary reforms without delay and with a sustained effort.

Impact on debt ratios in the low-case scenario

206. **The low-case scenario presents a situation in which little or no adjustment is made and foreign (program) financing dries up.**[95] In order to maintain some order of stability and stem the decline in reserves, it is assumed that gross official reserves decline somewhat, but that the government also borrows nonconcessionally to fill the remaining external financing gaps. The same debt indicators as in the high-case scenario are presented, and then compared with the results in the high-case scenario (Figures 20-22). In addition, and in order to better examine Kenya's vulnerability to external shocks in the low-case scenario, a one-off terms of trade shock is assumed as a "subscenario."

207. **As in the high-case scenario, the nominal stock of debt increases over the projection period, but not by as much.** The smaller nominal stock is a result of less external borrowing, as a large portion of foreign financing is not available. As a percentage of GDP, the nominal stock of debt falls from 51 percent in 2000 to just under 40 percent in 2015. As in the high-case scenario, the NPV of debt falls in the early years, before rising in the outer years. By 2015, the NPV of debt in the low-case scenario is larger than that in the high-case scenario. This is due to the relative degree of concessionality assumed in the two scenarios.

208. **The key liquidity and solvency ratios still improve, although much more slowly than in the high-case scenario.** The ratios of the NPV of debt to exports and to fiscal revenue fall from 143 percent and 162 percent in 2000 to 100 percent and 111 percent in 2015, respectively. Similarly, the ratios of debt service to exports and to fiscal revenue also fall to 12 percent and 13 percent in 2015, respectively. As a percentage of gross official reserves, debt service remains relatively high (although it does decline) at nearly 50 percent of gross reserves by 2015. These results imply that Kenya would be more vulnerable to an external shock in the low-case scenario.

209. **To test the impact of an external shock in this scenario, it is assumed that a one-off terms of trade shock occurs in 2008. The terms of trade are assumed to deteriorate**

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[95] Although this scenario assumes that no program financing is disbursed over the projection period, project financing is assumed to continue to be disbursed, albeit at a lower level than in the high-case scenario.

by 4.4 percent in this year,[96] and return to the previous path in 2009. Additional financing gaps are assumed to be filled by new nonconcessional loans. The results of this simulation are presented in Table 28 and Figures 20-22. As expected, the four key ratios would deteriorate if a terms of trade shock occurred relative to both the low-case scenario and the high-case scenario. The ratio of the NPV of debt to exports falls until 2009, and then rises to 131 percent by 2015. The ratio of the NPV of debt to fiscal revenue follows a similar pattern, rising to 141 percent by 2015. The debt-service ratios (to both exports and fiscal revenue) fall throughout the early years before rising to almost 20 percent in 2015. Finally, the ratio of debt service to gross official reserves climbs to nearly 70 percent in 2015, a level higher than that in 2000. The results of this scenario show that Kenya's ability to withstand even a moderate terms of trade shock would be vastly diminished under conditions of low growth and economic stagnation.

210.   The results of the low-case scenario show that under conditions of low growth and high inflation, the associated loss of reserves and recourse to nonconcessional borrowing would increase Kenya's external vulnerability. The country's ability to withstand a terms of trade or other external shock would be impeded. Moreover, the lack of external program financing would further limit Kenya's access to concessional financing as a means of adjusting to an adverse external environment.

D. Conclusion

211.   Kenya's external vulnerability would be reduced over the medium and longer terms under conditions of robust economic growth and macroeconomic stability. As Kenya recovers from a period of high debt-service payments that existed throughout the 1990s and into 2001, its debt-service burden, as well as the stock of debt, have fallen. The high-case scenario shows that, with high growth and a stable macroeconomic environment, Kenya's debt should not be a cause of external vulnerability and the country should be able to accumulate a sufficient level of gross official reserves. Conversely, the low-case scenario, with its assumed recourse to nonconcessional borrowing and decline in gross reserves, would significantly worsen Kenya's ability to withstand an external shock.

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[96] The decline in the terms of trade is assumed to stem from a fall in tea and coffee prices alongside an increase in petroleum prices.

Table 28. Kenya: Debt Dynamics and Debt Indicators in the Low-Case Scenario, 2000-15 1/

(In millions of US dollars, unless otherwise indicated)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Nominal stock of debt 2/	5327	5257	5095	5071	5079	5113	5174	5237	5317	5405	5507	5619	5742	5880	6023	6177
Multilateral	3001	3022	3051	3080	3120	3172	3221	3279	3339	3402	3470	3541	3608	3677	3749	3824
Bilateral	1889	1754	1675	1613	1572	1541	1514	1487	1462	1447	1436	1418	1404	1391	1381	1370
Paris Club	1845	1704	1613	1539	1487	1446	1407	1368	1331	1303	1277	1243	1212	1182	1156	1127
Non-Paris Club	44	50	62	73	84	96	107	119	131	144	159	175	192	209	226	243
Commercial	378	378	369	378	387	400	439	471	516	557	601	660	730	811	893	984
Net present value (NPV) of debt 2/	3933	3792	3588	3533	3512	3509	3543	3575	3622	3662	3728	3801	3876	3962	4047	4137
Multilateral	1615	1596	1597	1606	1627	1658	1695	1737	1780	1825	1874	1922	1964	2006	2046	2086
Bilateral	1868	1767	1680	1607	1553	1506	1469	1431	1397	1358	1336	1311	1284	1260	1237	1211
Paris Club	1832	1726	1631	1550	1489	1434	1391	1345	1303	1258	1227	1189	1151	1115	1078	1040
Non-Paris Club	36	41	48	56	64	72	79	86	94	100	110	121	133	146	158	171
Commercial	390	325	311	320	332	346	379	407	445	479	518	569	628	696	764	840
Debt service due 3/	511	481	445	382	354	345	352	352	363	371	365	398	418	443	467	500
Principal	412	380	328	272	245	236	254	264	276	283	278	310	329	352	376	406
Interest	99	102	117	111	109	109	98	88	87	88	87	87	89	91	91	95
Stock of arrears	60	103	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ratios 2/																
NPV of debt to exports (in percent) 4/	143	139	131	127	122	117	114	111	109	108	106	106	105	104	103	103
NPV of debt to exports (in percent) 5/	143	139	130	123	117	113	110	108	106	105	104	103	102	101	100	100
NPV of debt to revenue (in percent)	162	150	136	133	132	130	130	127	124	121	119	117	116	114	112	111
NPV of debt to GDP (in percent)	38	36	33	32	32	31	31	30	29	29	28	28	27	27	26	26
Nominal stock of debt to GDP (in percent)	51	50	47	46	46	45	45	44	43	42	41	41	40	40	39	39
Debt-service ratio (in percent) 5/	21	21	16	13	12	11	11	11	11	11	10	11	11	11	12	12
Debt service to fiscal revenue (in percent)	23	23	17	14	13	13	13	13	12	12	12	12	12	13	13	13
Debt service to gross reserves (in percent)	64	55	43	38	36	37	37	37	39	39	38	40	42	43	45	49
Memorandum items:																
Exports of goods and nonfactor services	2743	2733	2754	2873	2991	3114	3214	3309	3404	3501	3602	3705	3812	3922	4035	4152
Three-year backward-looking average	2757	2721	2743	2787	2872	2992	3106	3212	3309	3405	3502	3603	3706	3813	3923	4036
Central government revenue, excluding grants	2431	2520	2640	2665	2653	2692	2736	2813	2913	3016	3124	3236	3354	3477	3604	3739
GDP	10,345	10,501	10,887	11,013	11,056	11,311	11,593	11,971	12,398	12,836	13,293	13,771	14,273	14,794	15,338	15,910
Gross official reserves	897	1,064	1,043	1,017	971	935	945	944	938	947	967	988	1,005	1,023	1,027	1,025
Terms of trade shock in 2008:																
NPV of debt 2/	3933	3792	3588	3533	3511	3508	3542	3574	3734	3893	4086	4297	4517	4760	5012	5278
Debt service 3/	511	481	445	382	354	345	352	352	367	380	397	452	499	555	613	687
NPV of debt to exports (in percent) 2/ 4/	143	139	131	127	122	117	114	111	114	117	120	123	126	129	132	135
NPV of debt to exports (in percent) 2/ 5/	143	139	130	123	117	113	110	108	113	114	117	119	122	125	128	131
NPV of debt to revenue (in percent) 2/	162	150	136	133	132	130	129	127	128	129	131	133	135	137	139	141
NPV of debt to GDP (in percent) 2/	38	36	33	32	32	31	31	30	30	30	31	31	32	32	33	33
Debt-service ratio (in percent) 2/ 5/	21	21	16	13	12	11	11	11	11	11	11	13	13	15	16	17
Debt service to fiscal revenue (in percent) 2/	23	23	17	14	13	13	13	12	13	13	13	14	15	16	17	18
Debt service to gross reserves (in percent) 2/	64	55	43	38	36	37	37	37	39	40	41	46	50	54	60	67
Exports of goods and nonfactor services	2743	2733	2754	2873	2991	3114	3214	3309	3308	3402	3498	3597	3700	3805	3914	4026
Three-year backward-looking average	2757	2721	2743	2787	2872	2992	3106	3212	3277	3340	3403	3499	3598	3701	3806	3915
Terms of trade	0.1	1.2	2.2	0.1	0.3	0.4	0.6	-0.1	-4.4	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0

Sources: Kenyan authorities and Fund staff estimates.

1/ Includes the effects of the November 2000 rescheduling agreement with the Paris Club on Houston terms.
2/ Including arrears
3/ Excluding arrears
4/ Using three year backward looking average of exports.
5/ Debt service as a percentage of current year exports.

Table 29. Kenya: Gross Domestic Product by Origin at Constant Prices, 1995-2000

	1995	1996	1997	1998	1999	2000 Prel.
	(In millions of Kenya shillings at 1982 prices)					
Primary sector	25,927	27,083	27,409	27,840	28,197	27,561
Agriculture, forestry, and fishing	25,692	26,843	27,165	27,593	27,945	27,307
Mining and quarrying	234	240	243	247	252	254
Secondary sector	18,112	18,729	19,110	19,381	19,572	19,309
Manufacturing	12,688	13,154	13,409	13,597	13,733	13,527
Construction	3,926	4,028	4,093	4,127	4,151	4,121
Utilities	1,499	1,548	1,608	1,658	1,689	1,661
Tertiary sector	49,764	52,339	53,954	55,032	55,933	56,487
Trade, restaurants, and hotels	11,049	11,934	12,407	12,693	12,947	13,077
Transport, storage, and communications	5,703	5,932	6,047	6,118	6,202	6,326
Finance, insurance, real estate, and business services	9,191	9,843	10,361	10,690	10,904	10,945
Ownership of dwellings	7,507	7,899	8,173	8,362	8,507	8,625
Other services[1]	16,314	16,733	16,965	17,168	17,373	17,514
GDP at factor cost	93,803	98,152	100,473	102,253	103,702	103,357
	(In percent of GDP)					
Primary sector	27.6	27.6	27.3	27.2	27.2	26.7
Agriculture, forestry, and fishing	27.4	27.3	27.0	27.0	26.9	26.4
Mining and quarrying	0.2	0.2	0.2	0.2	0.2	0.2
Secondary sector	19.3	19.1	19.0	19.0	18.9	18.7
Manufacturing	13.5	13.4	13.3	13.3	13.2	13.1
Construction	4.2	4.1	4.1	4.0	4.0	4.0
Utilities	1.6	1.6	1.6	1.6	1.6	1.6
Tertiary sector	53.1	53.3	53.7	53.8	53.9	54.7
Trade, restaurants, and hotels	11.8	12.2	12.3	12.4	12.5	12.7
Transport, storage, and communications	6.1	6.0	6.0	6.0	6.0	6.1
Finance, insurance, real estate, and business services	9.8	10.0	10.3	10.5	10.5	10.6
Ownership of dwellings	8.0	8.0	8.1	8.2	8.2	8.3
Other services[1]	17.4	17.0	16.9	16.8	16.8	16.9
GDP at factor cost	100.0	100.0	100.0	100.0	100.0	100.0
	(Annual percentage change)					
Primary sector	4.8	4.5	1.2	1.6	1.3	-2.3
Secondary sector	3.5	3.4	2.0	1.4	1.0	-1.3
Tertiary sector	5.3	5.2	3.1	2.0	1.6	1.0
GDP at factor cost	4.8	4.6	2.4	1.8	1.4	-0.3

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

[1] Includes general government.

Table 30. Kenya: Gross Domestic Product by Origin at Current Prices, 1995-2000

	1995	1996	1997	1998	1999	2000 Prel.
			(In millions of Kenya shillings)			
Primary sector	123,316	133,045	147,458	157,776	150,173	135,152
Agriculture, forestry, and fishing	122,592	132,304	146,642	156,953	149,179	134,010
Mining and quarrying	724	741	815	823	994	1,143
Secondary sector	62,348	73,527	82,148	96,865	112,972	124,731
Manufacturing	38,911	47,758	54,607	65,971	78,535	87,974
Construction	18,340	20,015	21,263	23,933	27,070	29,134
Utilities	5,097	5,754	6,278	6,962	7,368	7,624
Tertiary sector	208,103	243,049	306,659	338,711	374,217	412,336
Trade, restaurants, and hotels	64,760	82,895	109,804	123,453	137,316	150,253
Transport, storage, and communications	30,313	35,471	41,816	43,255	45,617	49,892
Finance, insurance, real estate, and						
business services	46,768	55,719	68,747	75,010	76,078	69,750
Ownership of dwellings	22,963	26,132	29,058	30,614	33,391	37,048
Other services[1]	43,300	42,832	57,234	66,380	81,815	105,393
GDP at factor cost	393,766	449,621	536,264	593,353	637,362	672,219

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

[1]Includes general government.

Table 31. Kenya: Expenditure on Gross Domestic Product at Constant Prices, 1995-2000

	1995	1996	1997	1998	1999	2000 Prel.
	(In millions of Kenya shillings at 1982 prices)					
Final consumption expenditures	105,398	108,346	115,386	115,660	111,625	118,095
Private sector	75,454	77,591	83,329	82,545	77,074	82,046
General government	29,944	30,755	32,057	33,115	34,551	36,049
Gross capital formation	19,699	20,601	21,908	22,177	21,511	20,582
Fixed capital formation	18,468	18,701	19,080	19,051	18,167	17,706
General government	3,934	3,339	3,590	3,380	3,195	3,036
Private sector	14,534	15,362	15,491	15,672	14,972	14,670
Change in inventories	1,231	1,900	2,827	3,126	3,344	2,876
Gross domestic expenditure	125,096	128,947	137,293	137,837	133,136	138,676
Net exports	-17,502	-16,889	-22,890	-21,597	-15,394	-21,226
Exports of goods and services	33,099	34,633	29,987	28,438	32,036	34,786
Imports of goods and services	-50,601	-51,522	-52,876	-50,035	-47,430	-56,012
GDP at market prices	107,595	112,058	114,403	116,240	117,742	117,450
Net indirect taxes	13,792	13,906	13,930	13,988	14,040	14,094
GDP at factor cost	93,803	98,152	100,473	102,253	103,702	103,357
	(In percent of GDP at market prices)					
Final consumption expenditures	98.0	96.7	100.9	99.5	94.8	100.5
Private sector	70.1	69.2	72.8	71.0	65.5	69.9
General government	27.8	27.4	28.0	28.5	29.3	30.7
Gross capital formation	18.3	18.4	19.1	19.1	18.3	17.5
Fixed capital formation	17.2	16.7	16.7	16.4	15.4	15.1
General government	3.7	3.0	3.1	2.9	2.7	2.6
Private sector	13.5	13.7	13.5	13.5	12.7	12.5
Change in inventories	1.1	1.7	2.5	2.7	2.8	2.4
Gross domestic expenditure	116.3	115.1	120.0	118.6	113.1	118.1
Net exports	-16.3	-15.1	-20.0	-18.6	-13.1	-18.1
Exports of goods and services	30.8	30.9	26.2	24.5	27.2	29.6
Imports of goods and services	-47.0	-46.0	-46.2	-43.0	-40.3	-47.7
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0
	(Annual percentage change)					
Final consumption expenditures	13.0	2.8	6.5	0.2	-3.5	5.8
Private sector	14.3	2.8	7.4	-0.9	-6.6	6.5
General government	9.8	2.7	4.2	3.3	4.3	4.3
Gross capital formation	14.9	4.6	6.3	1.2	-3.0	-4.3
Fixed capital formation	15.4	1.3	2.0	-0.2	-4.6	-2.5
General government	57.3	-15.1	7.5	-5.8	-5.5	-5.0
Private sector	7.7	5.7	0.8	1.2	-4.5	-2.0
Change in inventories	8.0	54.4	48.8	10.6	7.0	-14.0
Gross domestic expenditure	13.3	3.1	6.5	0.4	-3.4	4.2
Net exports						
Exports of goods and services	-7.3	4.6	-13.4	-5.2	12.7	8.6
Imports of goods and services	17.5	1.8	2.6	-5.4	-5.2	18.1
GDP at market prices	4.4	4.1	2.1	1.6	1.3	-0.2
Net indirect taxes	1.7	0.8	0.2	0.4	0.4	0.4
GDP at factor cost	4.8	4.6	2.4	1.8	1.4	-0.3

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

Table 32. Kenya: Expenditure on Gross Domestic Product at Current Prices, 1995-2000

	1995	1996	1997	1998	1999	2000 Prel.
	(In millions of Kenya shillings)					
Final consumption expenditures	391,298	443,965	553,888	623,651	663,805	744,487
Private sector	322,241	359,442	453,176	510,083	537,862	602,353
General government	69,057	84,523	100,712	113,568	125,943	142,134
Gross capital formation	101,517	107,470	115,270	120,068	120,065	122,697
Fixed capital formation	99,497	104,470	109,870	113,858	112,923	116,555
General government	19,951	18,813	19,474	19,113	18,640	19,359
Private sector	79,545	85,657	90,396	94,745	94,283	97,196
Change in inventories	2,020	3,000	5,400	6,210	7,142	6,142
Gross domestic expenditure	492,814	551,435	669,157	743,719	783,870	867,184
Net exports	-27,542	-22,695	-45,922	-52,877	-43,539	-78,267
Exports of goods and services	152,596	172,459	174,846	171,895	188,693	208,800
Imports of goods and services	-180,139	-195,155	-220,769	-224,772	-232,233	-287,067
GDP at market prices	465,272	528,739	623,235	690,842	740,330	788,917
Net indirect taxes	71,505	79,118	86,971	97,489	102,968	116,698
GDP at factor cost	393,767	449,621	536,264	593,353	637,362	672,219
	(In percent of GDP)					
Final consumption expenditures	84.1	84.0	88.9	90.3	89.7	94.4
Private sector	69.3	68.0	72.7	73.8	72.7	76.4
General government	14.8	16.0	16.2	16.4	17.0	18.0
Gross capital formation	21.8	20.3	18.5	17.4	16.2	15.6
Fixed capital formation	21.4	19.8	17.6	16.5	15.3	14.8
General government	4.3	3.6	3.1	2.8	2.5	2.5
Private sector	17.1	16.2	14.5	13.7	12.7	12.3
Change in inventories	0.4	0.6	0.9	0.9	1.0	0.8
Gross domestic expenditure	105.9	104.3	107.4	107.7	105.9	109.9
Net exports	-5.9	-4.3	-7.4	-7.7	-5.9	-9.9
Exports of goods and services	32.8	32.6	28.1	24.9	25.5	26.5
Imports of goods and services	-38.7	-36.9	-35.4	-32.5	-31.4	-36.4
GDP at market prices	100.0	100.0	100.0	100.0	100.0	100.0
	(Annual percentage change, unless otherwise indicated)					
Final consumption expenditures	25.9	13.5	24.8	12.6	6.4	12.2
Private sector	28.9	11.5	26.1	12.6	5.4	12.0
General government	13.7	22.4	19.2	12.8	10.9	12.9
Gross capital formation	31.3	5.9	7.3	4.2	0.0	2.2
Fixed capital formation	31.6	5.0	5.2	3.6	-0.8	3.2
General government	73.9	-5.7	3.5	-1.9	-2.5	3.9
Private sector	24.0	7.7	5.5	4.8	-0.5	3.1
Change in inventories	20.0	48.5	80.0	15.0	15.0	-14.0
Gross domestic expenditure	27.0	11.9	21.3	11.1	5.4	10.6
Net exports						
Exports of goods and services	2.9	13.0	1.4	-1.7	9.8	10.7
Imports of goods and services	32.8	8.3	13.1	1.8	3.3	23.6
GDP at market prices	16.1	13.6	17.9	10.8	7.2	6.6
Memorandum items:						
Current account deficit, (including official transfers (in percent of GDP)	14.0	16.2	14.8	15.3	15.0	15.7
National savings (in percent of GDP)	35.8	36.6	33.3	32.7	31.2	31.3
Of which: central government	5.9	4.0	2.8	4.3	4.1	2.3

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

Table 33. Kenya: Gross Domestic Product, GDP Deflator, Population,
and Real Per Capita GDP, 1987-2000

	GDP at Market Prices		GDP Deflator	Population	Real Per Capita GDP
	1982 prices	Current prices			
	(In millions of Kenya shillings)		(Index, 1982=100)	(In millions)	(In Kenya shillings)
1987	85,833	131,169	152.8	21.3	4,027
1988	91,044	148,284	162.9	22.1	4,128
1989	95,369	170,406	178.7	22.8	4,182
1990	99,434	196,435	197.6	23.6	4,222
1991	100,864	224,232	222.3	24.3	4,154
1992	100,058	264,473	264.3	25.0	4,005
1993	100,411	333,613	332.2	25.7	3,913
1994	103,055	400,679	388.8	26.3	3,917
1995	107,595	465,272	432.4	26.9	3,997
1996	112,058	528,739	471.8	27.5	4,069
1997	114,403	623,235	544.8	28.2	4,062
1998	116,240	690,842	594.3	28.8	4,038
1999	117,742	740,330	628.8	29.4	4,003
2000	117,450	788,917	650.0	30.1	3,908
			(Annual percentage change)		
1987	5.9	11.7	5.4	3.8	2.0
1988	6.1	13.0	6.6	3.5	2.5
1989	4.8	14.9	9.7	3.4	1.3
1990	4.3	15.3	10.6	3.3	1.0
1991	1.4	14.2	12.5	3.1	-1.6
1992	-0.8	17.9	18.9	2.9	-3.6
1993	0.4	26.1	25.7	2.7	-2.3
1994	2.6	20.1	17.0	2.5	0.1
1995	4.4	16.1	11.2	2.3	2.0
1996	4.1	13.6	9.1	2.3	1.8
1997	2.1	17.9	15.5	2.3	-0.2
1998	1.6	10.8	9.1	2.2	-0.6
1999	1.3	7.2	5.8	2.2	-0.8
2000	-0.2	6.6	3.4	2.2	-2.4

Sources: Government of Kenya, *Economic Survey*, various issues; World Bank, *World Development Indicators*, various issues; and Fund staff estimates.

Table 34. Kenya: Gross Fixed Capital Formation at Current Prices, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
	(In millions of Kenya shillings)					
Gross fixed capital formation	99,497	104,909	109,026	112,846	111,556	116,425
General government	19,951	18,813	19,474	19,113	18,640	19,359
Enterprises and nonprofit institutions	79,546	86,096	89,551	93,733	92,916	97,066
Agriculture, forestry, and fishing	7,152	6,896	6,992	8,118	7,714	8,314
Mining and quarrying	715	741	877	972	1,082	1,087
Manufacturing	19,233	23,458	24,203	25,118	23,869	23,978
Construction and ownership of dwellings	11,494	11,634	13,945	13,672	14,000	16,189
Utilities	5,139	7,837	6,983	8,527	8,358	9,243
Finance, insurance, real estate, and business services	4,057	4,485	4,831	4,890	5,114	5,212
Trade, restaurants, and hotels	3,684	3,391	3,846	3,657	3,756	3,505
Transport, storage, and communications	24,253	24,253	24,253	24,253	24,253	24,253
Other services	3,819	3,400	3,622	4,527	4,770	5,284
	(In percent of GDP, unless otherwise indicated)					
Gross fixed capital formation	21.4	19.8	17.5	16.3	15.1	14.8
General government	4.3	3.6	3.1	2.8	2.5	2.5
Enterprises and nonprofit institutions	17.1	16.3	14.4	13.6	12.6	12.3
Agriculture, forestry, and fishing	1.5	1.3	1.1	1.2	1.0	1.1
Mining and quarrying	0.2	0.1	0.1	0.1	0.1	0.1
Manufacturing	4.1	4.4	3.9	3.6	3.2	3.0
Construction and ownership of dwellings	2.5	2.2	2.2	2.0	1.9	2.1
Utilities	1.1	1.5	1.1	1.2	1.1	1.2
Finance, insurance, real estate, and business services	0.9	0.8	0.8	0.7	0.7	0.7
Trade, restaurants, and hotels	0.8	0.6	0.6	0.5	0.5	0.4
Transport, storage, and communications	5.2	4.6	3.9	3.5	3.3	3.1
Other services	0.8	0.6	0.6	0.7	0.6	0.7
Memorandum item:						
GDP at market prices (in millions of Kenya shillings)	465,272	528,739	623,235	690,842	740,330	788,917

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

Table 35. Kenya: Sales of Agricultural Production to the Marketing Boards, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
	(In thousands of metric tons)[1]					
Coffee	95.8	103.2	68.0	51.0	64.3	98.0
Tea	244.5	257.2	220.7	294.0	248.8	236.3
Maize	401.0	295.5	204.6	218.0	223.5	201.2
Wheat	125.5	130.0	124.2	177.0	52.9	70.5
Rice (paddy)	14.6	15.9	14.4	12.0	24.3	18.7
Sugarcane	4,034.9	3,870.5	4,278.3	4,661.0	4,400.0	3,900.0
Cotton	0.2	0.5	0.5	1.0	0.2	0.5
Sisal	27.9	28.1	20.1	18.0	21.9	21.4
Pyrethrum extract	122.8	93.0	89.4	67.0	78.1	74.2
	(Annual percentage change)					
Coffee	17.5	7.7	-34.1	-25.0	26.1	52.4
Tea	16.8	5.2	-14.2	33.2	-15.4	-5.0
Maize	26.9	-26.3	-30.8	6.5	2.5	-10.0
Wheat	19.3	3.6	-4.5	42.5	-70.1	33.3
Rice (paddy)	8.1	8.9	-9.4	-16.7	102.5	-23.0
Sugarcane	22.0	-4.1	10.5	8.9	-5.6	-11.4
Cotton	-88.9	150.0	0.0	100.0	-80.0	150.0
Sisal	-17.9	0.7	-28.5	-10.4	21.7	-2.3
Pyrethrum extract	-28.7	-24.3	-3.9	-25.1	16.6	-5.0

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

[1]Except pyrethrum, which is expressed in metric tons.

Table 36. Kenya: Value of Agricultural Production Sold to the Marketing Boards, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
(In millions of Kenya shillings)						
Coffee	15,289	14,358	16,546	13,198	10,050	11,282
Tea	16,596	20,336	23,635	39,137	31,088	35,970
Maize	3,208	3,119	2,809	2,986	3,097	2,915
Wheat	1,632	2,113	2,198	2,800	1,005	1,133
Sugarcane	6,824	7,125	6,644	7,967	7,639	7,942
Sisal	535	546	781	795	875	810
Pyrethrum extract	442	335	322	350	406	729
Livestock and derivatives	14,158	14,239	14,785	14,109	15,461	13,949
Other	2,189	2,877	3,414	3,458	4,109	4,045
Total	60,873	65,048	71,134	84,802	73,731	78,775
(In percentage of total value)						
Coffee	25.1	22.1	23.3	15.6	13.6	14.3
Tea	27.3	31.3	33.2	46.2	42.2	45.7
Maize	5.3	4.8	3.9	3.5	4.2	3.7
Wheat	2.7	3.2	3.1	3.3	1.4	1.4
Sugarcane	11.2	11.0	9.3	9.4	10.4	10.1
Sisal	0.9	0.8	1.1	0.9	1.2	1.0
Pyrethrum extract	0.7	0.5	0.5	0.4	0.6	0.9
Livestock and derivatives	23.3	21.9	20.8	16.6	21.0	17.7
Other	3.6	4.4	4.8	4.1	5.6	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

Table 37. Kenya: Average Prices to Producers For Selected Commodities, 1995-2000

	1995	1996	1997	1998	1999	2000 Prel.
	(Kenya shillings per hundred kilograms, unless otherwise indicated)					
Coffee	15,966	13,914	25150	25,178	15,632	11,509
Tea	6,787	7,908	10680	13,300	12,500	15,223
Maize	800	1,055	1373	1,284	1,386	1,449
Wheat	1,300	1,563	1,770	1,690	1,815	1,652
Sugar cane (per ton)	1,553	1,553	1,553	1,730	1,730	2,015
Seed cotton	1,720	2,136	2,000	2,096	2,100	1,910
Sisal	1,915	1,915	3,891	3,974	3,990	3,779
Pyrethrum extract (per kilogram)	3,600	3,600	3,600	5,200	5,200	9,835
Beef (third grade)	3,300	3,400	3,580	3,824	4,799	8,154
Bacon	6,500	6,600	8,174	7,651	8,164	9,022
Milk (per hundred liters)	1,450	1,250	1,450	1,549	1,494	1,500
	(Annual percentage change)					
Coffee	10.7	-12.9	80.8	0.1	-37.9	-26.4
Tea	-22.4	16.5	35.1	24.5	-6.0	21.8
Maize	-15.8	31.9	30.1	-6.5	7.9	4.6
Wheat	8.3	20.2	13.2	-4.5	7.4	-9.0
Sugarcane(per ton)	0.0	0.0	0.0	11.4	0.0	16.5
Seed cotton	-10.1	24.2	-6.4	4.8	0.2	-9.0
Sisal	74.1	0.0	103.2	2.1	0.4	-5.3
Pyrethrum extract (per kilogram)	65.5	0.0	0.0	44.4	0.0	89.1
Beef (third grade)	10.0	3.0	5.3	6.8	25.5	69.9
Bacon	9.0	1.5	23.8	-6.4	6.7	10.5
Milk (per hundred liters)	16.0	-13.8	16.0	6.8	-3.6	0.4

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

[1]These prices are for calendar-year deliveries and reflect actual payouts, although average prices for two seasons that overlap during a calendar year may have differed. For coffee and tea, the prices are processed coffee and made tea, respectively.

Table 38. Kenya: Quantity Index of Manufacturing Output, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
			(Indices, 1976=100)			
Food processing	194.3	194.2	195.3	200.1	204.9	199.4
Beverages and tobacco	230.8	207.5	203.0	203.7	159.7	166.1
Textiles	136.5	125.7	119.6	118.6	118.7	115.5
Clothing	153.0	152.0	142.4	148.4	154.8	176.2
Leather and footwear	65.7	68.8	61.6	57.9	48.6	54.6
Wood and cork products	73.4	74.8	74.9	73.4	82.3	75.1
Furniture and fixtures	52.5	54.5	54.7	55.9	55.9	56.1
Paper and paper products	153.0	192.1	196.5	222.3	238.1	258.5
Printing and publishing	451.6	465.0	465.9	465.9	466.4	424.5
Basic industrial chemicals	209.0	201.6	157.5	168.8	162.6	140.6
Petroleum and other chemicals	492.0	531.7	591.7	594.8	616.8	659.4
Rubber products	621.0	630.9	678.0	668.3	590.8	588.1
Plastic products	384.7	397.5	510.9	608.7	697.6	781.8
Clay and glass products	2,099.9	2,376.3	2,254.6	2,437.0	1,623.0	1,191.7
Nonmetallic minerals	209.6	219.5	230.6	216.7	216.9	153.8
Metal products	206.8	246.4	298.6	252.9	270.1	238.1
Nonelectrical machinery	78.1	113.9	88.7	86.7	85.1	86.1
Electrical machinery	253.7	266.9	213.3	221.9	188.4	188.7
Transport equipment	529.0	713.7	594.9	433.3	360.1	241.5
Miscellaneous manufactures	472.3	569.1	661.6	765.2	917.5	1,149.6
Total manufacturing	263.9	272.9	278.1	282.2	285.6	281.4
			(Annual percentage change)			
Food processing	15.9	-0.1	0.6	2.5	2.4	-2.7
Beverages and tobacco	5.2	-10.1	-2.2	0.3	-21.6	4.0
Textiles	-27.0	-7.9	-4.9	-0.8	0.1	-2.7
Clothing	-16.8	-0.7	-6.3	4.2	4.3	13.8
Leather and footwear	-32.1	4.7	-10.5	-6.0	-16.1	12.3
Wood and cork products	-3.4	1.9	0.1	-2.0	12.1	-8.7
Furniture and fixtures	3.8	3.8	0.4	2.2	0.0	0.4
Paper and paper products	-1.7	25.6	2.3	13.1	7.1	8.6
Printing and publishing	6.3	3.0	0.2	0.0	0.1	-9.0
Basic industrial chemicals	-1.9	-3.5	-21.9	7.2	-3.7	-13.5
Petroleum and other chemicals	8.5	8.1	11.3	0.5	3.7	6.9
Rubber products	1.2	1.6	7.5	-1.4	-11.6	-0.5
Plastic products	6.1	3.3	28.5	19.1	14.6	12.1
Clay and glass products	18.6	13.2	-5.1	8.1	-33.4	-26.6
Nonmetallic minerals	-1.0	4.7	5.1	-6.0	0.1	-29.1
Metal products	0.9	19.1	21.2	-15.3	6.8	-11.8
Nonelectrical machinery	-22.1	45.8	-22.1	-2.3	-1.8	1.2
Electrical machinery	12.2	5.2	-20.1	4.0	-15.1	0.2
Transport equipment	-7.4	34.9	-16.6	-27.2	-16.9	-32.9
Miscellaneous manufactures	6.6	20.5	16.3	15.7	19.9	25.3
Total manufacturing	3.6	3.4	1.9	1.5	1.2	-1.5

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

Table 39. Kenya: Selected Statistics on Construction Activity, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
Cement consumption (in thousands of tons)	1,065	1,162	1,137	1,072	1,014	846
Value added at constant prices (in millions of Kenya shillings at 1982 prices)	3,926	4,028	4,093	4,127	4,151	4,121
Employment (in thousands)	76.4	78.8	79.8	79.2	78.7	78.0
Value of building plans approved (in millions of Kenya shillings)	12,755	15,125	15,052	12,752	11,130	9,975
New private buildings in main towns						
Number	1,343	1,492	1,482	1,472	1,135	1,024
Value (in millions of Kenya shillings)	1,324	1,465	1,610	1,530	1,275	994
New public buildings in main towns						
Number	142	109	99	73	55	21
Value (in millions of Kenya shillings)	60	46	44	31	26	16

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

Table 40. Kenya: Energy Supply-and-Demand Balances, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
Petroleum	(In thousands of tons)					
Demand	2,526.3	2,784.2	2,921.9	2942.1	3029.1	2986.3
Domestic demand	2,159.2	2,333.4	2,268.9	2293.2	2401.8	2544.4
Liquefied gas	31.2	31.2	30.7	31.3	32.2	33.4
Premium and regular gasoline	378.7	399.3	390.6	395.8	384.6	365.7
Aviation spirit	5.7	4.6	4.1	3.2	2.5	2.2
Jet/turbo fuel	433.7	444.6	431.9	419.4	418.7	432.2
Illuminating kerosene	243.1	253.8	267.6	318.2	406.8	383.7
Light diesel oil	603.1	646.3	615.9	607.5	601.7	712.8
Heavy diesel oil	23.5	26.6	47.6	26.4	25.7	28.1
Fuel oil	347.5	424.2	386.9	397.3	439.4	490.0
Refinery usage	92.7	102.8	93.6	94.1	90.2	96.3
Export demand	367.1	450.8	653	648.9	627.3	441.9
Supply	2,526.3	2,784.2	2,921.9	2942.1	3029.1	2986.3
Imports of crude oil	1,680.3	1,412.9	1,833.7	2157.7	2139.3	2452.3
Petroleum fuels	719.7	963.9	893.7	1387.8	1250.9	874.9
Adjustment	126.3	407.4	194.5	603.4	-361.1	-340.9
Electricity	(In millions of kilowatt-hours)					
Demand	3,223	3,408	3,555	3,615	3,717	
Domestic	636	674	697	761	804	
Off peak	119	100	86	89	92	
Large industrial and commercial	1,356	1,491	1,536	1,526	1,513	
Medium industrial and commercial	569	618	657	667	680	
Small commercial	364	375	418	414	466	
Street lighting	19	12	10	11	9	
Rural electrification	134	138	150	147	153	
Staff quarters	26	0	0	0	0	
Supply	3,866	4,119	4,296	4,516	4,637	
Net generation	3,679	3,970	4,152	4,370	4,497	
Imports from Uganda	187	149	144	146	140	

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

Table 41. Kenya: Employment by Industry and Sector, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
Total employment	1,557,015	1,618,841	1,647,434	1,664,904	1,673,550	1,676,600
Agriculture and forestry	294,045	302,940	305,558	308815	311,257	310,900
Mining and quarrying	4,720	4,851	4,964	5040	5,162	5,300
Manufacturing	204,790	210,423	214,493	216889	219,604	217,900
Electricity and water	22,842	23,356	23,445	23184	22,713	22,300
Building and construction	76,445	78,811	79,924	79256	78,647	78,000
Wholesale and retail trade	134,887	143,177	148,204	150727	153,629	155,300
Transport and communications	79,045	86,267	85,852	84980	83,805	83,400
Finance, insurance, and business services	78,044	81,051	83,165	84003	84,528	84,600
Community, social, and personal services	662,197	687,965	701,829	712010	714,205	718,900
Private sector	866,984	917,939	946,786	967,193	990,315	1,002,800
Agriculture and forestry	226,812	236,572	240,594	245,207	249,577	251300
Mining and quarrying	4,003	4,133	4,264	4,345	4,497	4600
Manufacturing	165,478	172,269	177,082	180,783	184,036	182900
Electricity and water	1,256	1,332	1,488	1,480	1,521	1500
Building and construction	47,107	49,592	51,593	51,856	52,163	52300
Wholesale and retail trade	127,921	136,185	141,680	144,327	147,306	149100
Transport and communications	38,070	41,443	43,100	43,083	43,660	44500
Finance, insurance, and business services	59,723	62,613	65,358	66,803	68,119	68800
Community, social, and personal services	196,614	213,800	221,627	229,309	239,436	247800
Public sector	690,031	700,902	700,648	697,711	683,235	673,800
Agriculture and forestry	67,233	66,368	64,964	63,608	61,680	59,600
Mining and quarrying	717	718	700	695	665	700
Manufacturing	39,312	38,154	37,411	36,106	35,568	35,000
Electricity and water	21,586	22,024	21,957	21,704	21,192	20,800
Building and construction	29,338	29,219	28,331	27,400	26,484	25,700
Wholesale and retail trade	6,966	6,992	6,524	6,400	6,323	6,200
Transport and communications	40,975	44,824	42,752	41,897	40,145	38,900
Finance, insurance, and business services	18,321	18,438	17,807	17,200	16,409	15,800
Community, social, and personal services	465,583	474,165	480,202	482,701	474,769	471,100

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

Table 42. Kenya: Average Wage Earnings per Employee by Industry and Sector, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
			(In Kenya shillings)			
Private and public sector	70,381	82,428	99,714	121,240	139,940	163,790
Private sector	70,461	86,267	103,704	124,938	146,087	168,301
Agriculture and forestry	28,976	35,626	42,658	50,937	59,292	66,031
Mining and quarrying	46,638	54,562	62,437	71,252	80,320	89,196
Manufacturing	76,909	94,247	113,956	135,791	158,034	174,464
Electricity and water	80,557	99,408	123,362	161,482	198,471	216,933
Building and construction	65,375	80,839	96,905	116,427	136,234	151,530
Wholesale and retail trade	103,397	127,082	153,343	183,901	215,341	251,307
Transport and communications	115,135	139,762	151,437	197,040	227,428	268,852
Finance, insurance, and business services	144,080	173,421	205,833	241,641	277,763	320,497
Community, social, and personal services	62,089	75,771	92,893	113,564	135,523	161,988
Public sector	70,280	77,401	94,323	116,114	131,032	157,077
Agriculture and forestry	37,175	47,817	59,931	73,671	85,692	96,602
Mining and quarrying	76,195	84,635	103,911	123,335	139,669	154,429
Manufacturing	65,642	69,359	113,331	132,804	149,479	141,771
Electricity and water	99,489	114,637	143,154	171,369	196,791	202,784
Building and construction	58,024	71,365	86,972	101,503	113,138	122,798
Wholesale and retail trade	86,920	101,703	124,913	148,551	168,515	188,097
Transport and communications	93,081	104,589	128,436	184,210	237,190	250,761
Finance, insurance, and business services	173,052	202,949	281,601	363,119	433,290	377,032
Community, social, and personal services	68,561	73,010	85,285	103,651	113,669	150,234

Sources: Government of Kenya, *Statistical Abstract* and *Economic Survey*, various issues.

Table 43. Kenya: Employment and Earnings in the Public Sector, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
	(In thousands)					
Employment	690.0	700.9	700.6	697.7	683.2	673.9
Central government	241.4	228.0	219.1	214.1	208.5	204.2
Teachers' Service Commission	219.1	232.9	241.3	247.7	242.3	236.8
Parastatal bodies[1]	111.4	114.3	112.8	108.9	105.3	104.3
Other public sector [2]	50.3	53.9	52.5	49.9	48.5	48.4
Local governments	67.8	71.8	74.9	77.1	78.7	80.2
	(In millions of Kenya shillings)					
Gross earnings	45,188	55,218	66,066	85,224	89,524	
Central government	16,788	18,304	20,810	26,128	26,318	
Teachers' Service Commission	11,060	14,570	18,304	25,576	25,928	
Parastatal bodies[1]	8,472	10,170	11,866	14,408	15,650	
Other public sector [2]	4,438	5,938	7,158	8,718	9,506	
Local governments	4,430	6,236	7,928	10,394	12,122	
	(In Kenya shillings)					
Average monthly earnings	5,457	6,565	7,858	10,179	10,919	
Central government	5,307	6,690	7,915	10,170	10,519	
Teachers' Service Commission	5,145	5,213	6,321	8,604	8,917	
Parastatal bodies[1]	6,003	7,415	8,766	11,025	12,385	
Other public sector [2]	6,221	9,181	11,362	14,559	16,333	
Local governments	5,439	7,237	8,821	11,234	12,836	

Source: Government of Kenya, *Statistical Abstract*, various issues.

[1]Includes Kenya Railways, Kenya Ports Authority, Kenya Post and Telecommunications Corporation, and Kenya Airways.

Table 44. Kenya: Consumer Price Indices (CPI), December 1994-December 2001

(Index, February-March 1986 = 100)

	1994 Dec.	1995 Dec.	1996 Dec.	1997 Dec.	1998 Mar.	1998 June	1998 Sep.	1998 Dec.	1999 Mar.	1999 June	1999 Sep.	1999 Dec.	2000 Mar.	2000 June	2000 Sep.	2000 Dec.	2001 Mar.	2001 June	2001 Sep.	2001 Dec.
Lower-income group CPI	446	476	529	570	621	620	587	580	622	627	626	623	637	661	668	670	658	653	647	643
Food	421	459	507	561	607	617	563	548	607	610	604	592	598	630	621	619	603	590	577	569
Drinks and tobacco	469	505	567	588	598	608	609	611	638	636	640	648	657	711	732	753	741	766	780	795
Clothing and footwear	342	308	364	378	378	365	378	385	398	401	403	408	416	419	430	435	440	448	441	448
Rent	545	581	645	696	758	757	717	708	759	765	764	761	777	807	816	818	804	797	790	784
Fuel and power	336	384	442	460	563	527	476	478	451	513	523	548	547	587	605	638	624	658	636	602
Household equipment	356	376	411	426	427	429	449	454	448	452	470	471	472	465	470	461	465	461	472	474
Health and personal care	378	394	419	429	487	489	513	522	535	533	529	525	528	534	552	579	579	584	582	585
Transport and communications	377	409	467	482	661	577	577	587	588	588	596	620	628	632	637	640	643	638	643	640
Recreation and education	565	577	633	669	700	700	699	700	739	739	740	762	861	863	941	941	945	950	969	983
Miscellaneous goods and services	297	305	329	316	336	335	335	340	341	345	351	351	351	353	418	420	364	367	380	378
Average	446	476	529	570	621	620	587	580	622	627	626	623	637	661	668	670	658	653	647	643
Average excluding rent	413	441	490	528	575	575	544	538	576	581	580	577	590	613	619	621	610	605	600	596
Average excluding food	466	490	545	578	632	623	607	605	633	640	643	648	668	687	706	711	703	703	703	701
Average excluding food and rent	402	416	464	482	530	514	517	523	532	539	545	556	580	589	617	624	621	627	632	634
Average excluding food, rent, and fuel and power	410	420	467	485	527	513	522	528	541	542	548	557	583	589	618	622	620	624	632	637
Middle-income group CPI	477	513	562	620	647	660	646	651	676	685	707	714	718	737	761	761	754	765	763	759
Food	437	480	531	598	631	640	602	604	642	645	666	663	665	702	706	697	681	676	675	671
Drinks and tobacco	407	449	505	541	558	581	585	590	594	593	594	603	605	616	620	638	656	692	720	721
Clothing and footwear	412	405	462	503	508	505	520	528	533	543	555	561	569	577	579	608	605	607	602	598
Rent	605	651	706	787	821	837	820	826	858	869	897	906	912	935	966	967	957	971	969	964
Fuel and power	323	360	410	462	484	482	472	483	484	495	533	544	545	564	723	729	688	723	698	690
Household equipment	499	506	543	574	581	612	617	614	607	637	650	661	660	664	667	644	641	650	651	651
Health and personal care	430	485	517	568	578	607	615	625	675	680	686	718	717	716	702	693	695	731	733	733
Transport and communications	508	550	577	641	692	680	682	699	717	722	741	744	759	767	776	797	798	804	808	794
Recreation and education	341	372	436	470	491	519	503	502	553	553	582	589	604	609	622	621	645	664	661	662
Miscellaneous goods and services	380	423	453	453	469	465	467	467	471	471	485	489	486	486	474	501	499	495	495	500
Average	477	513	562	620	647	660	646	651	676	685	707	714	718	737	761	761	754	765	763	759
Average excluding rent	421	453	500	548	571	583	571	575	597	605	624	630	635	651	672	673	666	676	674	671
Average excluding food	487	522	571	626	651	665	658	663	685	695	718	727	733	746	775	779	773	789	787	783
Average excluding food and rent	414	442	487	526	545	558	557	562	577	587	606	616	621	629	657	662	659	676	674	671
Average excluding food, rent, and fuel and power	432	458	502	539	558	573	574	578	596	606	621	631	636	641	644	649	654	667	669	667
Upper-income group CPI	493	519	577	639	660	671	675	674	694	703	719	723	732	745	800	816	817	829	823	823
Food	495	510	541	608	650	642	645	629	652	674	678	677	698	715	695	713	732	727	731	733
Drinks and tobacco	530	586	640	700	764	788	800	789	808	812	816	823	835	837	854	885	908	912	927	931
Clothing and footwear	448	432	487	577	606	636	642	650	666	674	680	686	715	720	803	828	829	835	828	830
Rent	576	607	674	746	770	784	788	787	810	821	840	845	855	871	935	953	954	968	961	961
Fuel and power	416	443	494	556	555	560	559	562	563	572	622	634	634	653	975	983	924	959	919	905
Household equipment	405	396	440	460	474	498	495	500	518	521	527	530	517	543	543	535	537	553	557	558
Health and personal care	460	504	537	579	591	607	621	633	664	669	671	676	676	680	666	726	720	728	727	739
Transport and communications	656	700	760	863	850	858	858	866	884	894	916	924	933	945	947	975	966	969	968	964
Recreation and education	323	385	488	537	560	580	589	589	619	620	630	631	638	639	648	652	686	705	697	702
Miscellaneous goods and services	373	364	395	406	413	412	411	410	416	419	434	437	453	449	476	489	486	489	491	487
Average	493	519	577	639	660	671	675	674	694	703	719	723	732	745	800	816	817	829	823	823
Average excluding rent	453	477	530	587	606	617	620	619	638	646	661	665	673	685	736	750	751	762	757	756
Average excluding food	493	521	582	643	661	676	679	681	700	708	725	731	737	750	817	833	830	845	838	837
Average excluding food and rent	443	469	527	582	595	610	614	617	634	639	656	662	666	678	746	760	756	771	763	762
Average excluding food, rent, and fuel and power	449	475	535	587	604	622	626	629	649	654	664	668	674	683	696	711	719	729	729	731

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Table 44. Kenya: Consumer Price Indices (CPI)[1], December 1994–December 2001

	1994 Dec.	1995 Dec.	1996 Dec.	1997 Dec.	1998 Mar.	1998 June	1998 Sep.	1998 Dec.	1999 Mar.	1999 June	1999 Sep.	1999 Dec.	2000 Mar.	2000 June	2000 Sep.	2000 Dec.	2001 Mar.	2001 June	2001 Sep.	2001 Dec.
								(Index, February-March 1986 = 100)												
Composite (computed)																				
Food	426	464	513	570	613	622	573	562	615	619	619	609	614	647	640	637	622	611	601	594
Drinks and tobacco	457	495	556	581	593	606	609	611	633	631	634	643	650	694	711	732	727	754	771	782
Clothing and footwear	359	331	387	408	411	400	414	421	433	437	441	446	455	459	469	480	484	490	483	488
Rent	558	596	658	716	771	774	740	734	781	788	794	793	807	835	850	852	839	838	831	826
Fuel and power	335	380	436	462	546	518	477	481	460	511	527	549	548	583	638	665	644	678	656	628
Household equipment	387	403	439	458	460	469	485	489	483	492	509	512	513	509	513	501	503	503	511	513
Health and personal care	391	415	442	461	508	516	536	546	567	567	565	569	571	575	586	606	607	618	617	619
Transport and communications	411	445	497	524	672	605	605	617	621	623	634	653	662	668	673	681	683	680	685	680
Recreation and education	512	529	588	624	653	659	655	656	697	698	705	723	802	805	868	867	876	885	899	909
Miscellaneous goods and services	316	331	356	347	365	364	364	368	370	373	381	382	381	383	431	439	395	397	406	406
Average	454	485	537	582	627	630	601	597	635	641	645	644	656	679	691	693	682	681	676	671
Average excluding rent	416	445	493	534	575	577	551	547	582	587	591	591	601	622	633	635	625	624	619	615
Average excluding food	471	498	551	590	637	633	619	619	646	653	661	666	683	700	723	728	720	725	723	721
Average excluding food and rent	406	423	471	494	535	526	528	533	544	552	561	571	590	599	628	635	632	641	644	644
Average excluding food, rent, and fuel and power	415	429	476	498	535	528	535	540	555	558	566	575	596	602	625	630	629	635	642	645
Composite index[2]																				
Food	426	464	513	570	613	622	573	562	615	619	619	609	614	647	640	637	622	611	601	594
Drinks and tobacco	457	495	556	581	593	606	609	611	633	631	634	643	650	694	711	732	727	754	771	782
Clothing and footwear	359	331	387	408	411	400	414	421	433	437	441	446	455	459	469	480	484	490	483	488
Rent	558	596	658	716	771	774	740	734	781	788	794	793	807	835	850	852	839	838	831	826
Fuel and power	335	380	436	462	546	518	477	481	460	511	527	549	548	583	638	665	644	678	656	628
Household equipment	387	403	439	458	460	469	485	489	483	492	509	512	513	509	513	501	503	503	511	513
Health and personal care	391	415	442	461	508	516	536	546	567	567	565	569	571	575	586	606	607	618	617	619
Transport and communications	411	445	497	524	672	605	605	617	621	623	634	653	662	668	673	681	683	680	685	680
Recreation and education	512	529	588	624	653	659	655	656	697	698	705	723	802	805	868	867	876	885	899	909
Miscellaneous goods and services	316	331	356	347	365	364	364	368	370	373	381	382	381	383	431	439	395	397	406	406
Overall index	454	485	537	582	627	630	601	597	635	641	645	644	656	679	691	693	682	681	676	671
Overall index, excluding rent	416	445	493	534	575	577	551	547	582	587	591	591	601	622	633	635	625	624	619	615
Overall index, excluding food	471	498	551	590	637	633	619	619	646	653	661	666	683	700	723	728	720	725	723	721
Overall index, excluding food and rent	406	423	471	494	535	526	528	533	544	552	561	571	590	599	628	635	632	641	644	644
Overall excluding food, rent, and fuel and power	415	429	476	498	535	528	535	540	555	558	566	575	596	602	625	630	629	635	642	645
								(Twelve-month percentage change)												
Composite index																				
Food	1.1	8.9	10.5	11.0	7.6	4.8	0.8	-1.4	0.4	-0.6	8.0	8.4	-0.2	4.5	3.5	4.7	1.3	-5.6	-6.1	-6.8
Drinks and tobacco	1.7	8.3	12.2	4.6	2.2	8.4	6.1	5.1	6.6	4.1	4.2	5.2	2.7	9.9	12.2	13.9	11.9	8.6	8.4	6.9
Clothing and footwear	21.9	-7.8	16.9	5.6	0.5	6.7	2.4	3.1	5.4	9.2	6.6	6.0	5.1	5.0	6.4	7.6	6.4	6.9	2.9	1.7
Rent	6.6	6.9	10.4	8.8	7.7	7.4	4.0	2.5	1.2	1.8	7.3	8.0	3.4	6.0	7.1	7.4	3.9	0.2	-2.2	-3.1
Fuel and power	9.6	13.4	14.8	6.0	18.1	21.7	4.8	4.0	-15.7	-1.5	10.6	14.2	19.1	14.3	21.0	21.1	17.5	16.2	2.8	-5.6
Household equipment	-7.3	4.3	8.8	4.3	0.6	4.6	7.0	6.8	4.9	4.9	4.9	4.7	6.2	3.4	0.8	-2.2	-1.8	-1.1	-0.3	2.4
Health and personal care	8.9	6.2	6.5	4.3	10.2	16.2	19.1	18.4	11.7	9.9	5.3	4.2	0.6	1.4	3.8	6.6	6.3	7.5	5.2	2.2
Transport and communications	13.4	8.5	11.5	5.5	28.3	21.3	16.6	17.7	-7.5	3.1	4.7	5.9	6.6	7.1	6.3	4.2	3.1	1.8	1.7	-0.1
Recreation and education	47.8	3.3	11.1	6.1	4.6	7.3	6.8	5.2	6.8	5.8	7.5	10.1	15.0	15.4	23.1	20.0	9.2	9.9	3.6	4.8
Miscellaneous goods and services	3.2	4.9	7.6	-2.7	5.3	9.9	8.6	6.3	1.2	2.5	4.5	3.6	3.2	2.8	13.3	15.0	3.7	3.5	-5.8	-7.5
Overall index	6.6	6.9	10.7	8.5	7.7	7.4	4.0	2.5	1.2	1.8	7.2	7.9	3.4	6.0	7.1	7.5	3.9	0.2	-2.2	-3.1
Overall index, excluding rent	6.6	6.9	10.8	8.3	7.8	7.4	4.0	2.5	1.1	1.7	7.2	7.9	3.4	6.0	7.1	7.5	3.9	0.2	-2.2	-3.1
Overall index, excluding food	10.3	5.6	10.8	6.9	8.0	9.1	6.1	5.1	1.4	3.2	6.7	7.6	5.8	7.2	9.4	9.2	5.4	3.5	0.1	-0.9
Overall index, excluding food and rent	17.8	4.2	11.3	4.9	8.4	11.0	8.5	8.0	1.6	4.9	6.2	7.2	8.6	8.6	12.1	11.1	7.0	7.0	2.5	1.5
Overall excluding food, rent, and fuel and power	18.0	3.3	10.8	4.7	7.3	9.9	8.9	8.5	3.7	5.7	5.7	6.4	7.5	7.9	10.5	9.5	5.5	5.6	2.6	2.5

Source: Kenya Central Bureau of Statistics.

[1] For Nairobi.

[2] Weighted average, with a weight of 76.8 percent for the lower-income index, 20.9 percent for the middle-income index, and 2.3 percent for the upper-income index.

Table 45. Kenya: Average Consumer Price Indices for Urban Centers, 1995–2000

	1995	1996	1997	1998	1999	2000
	(Indices; base periods as indicated)					
Urban population						
Nairobi[1]						
Lower income	467.1	508.3	569.4	602.5	618.4	654.6
Middle income	498.0	546.6	592.7	647.9	687.4	736.5
Upper income	504.5	549.5	609.0	664.5	704.2	758.4
Mombasa[2]	1,190.7	1,286.2	1,430.6	1,510.8	1,606.4	1,761.7
Kisumu[2]	1,137.1	1,251.5	1,394.9	1,465.3	1,584.4	1,731.3
Nakuru[2]	1,235.6	1,360.4	1,483.9	1,562.9	1,639.6	1,777.5
	(Annual percentage change)					
Nairobi[1]						
Lower income	0.8	8.8	12.0	5.8	2.6	5.9
Middle income	4.0	9.8	8.4	9.3	6.1	7.1
Upper income	3.8	8.9	10.8	9.1	6.0	7.7
Mombasa[2]	5.1	8.0	11.2	5.6	6.3	9.7
Kisumu[2]	2.6	10.1	11.5	5.0	8.1	9.3
Nakuru[2]	1.0	10.1	9.1	5.3	4.9	8.4

Source: Government of Kenya, *Economic Survey*, various issues.

[1]February-March 1986 = 100.
[2]1976 = 100; these indices refer to households in the lower- and middle-income groups and exclude rent.

Table 46. Kenya: Central Government Fiscal Operations, 1994/95-1999/2000[1]

	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
	(In millions of Kenya shillings)					
Revenue and grants	130,639	151,316	155,032	184,866	197,183	182,690
Revenue	125,131	145,502	149,249	179,594	192,263	178,443
Grants	5,508	5,814	5,783	5,272	4,920	4,247
Expenditure and net lending	137,526	150,848	171,797	195,939	197,456	175,119
Recurrent expenditure[2]	107,569	121,742	141,978	161,152	161,468	156,535
Development expenditure and net lendi	29,957	29,106	29,819	34,787	35,988	18,584
Overall balance, excluding grants[3]	-12,395	-5,346	-22,548	-16,345	-5,193	3,324
Overall balance, including grants[3]	-6,887	468	-16,765	-11,073	-273	7,571
Adjustment to cash basis	2,693	-2,364	6,911	4,444	-2,011	-6,035
Overall cash balance, excluding grants	-9,702	-7,710	-15,637	-11,901	-7,204	-2,711
Overall cash balance, including grants	-4,194	-1,896	-9,854	-6,629	-2,284	1,536
Financing	4,194	1,897	9,853	6,630	2,284	-1,801
Foreign (net)	-4,420	138	-6,634	-7,201	-8,732	-19,337
Domestic (net)	8,614	-2,087	15,352	12,042	11,016	11,876
Privatization receipts	0	3,846	1,135	1,789	0	5,660
	(In percent of GDP, unless otherwise indicate)					
Revenue and grants	30.2	30.4	26.9	28.1	27.6	23.9
Revenue	28.9	29.3	25.9	27.3	26.9	23.3
Grants	1.3	1.2	1.0	0.8	0.7	0.6
Expenditure and net lending	31.8	30.4	29.8	29.8	27.6	22.9
Recurrent expenditure[2]	24.8	24.5	24.6	24.5	22.6	20.5
Development expenditure and net lendi	6.9	5.9	5.2	5.3	5.0	2.4
Overall balance, excluding grants[3]	-2.9	-1.1	-3.9	-2.5	-0.7	0.4
Overall balance, including grants[3]	-1.6	0.1	-2.9	-1.7	0.0	1.0
Adjustment to cash basis	0.6	-0.5	1.2	0.7	-0.3	-0.8
Overall cash balance, excluding grants	-2.2	-1.6	-2.7	-1.8	-1.0	-0.4
Overall cash balance, including grants	-1.0	-0.4	-1.7	-1.0	-0.3	0.2
Financing	1.0	0.4	1.7	1.0	0.3	-0.2
Foreign (net)	-1.0	0.0	-1.2	-1.1	-1.2	-2.5
Domestic (net)	2.0	-0.4	2.7	1.8	1.5	1.6
Privatization receipts	0.0	0.8	0.2	0.3	0.0	0.7
Memorandum item:						
GDP (in millions of Kenya shillings)	432,975	497,006	575,987	657,039	715,586	764,623

Sources: Kenyan authorities; and Fund staff estimates.

[1] July-June fiscal year.
[2] Includes items in transit.
[3] On a commitment basis.

Table 47. Kenya: Central Government Revenue and Grants, 1994/95-1999/2000[1]

	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
	(In millions of Kenya shillings)					
Tax revenue	108,516	123,008	129,230	148,608	154,682	156,344
Taxes on income and profits	43,287	48,054	49,266	56,040	55,235	54,402
Taxes on goods and services	44,918	52,203	55,279	65,356	69,163	70,637
Value-added tax	24,298	28,404	29,050	35,941	39,205	40,944
Local manufactures	13,319	14,751	14,864	19,284	21,019	22,504
Imported manufactures	10,979	13,653	14,186	16,657	18,186	18,440
Excise duties	19,332	22,612	24,788	27,939	28,733	28,493
Other taxes and licenses	1,288	1,187	1,441	1,476	1,225	1,200
Taxes on international trade	18,598	21,176	22,773	24,612	28,444	28,605
Import duties	18,598	21,176	22,773	24,612	28,444	28,605
Export duties	0	0	0	0	0	0
Other taxes	1,713	1,576	1,912	2,600	1,840	2,700
Nontax revenue	16,615	22,494	20,019	30,986	37,581	22,099
Property income	3,802	8,401	6,469	15,799	17,249	3,725
Public enterprises and financial institu	1,620	6,539	4,596	12,270	14,906	305
Central Bank of Kenya	844	5,883	3,813	11,635	16,100	0
Other profits and dividends	776	655	783	635	806	305
Loan interest receipts	1,014	750	680	376	185	256
Other property income	1,168	1,113	1,193	3,153	2,158	3,164
Administrative fees and charges	4,471	3,786	4,005	3,925	1,620	3,699
Other nontax revenue	8,342	10,307	9,545	11,262	18,712	14,675
Total revenue	125,131	145,502	149,249	179,594	192,263	178,443
Foreign grants	5,508	5,815	5,783	5,272	4,920	4,247
Cash grants	693	1,317	1,272	790	913	938
Grants under aid in appropriation	4,815	4,498	4,511	4,482	4,007	3,309
Total revenue and grants	130,639	151,317	155,032	184,866	197,183	182,690
	(In percent of GDP)					
Tax revenue	25.1	24.7	22.4	22.6	21.6	20.4
Taxes on income and profits	10.0	9.7	8.6	8.5	7.7	7.1
Taxes on goods and services	10.4	10.5	9.6	9.9	9.7	9.2
Taxes on international trade	4.3	4.3	4.0	3.7	4.0	3.7
Other taxes	0.4	0.3	0.3	0.4	0.3	0.4
Nontax revenue	3.8	4.5	3.5	4.7	5.3	2.9
Total revenue	28.9	29.3	25.9	27.3	26.9	23.3
	(In percent of total revenue)					
Tax revenue	86.7	84.5	86.6	82.7	80.5	87.6
Taxes on income and profits	34.6	33.0	33.0	31.2	28.7	30.5
Taxes on goods and services	35.9	35.9	37.0	36.4	36.0	39.6
Taxes on international trade	14.9	14.6	15.3	13.7	14.8	16.0
Other taxes	1.4	1.1	1.3	1.4	1.0	1.5
Nontax revenue	13.3	15.5	13.4	17.3	19.5	12.4

Sources: Kenyan authorities; and Fund staff estimates.

[1]July-June fiscal year.

Table 48. Kenya: Economic Classification of Central Government
Expenditure and Net Lending, 1994/95-1999/2000[1]

	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
	(In millions of Kenya shillings)					
Recurrent expenditure	107,569	121,742	141,978	161,152	161,468	156,535
Goods and services	70,674	79,421	101,533	87,278	86,216	95,518
Wages and allowances	42,830	45,886	48,171	62,146	63,253	65,861
Other[2]	27,844	33,535	53,362	25,132	22,963	29,657
Interest	31,823	37,245	34,786	37,971	40,055	29,387
Domestic	22,588	25,928	26,569	30,358	31,743	20,752
Foreign	9,235	11,317	8,217	7,613	8,312	8,635
Subsidies and transfers	5,072	5,076	5,659	35,903	35,197	31,630
General government	5	0	0	30,804	30,200	25,928
Households/nonprofit institutions	5,067	5,076	5,659	3,689	3,620	5,145
Export compensation	0	0	0	0	0	0
Other	0	0	0	1,410	1,377	557
Development expenditure and net lending	29,957	29,106	29,819	34,787	35,988	18,584
Fixed investment	24,013	26,258	27,343	31,658	26,771	16,630
Net lending	1,592	2,848	2,476	2,243	7,712	1,880
Equity and capital transfers	4,352	0	0	886	1,505	74
Equity	70	0	0	223	7	2
Capital transfers	4,282	0	0	663	1,498	72
Total expenditure and net lending	137,526	150,848	171,797	195,939	197,456	175,119
	(In percent of GDP)					
Recurrent expenditure	24.8	24.5	24.6	24.5	22.6	20.5
Wages and allowances	9.9	9.2	8.4	9.5	8.8	8.6
Interest payments	7.3	7.5	6.0	5.8	5.6	3.8
Subsidies and transfers	1.2	1.0	1.0	5.5	4.9	4.1
Other[2]	6.4	6.8	9.3	3.8	3.2	3.9
Development expenditure and net lending	6.9	5.9	5.2	5.3	5.0	2.4
Total expenditure and net lending	31.8	30.4	29.9	29.8	27.6	22.9
	(In percent of total expenditure)					
Recurrent expenditure	78.2	80.7	82.6	82.2	81.8	89.4
Wages and allowances	31.1	30.4	28.0	31.7	32.0	37.6
Interest payments	23.1	24.7	20.2	19.4	20.3	16.8
Subsidies and transfers	3.7	3.4	3.3	18.3	17.8	18.1
Other[2]	20.2	22.2	31.1	12.8	11.6	16.9
Development expenditure and net lending	21.8	19.3	17.4	17.8	18.2	10.6

Sources: Kenyan authorities; and Fund staff estimates.

[1]July-June fiscal year.
[2]1996/97 estimate includes unclassified spending commitments of K Sh 7,638 million (1.3 percent of GDP).

Table 49. Kenya: Functional Classification of Central Government
Expenditure and Net Lending, 1994/95-1999/2000[1]

	(In millions of Kenya shillings)					
General administration	18,003	28,563	35,931	38,457	48,047	41,427
Defense	7,367	9,039	10,472	10,161	11,087	10,427
Social services	44,195	45,851	47,686	62,764	68,319	60,286
Education	30,717	31,723	33,483	46,224	50,039	47,493
Health	9,595	9,059	10,568	13,053	14,194	10,054
Housing, community, and social welfar	3,883	5,069	3,635	3,488	4,085	2,739
Economic services	32,857	27,787	26,457	24,270	35,950	27,708
General administration	2,637	2,446	2,795	3,047	6,832	5,048
Agriculture, forestry, and fishing	10,069	7,732	6,963	7,756	12,912	7,696
Mining, manufacturing, and constructio	4,858	1,632	2,292	2,227	2,450	2,314
Electricity, water, gas, and steam	4,191	3,359	3,211	1,996	2,644	1,383
Roads	6,242	7,672	7,947	7,532	8,744	8,849
Transport and communications	3,336	3,925	2,200	652	943	1,004
Other	1,524	1,022	1,050	1,059	1,425	1,415
Interest	31,823	37,245	34,786	37,971	40,055	28,918
Unallocated	3,282	2,363	16,465	22,316	-6,002	...
Total	137,526	150,848	171,797	195,939	197,456	168,766
	(In percent of GDP)					
Administration	4.2	5.7	6.2	5.9	6.7	5.4
Defense	1.7	1.8	1.8	1.5	1.5	1.4
Education	7.1	6.4	5.8	7.0	7.0	6.2
Health and welfare	3.1	2.8	2.5	2.5	2.6	1.7
Economic services	7.6	5.6	4.6	3.7	5.0	3.6
Interest	7.3	7.5	6.0	5.8	5.6	3.8
Unallocated	0.8	0.5	2.9	3.4	-0.8	0.0
	(In percent of total expenditure)					
Administration	13.4	19.2	23.1	22.1	23.6	24.5
Defense	5.5	6.1	6.7	5.9	5.4	6.2
Education	22.9	21.4	21.6	26.6	24.6	28.1
Health and welfare	10.0	9.5	9.1	9.5	9.0	7.6
Economic services	24.5	18.7	17.0	14.0	17.7	16.4
Interest	23.7	25.1	22.4	21.9	19.7	17.1

Sources: Kenyan authorities; and Fund staff estimates.

Table 50. Kenya: Local Government Finances, 1994/95-2000/2001[1]

	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01
	(In millions of Kenya shillings)						
Total receipts	6,153	5,685	6,221	8,945	8,866	8,712	9,183
Municipal councils	4,810	4,027	5,001	6,537	6,954	6,471	6,795
Taxes, licenses, and cesses	1,420	1,162	2,305	2,608	2,689	2,059	2,115
Property income	436	208	420	195	519	376	409
Sale of goods and services	2,949	2,610	2,254	3,690	3,583	4,035	4,269
Government grants	5	46	22	44	163	1	2
Town and county councils	1,343	1,658	1,220	2,408	1,912	2,240	2,389
Taxes, licenses, and cesses	407	893	590	1,179	836	660	645
Property income	58	161	38	211	51	38	44
Sale of goods and services	875	600	592	1,012	1,025	1,539	1,695
Government grants	3	4	0	6	0	4	5
Total outlays	9,811	9,222	8,225	14,651	11,431	10,859	11,636
Municipal councils[2]	8,303	7,467	6,501	12,047	9,008	8,189	8,731
Current expenditure	4,089	4,689	5,095	6,620	6,804	6,852	6,772
Capital expenditure	4,214	2,770	1,338	5,319	2,161	1,176	1,866
Debt service[3]	0	8	68	108	43	161	93
Town and county councils[2]	1,509	1,755	1,724	2,604	2,423	2,670	2,905
Current expenditure	1,255	1,615	1,594	2,189	2,081	2,384	2,575
Capital expenditure	254	140	130	408	342	259	297
Debt service[3]	0	0	0	7	0	27	34
Overall balance	-3,658	-3,538	-2,004	-5,706	-2,565	-2,148	-2,453
Municipal councils	-3,493	-3,441	-1,500	-5,510	-2,054	-1,718	-1,936
Town and county councils	-165	-97	-504	-196	-511	-429	-516
	(In percent of GDP)						
Total receipts	1.4	1.1	1.1	1.4	1.2	1.1	1
Total outlays	2.3	1.9	1.4	2.2	1.6	1.4	1
Current expenditure[2]	1.2	1.3	1.2	1.3	1.2	1.2	1
Capital expenditure	1.0	0.6	0.3	0.9	0.3	0.2	0
Debt service[3]	0.0	0.0	0.0	0.0	0.0	0.0	0
Overall balance	-0.8	-0.7	-0.3	-0.9	-0.4	-0.3	0

Sources: Kenyan authorities; and Fund staff estimates.

[1] July-June fiscal year.
[2] Amortization payments included as an expenditure.
[3] Excludes interest payments.

Table 51. Kenya: Gross Domestic Debt of the Central Government, 1994/95-1999/2000[1]

	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
	(In millions of Kenya shillings)					
Treasury bills	75,399	81,140	116,620	121,035	117,643	131,029
Banks	35,678	47,776	72,849	62,404	77,583	76,326
Central bank[2]	21	2,676	19,306	18,148	19,302	18,421
Commercial banks	35,657	45,100	53,543	44,256	58,281	57,905
Nonbanks	39,721	33,364	43,771	58,631	40,060	54,703
National Social Security Fund	2,459	4,800	3,088	554	103	478
Financial institutions	16,632	5,160	3,818	2,737	1,820	2,493
Other	20,630	23,404	36,865	55,340	38,137	51,732
Treasury bonds	15,619	8,574	35,615	34,687	44,143	36,851
Banks	658	536	23,226	26,541	23,020	8,537
Central bank[2]	616	478	19,297	19,624	16,056	0
Commercial banks	42	58	3,929	6,917	6,964	8,537
Nonbanks	14,961	8,038	12,389	8,146	21,123	28,314
National Social Security Fund	8,650	5,650	3,260	0	0	0
Financial institutions	1,879	559	463	720	135	100
Other	4,432	1,829	8,666	7,426	20,988	28,214
Government stock	4,589	4,584	3,959	3,730	3,430	3,006
Banks	99	99	101	27	958	52
Central bank2	0	0	0	0	933	0
Commercial banks	99	99	101	27	25	52
Nonbanks	4,490	4,485	3,858	3,703	2,472	2,954
National Social Security Fund	3,112	3,112	2,611	2,525	1,405	1,936
Financial institutions	68	68	59	59	59	59
Other	1,310	1,305	1,188	1,119	1,008	959
Total	95,607	94,298	156,194	159,452	165,215	170,886
Banks	36,435	48,411	96,176	88,972	101,560	84,915
Central Bank[2]	637	3,154	38,603	37,772	36,290	18,421
Commercial banks	35,798	45,257	57,573	51,200	65,270	66,494
Nonbanks	59,172	45,887	60,018	70,480	63,655	85,971
National Social Security Fund	14,221	13,562	8,959	3,079	1,508	2,414
Financial institutions	18,579	5,787	4,340	3,516	2,014	2,652
Other	26,372	26,538	46,719	63,885	60,133	80,905
	(In percent of total)					
Memorandum items:						
Banks	38.1	51.3	61.6	55.8	61.5	49.7
Nonbanks	61.9	48.7	38.4	44.2	38.5	50.3
National Social Security Fund	14.9	14.4	5.7	1.9	0.9	1.4
Financial institutions	19.4	6.1	2.8	2.2	1.2	1.6
Other	27.6	28.1	29.9	40.1	36.4	47.3

Source: Kenyan authorities.

[1]July-June fiscal year. Face value at the end of each fiscal year. Market value would be lower.
Excludes bank overdrafts and advances, tax reserve certificates, sinking-fund holdings, and debts
to domestic suppliers.
[2]At the end of 1998/99, the interest on K Sh 31,917 million of treasury bills and bonds was permanently canceled.

Table 52. Kenya: Operating Profits and Cash Position of
Selected Public Enterprises, 1992/93-1999/2000[1]

	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
(In millions of Kenya shillings, unless otherwise indicated)								
Operating balances[2]								
Kenya Power and Lighting Corporation (KPLC)	-147	680	1,574	4,163	3,911	2,005	1,722	
Kenya Post and Telecommunications Company (KPTC)	4,506	5,308	2,886	4,142	3,456	4,959	8,363	
Kenya Railways (KR)[3]	62	429	421	-1,179	-1,604	-1,418	709	
National Cereals and Produce Board (NCPB)	-1,784	-2,522	-2,281	-2,030	-72	-724	-598	
Kenya Ports Authority (KPA)	1,543	3,304	801	1,276	541	349	-270	
Total	4,180	7,199	3,400	6,372	6,231	5,171	9,926	
(in percent of GDP)	1.4	2.0	0.8	1.3	1.1	0.8	1.4	
Total, excluding KPTC	-326	1,891	515	2,230	2,776	213	1,563	
(in percent of GDP)	-0.1	0.5	0.1	0.5	0.5	0.0	0.2	
Total, excluding NCPB	5,964	9,721	5,681	8,402	6,304	5,895	10,524	
(in percent of GDP)	2.0	2.6	1.3	1.7	1.1	0.9	1.5	
Cash position[4]								
KPLC	-150	-105	2,389	3,973	3,742	-283	-1,657	
KPTC	-147	124	-888	312	675	2,932	4,694	
KR	-106	-180	-312	-222	-604	-479	-173	
NCPB	1,806	864	-525	-177	1,243	-265	685	
KPA	1,410	1,240	202	144	-281	-739	-511	
Total	2,812	1,943	866	4,030	4,776	1,166	3,038	
Total, excluding KPTC	2,959	1,819	1,754	3,718	4,101	-1,766	-1,656	
Total, excluding NCPB	1,006	1,079	1,391	4,207	3,532	1,431	2,353	
Memorandum item:								
GDP at current market prices	299,043	367,146	428,166	485,875	568,152	659,951	719,698	

Sources: Kenyan authorities; and Fund staff estimates.

[1]July-June fiscal year.
[2]Excludes foreign exchange losses/gains.

Table 53. Kenya: Central Bank of Kenya Balance Sheet, June 1994-December 2001

	1994 Jun.	1994 Dec.	1995 Jun.	1995 Dec.	1996 Jun.	1996 Dec.	1997 Jun.	1997 Dec.	1998 Jun.	1998 Dec.	1999 Jun.	1999 Dec.	2000 Jun.	2000 Dec.	2001 Jun	2001 Dec
							(In millions of Kenya shillings)									
Net foreign assets[1]	19,518	7,854	2,497	2,275	22,592	25,982	38,655	28,165	26,877	31,201	34,496	46,163	54,871	60,580	69,510	78,912
Net domestic assets	21,267	47,462	50,435	68,926	46,216	51,010	35,460	47,684	51,586	43,786	38,294	32,825	20,848	17,153	-200	213
Domestic credit	11,818	31,849	37,911	59,893	37,138	41,650	28,424	38,884	32,441	31,428	26,601	23,993	15,316	14,385	-2,934	1,716
Government (net)	-456	21,777	24,298	50,127	27,822	32,594	19,160	37,289	31,334	28,078	30,962	25,742	20,953	19,057	10,807	14,554
Advances and discounts to commercial banks	12,274	10,072	13,613	9,766	9,316	9,056	9,264	1,595	1,107	3,350	-4,361	-1,749	-5,637	-4,672	-13,741	-12,838
Other items (net)	9,449	15,613	12,524	9,033	9,078	9,360	7,036	8,800	19,145	12,358	11,693	8,832	5,532	2,768	2,734	-1,503
Reserve money	40,785	55,316	52,932	71,201	68,808	76,992	74,115	75,849	78,463	74,987	72,790	78,988	75,719	77,733	69,310	79,125
Currency outside banks	20,367	24,725	25,825	28,795	28,747	30,332	29,158	36,148	32,966	38,658	36,601	42,899	38,397	43,402	42,374	45,289
Bank reserves[2]	20,418	30,591	27,107	42,406	40,061	46,660	44,957	39,701	45,497	36,329	36,189	36,089	37,322	34,331	26,936	33,836
			(Annual change in percent of beginning-of-period reserve money stock, unless otherwise indicated)													
Net foreign assets	119.2	-0.7	-41.7	-10.1	38.0	33.3	23.3	2.8	-15.9	4.0	9.7	20.0	28.0	18.3	19.3	23.6
Net domestic assets	-66.9	32.0	71.5	38.8	-8.0	-25.2	-15.6	-4.3	21.8	-5.1	-16.9	-14.6	-24.0	-19.8	-27.8	-21.8
Of which																
Government (net)	-41.7	15.0	60.7	51.3	6.7	-24.6	-12.6	6.1	16.4	-12.1	-0.5	-3.1	-13.7	-8.5	-13.4	-5.8
Reserve money																
Currency outside banks	42.3	8.4	13.4	7.4	5.5	2.2	0.6	7.6	5.1	3.3	4.6	5.7	2.5	0.6	5.3	2.4
Bank reserves[2]	10.1	22.9	16.4	21.4	24.5	6.0	7.1	-9.0	0.7	-4.4	-11.9	-0.3	1.6	-2.2	-13.7	-0.6
Memorandum items:																
Reserve money (annual percentage change)	52.4	31.3	29.8	28.7	-3.4	8.1	7.7	-1.5	5.9	-1.1	-7.2	5.3	4.0	-1.6	-8.5	1.8
Statutory reserve requirement (in percent)																
Commercial banks	16.0	16.0	16.0	18.0	18.0	18.0	18.0	15.0	15.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0
Finance houses	0.0	10.0	10.0	18.0	18.0	18.0	18.0	15.0	15.0	12.0	12.0	12.0	12.0	10.0	10.0	10.0

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

[1]Valued at current exchange rates.
[2]From June 1995 onward includes nonbank financial institutions.

Table 54. Kenya: Monetary Survey, June 1994-December 2001[1]

	1994 Jun.	1994 Dec.	1995 Jun.	1995 Dec.	1996 Jun.	1996 Dec.	1997 Jun.	1997 Dec.	1998 Jun.	1998 Dec.	1999 Jun.	1999 Dec.	2000 Jun.	2000 Dec.	2001 Jun.	2001 Dec.
	(In millions of Kenya shillings)															
Net foreign assets[2]	24,426	13,291	10,258	6,913	26,640	28,645	40,070	34,849	36,495	39,076	45,519	53,116	68,126	86,252	93,426	97,182
Net domestic assets	147,499	192,531	205,654	224,732	228,996	239,844	241,568	259,846	284,133	294,559	295,904	292,802	278,137	271,558	258,735	268,790
Domestic credit	159,960	204,187	224,551	249,513	254,349	272,521	285,682	315,213	343,507	354,006	368,370	369,702	371,698	372,656	370,376	367,258
Government (net)	44,958	76,117	75,571	78,486	69,616	74,794	72,942	83,559	77,652	88,018	89,874	84,134	83,220	76,448	68,663	89,078
Other public sector	4,974	5,752	5,592	5,368	4,077	5,697	5,628	8,171	8,559	6,261	7,152	7,304	7,041	8,058	9,877	8,027
Private sector	110,028	122,318	143,388	165,659	180,656	192,030	207,112	223,483	257,297	259,726	271,344	278,265	281,436	288,150	291,836	270,152
Other items (net)	12,462	-11,656	-18,897	-24,781	-25,353	-32,677	-44,114	-55,367	-59,374	-59,447	-72,466	-76,901	-93,561	-101,099	-111,641	-98,467
Money and quasi money (M3)	171,925	205,822	215,911	231,645	255,636	268,489	281,637	294,694	291,232	303,750	309,799	312,116	310,355	314,666	305,590	322,325
Currency outside banks	20,367	24,725	25,825	28,795	28,747	30,394	29,158	36,182	32,966	38,658	36,601	42,899	38,397	43,402	42,374	45,289
Deposits	151,558	181,097	190,085	202,850	226,889	238,095	252,479	258,512	258,266	265,092	273,198	269,217	271,957	271,263	263,216	277,036
	(Annual percentage change, unless otherwise indicated)															
Memorandum items:																
Currency outside banks (M0)	15.0	16.7	26.8	16.5	11.3	5.6	1.4	19.0	13.1	6.8	11.0	11.0	4.9	1.2	10.4	4.3
Money and quasi money (M3)	25.6	27.4	25.6	12.5	18.4	15.9	10.2	9.8	3.4	3.1	6.4	2.8	0.2	0.8	-1.5	2.4
Credit to private sector	13.0	23.5	30.3	35.4	26.0	15.9	14.6	16.4	24.2	16.2	5.5	7.1	3.7	3.6	3.7	-6.2
Currency-deposit ratio (in percent)	13.4	13.7	13.6	14.2	12.7	12.8	11.5	14.0	12.8	14.6	13.4	15.9	14.1	16.0	16.1	16.3

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

[1]Includes nonbank financial institutions.

[2]Valued at current exchange rates.

Table 55. Kenya: Commercial Banks' Liquidity, June 1994 - December 2000

	1994		1995		1996		1997		1998		1999		2000	
	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.
Deposit liabilities subject to requirements (in million of Kenya shillings)	105,845	136,866	146,228	162,242	195,532	211,584	234,769	252,739	258,169	257,954	279,908	277,129	285,779	292,682
Liquid assets (in millions of Kenya shillings)	53,258	71,411	67,428	66,722	82,451	85,804	97,752	94,161	99,220	99,113	115,790	112,045	128,509	122,468
Of which														
Cash and deposits at central bank	24,117	31,371	26,540	33,691	36,670	42,426	46,323	41,350	44,168	26,506	32,920	33,481	32,081	28,909
Liquid assets (in percent)	47.0	53.0	47.0	41.1	42.2	40.6	41.6	37.3	38.0	38.0	41.4	40.4	45.0	41.8
Minimum statutory requirements (in percent)	25.0	25.0	25.0	25.0	25.0	25.0	25.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Excess (+) or deficiency (-) (in percent)	22.0	28.0	22.0	16.0	17.0	16.0	17.0	17.0	18.0	18.0	21.4	20.4	25.0	21.8
Number of banks with the liquidity ratio deficiency	5	6	6	4	3	1	3	2	5	8	3	3	2	1
Number of banks with liquidity ratio requirement	28	28	32	37	45	49	50	51	48	45	49	48	49	49
Cash ratio (in percent, end of period)	17	20	17	19	17	18	20	16	17	10	12	12	11	10
Number of banks below the cash ratio requirement[1]	4	...	3	2	1	1	1	0	...	...	...	...	...	...

Source: Central Bank of Kenya.

1/ Defined as the ratio of commercial banks' balances at the central bank to their total deposits (excluding deposits by the central government and nonresidents) on a deferred basis.

Table 56. Kenya: Nonbank Financial Institutions' Liquidity, June 1994 - December 2000[1]

	1994		1995		1996		1997		1998		1999		2000	
	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.
	(In millions of Kenya shillings, unless otherwise indicated)													
Total deposits	51,230	56,823	52,940	44,556	33,627	26,736	16,772	9,350	9,325	8,176	6,433	6,385	6,174	5,271
Liquid assets	26,428	28,653	21,508	17,090	12,236	9,490	6,422	4,838	4,313	3,434	3,105	3,473	2,970	2,236
Liquidity ratio (in percent of total deposits)	51	51	42	38	36	35	38	32	46	42	48	54	48	42
Minimum statutory requirement (in percent of deposits)	30	28	30	25	25	25	25	20	20	20	20	20	20	20
Excess (in percent of total deposits)	21	23	12	13	11	10	13	12	26	22	28	34	28	22
Treasury bills	23,055	20,364	15,055	5,561	2,488	1,122	964	1,650	1,449	1,408	1,196	1,031	645	624
Number of nonbank financial institutions (NBFIs) with liquidity ratio deficiency (-)	3	7	7	6	3	4	4	3	3	3	2	2	2	2
Number of NBFIs meeting the liquidity ratio requirement	48	44	36	27	21	15	13	12	12	11	9	9	6	5

Source: Central Bank of Kenya.

1/ Building societies are not required to comply with the liquidity requirements. These are the Housing Finance Company of Kenya, Savings and Mortgages Ltd., and the east Africa Building Society.

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Table 57. Kenya: Principal Interest Rates, June 1998 - December 2000

	1998		1999				2000			
	Jun.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.
	(In percent per annum)									
Central Bank of Kenya										
Rediscount rate of treasury bills	31.12	17.07	15.24	19.40	22.74	26.46	17.90	16.01	16.59	19.47
Advances against treasury bills	31.12	17.07	15.24	19.40	22.74	26.46	17.90	16.01	16.59	19.47
Advances against Kenya government securities	31.12	17.07	15.24	19.40	22.74	26.46	17.90	16.01	16.59	19.47
Commercial banks										
Savings deposits (minimum)	9.73	7.89	5.48	4.57	5.35	6.15	5.17	4.89	4.36	4.51
Time deposits										
Three months to less than six months	20.13	14.84	9.50	8.17	9.04	12.26	8.33	7.94	6.25	6.29
Six months to less than nine months	16.15	13.35	9.56	7.87	7.77	8.63	7.60	7.54	6.62	6.65
Nine months to less than six months	15.25	13.95	9.59	8.73	8.23	9.25	7.45	6.88	6.40	5.91
Loans and advances (maximum)	29.85	26.16	21.36	20.7	22.45	25.19	23.79	23.11	20.57	19.60
Other financial institutions										
Deposit rates										
Hire purchase	9.00	9.00	4.18	4.57	5.35	6.15	4.98	5.45	5.37	6.01
Building societies	6.22	5.94	5.94	5.94	5.54	5.94	5.94	5.94	4.85	5.63
Lending rates										
Hire purchase	33.80	28.95	22.63	22.60	25.89	26.82	24.36	25.67	22.85	22.42
Building societies	24.13	24.92	21.47	21.47	21.47	21.47	21.47	22.47	19.9	19.9
Other interest rates										
Treasury bills (91-day)	25.5	12.6	8.8	11.4	15.8	20.0	11.3	10.5	10.4	12.9
Treasury bonds										
One year	26.8	22.4	11.9	9.5	11.1	16.5	20.1	14.3	11.3	10.1
Two year	...	...	24.6	19.6	10.3	10.4	15.0	18.7	17.2	11.9
Three year	...	...	...	...	...	...	...	...	...	...

Source: Central Bank of Kenya

Table 58. Kenya: Distribution of Credit to Private Sector, June 1998 - December 2000

	1998		1999		2000	
	Jun.	Dec.	Jun.	Dec.	Jun.	Dec.
(In percent of total credits, unless otherwise indicated)						
Agriculture	6.9	7.1	6.8	7.0	6.6	6.9
Manufacturing	16.8	16.2	16.6	16.6	16.6	17.0
Trade	13.9	14.7	15.2	15.3	14.4	15.0
Exports	0.9	1.5	1.9	2.1	2.0	2.0
Imports	0.8	1.1	0.8	1.0	0.6	0.6
Domestic	12.2	12.2	12.5	12.2	11.7	12.3
Building and construction	6.9	6.3	6.5	6.5	6.5	5.7
Transport and communication	3.9	3.6	3.2	3.0	3.0	2.8
Finance and insurance	4.0	3.4	3.6	3.6	4.3	4.1
Real estate	6.4	6.2	5.6	6.2	6.8	6.2
Mining and quarrying	0.8	0.8	1.0	0.9	0.7	0.8
Private households	2.3	1.9	1.8	2.1	2.3	2.3
Other	21.1	18.2	18.3	18.7	16.8	18.8
Credit to agriculture (in percent of total deposits)	7.3	8.0	8.2	8.4	8.3	8.8

Source: Central Bank of Kenya.

Table 59. Kenya: Balance of Payments, 1995–2000

	1995	1996	1997	1998	1999	2000 Prel.
	(In millions of U.S. dollars, unless otherwise indicated)					
Current account	-509	-196	-450	-549	-234	-220
Excluding official transfers	-505	-209	-469	-549	-233	-311
Exports, f.o.b.	1,924	2,083	2,060	2,012	1,755	1,774
Coffee	282	287	296	212	172	154
Tea	331	396	406	546	472	463
Oil products	95	97	170	149	138	127
Other	1,217	1,303	1,187	1,105	973	1,030
Imports, f.o.b.	-2,666	-2,598	-2,944	-3,028	-2,679	-2,965
Public	-212	-142	-92	-148	-121	-94
Private	-2,454	-2,456	-2,852	-2,881	-2,557	-2,871
Oil	-401	-448	-519	-532	-527	-850
Other	-2,053	-2,008	-2,333	-2,349	-2,031	-2,021
Balance on goods	-742	-515	-884	-1,016	-924	-1,191
Services (net)	149	98	90	122	298	245
Credit	1,024	952	916	831	932	969
Foreign travel	486	452	388	290	301	259
Other	538	500	528	541	631	710
Debit	-876	-854	-826	-709	-634	-724
Balance on goods and services	-594	-417	-794	-894	-626	-946
Income (net)	-320	-226	-172	-130	-173	-134
Credit	26	22	39	41	32	45
Debit	-346	-247	-211	-171	-205	-179
Of which: official interest payments	-257	-225	-160	-148	-164	-124
Current transfers (net)	404	446	516	475	564	860
Private (net)	409	433	497	476	566	769
Official (net)	-4	13	19	0	-2	91
Capital and financial account	375	643	413	616	214	211
Capital account	111	112	63	79	63	63
Of which: capital transfers	111	112	63	79	63	63
Financial account	264	531	350	537	151	148
Investment assets and liabilities (net)	-5	43	-127	-42	-285	-314
Official, medium and long term	-61	-51	-199	-172	-305	-170
Inflows	378	400	241	287	205	304
Outflows	-439	-452	-440	-460	-510	-474
Commercial banks (net)	23	88	3	80	21	-235
Private (net)	33	6	69	51	-1	91
Short-term (net) and net errors and omissions 1/	268	489	477	578	436	462
Overall balance	-135	447	-37	66	-20	-8
Financing items	135	-447	37	-66	20	8
Reserve assets (gross)	168	-397	67	5	-8	-106
Use of Fund credit and loans to the Fund (net)	-39	-25	-67	-62	-60	2
Change in arrears	6	-25	37	-79	88	-53
Rescheduling	0	0	0	70	0	166
Remaining gap	0	0	0	0	0	0
Memorandum items:						
Gross official reserves (end of period)	453	842	780	766	802	897
(in months of next year's imports) 2/	458	855	788	783	791	897
Current account balance						
(percent of GDP, excluding official transfers)	0	0	0	0	0	0
(percent of GDP, excluding special imports) 3/	-4	-1	-4	-4	-2	-2
Debt-service ratio after rescheduling 4/	25	24	22	24	27	17
Import volume growth, goods (percent)	43	5	-7	1	-5	4
Import volume growth, goods (percent; excluding special imports) 3/	17	11	-10	-2	-5	-6
Export volume growth, goods (percent)	15	12	-11	-2	-6	-11
Net present value of debt 5/	5,846	5,380	5,182	4,670	4,257	3,982
NPV of debt/exports (percent) 5/ 6/	224	187	174	158	150	144
Debt/GDP (percent) 5/	71	67	56	51	52	51

Source: Kenyan authorities; and Fund staff estimates.

1/ Includes underrecorded tourism earnings.
2/ In months of projected imports of goods and nonfactor services.
3/ Includes defense-related imports, imports of maize, sugar, and airplanes, and, beginning in 1998, imports related to rehabilitation of the energy sector.
4/ In percent of exports of goods and services.
5/ After Paris Club rescheduling and assumed rescheduling, under comparable terms, by commercial and non-Paris Club bilateral creditors in 2000. Official development assistance (ODA) debt was rescheduled over 20 years, with 10 years grace, and an assumed interest rate of 2 percent. Non-ODA debt was rescheduled over 18 years with a 3 year grace period and graduated repayments, and an assumed interest rate equal to the average currency commercial interest reference rate (CIRR) . NPV of debt refers to present value of debt service calculated using CIRRs. Includes arrears on nonreschedulable debt.
6/ Three-year backward-looking average of exports.

Table 60. Kenya: Tea Production and Exports, 1995–2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 Prel.
									(In thousand of tons, unless otherwise specified)		
Production	197	204	188.1	211.2	209.4	244.6	257.2	220.7	294.1	248.8	236.3
Smallholder			99.8	112.5	119.1	139.0	144.1	129.7	175.6	153.9	145.6
Estates			88.3	98.6	90.3	105.6	113.1	91.0	118.5	94.9	90.7
Area (in thousands of hectares)	197	204	103.5	104.9	105.9	111.3	113.7	118.8	121.0	124.2	126.1
Smallholder			72.2	73.1	73.8	79.0	81.2	86.1	87.9	90.3	91.7
Estates			31.3	31.8	32.1	32.4	32.5	32.7	33.1	33.9	34.4
Average yield (kilograms per hectare)											
Smallholder			1,730	1,942	1,776	1,996.1	1,383.2	1,539.3	1,523.2	1,772.0	1,775.2
Estates			2,816	3,339	3,013	3,403.6	2,816.2	3,106.2	2,819.7	3,278.8	3,477.3
Exports											
Volume (in thousands of tons)	178	178	169	191	178	225.6	253.3	199.1	263.6	260.1	217.3
Price (U.S. cents per pound)	164	155	174	156	170	146.6	156.5	204.1	207.1	181.6	213.0
Value (millions of U.S. dollars)	292	277	295	299	301	330.6	396.3	406.3	545.9	472.3	462.9

Sources: Tea Board of Kenya; Central Bureau of Statistics; and Fund staff estimates.

Table 61. Kenya: Coffee Production, Consumption, and Exports, 1995–2000

	Crop Years Beginning October 1										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 Prel.
	(In thousands of tons, unless otherwise specified)										
Opening stocks	3,752	33.1	37.0	28.3	17.3	35	13	11	7	24	...
Production	197,002	90.3	79.9	73.5	95.8	99	97	68	53	68	101
Consumption	17,883	3.0	3.0	3.0	3.0	5	4	2	3	4	...
Total exports 1/											
Volume	115	85	79	89	80	90	116	70	51	73	88
Average price (U.S. cents per pound)	75	85	74	90	132	142	112	192	187	107	79
Value (millions of U.S. dollars)	192	159	128	177	233	282	287	296	212	172	154

Source: Kenyan authorities.

Table 62. Kenya: Commodity Composition of Trade, 1995–2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 Prel.
							(In percent of total)				
Exports											
Coffee	19.2	15.0	12.6	16.0	15.7	15	14	14	11	10	9
Tea	29.3	26.3	29.1	27.1	20.3	17	19	20	27	27	26
Horticulture	8.3	6.9	6.9	6.1	5.6	6	7	7	8	10	12
Petroleum products 1/	5.9	7.2	6.8	5.6	4.3	5	5	8	7	8	7
Other	37.2	44.6	44.5	45.1	54.1	57	56	51	47	46	46
Imports											
Consumer goods 2/	8.4	9.6	10.6	10.8	12.9	13	16	12	14	15	10
Industrial supplies 3/	37.7	40.6	43.1	42.9	47.1	41	41	44	38	38	27
Fuels and lubricants	19.2	18.7	20.2	24.8	16.2	13	16	15	16	15	25
Machinery, capital, and transport equipment	34.7	31.1	26.1	21.4	23.9	33	27	29	32	33	37

Source: Kenyan authorities.

Table 63. Kenya: Trade Volumes and Prices, 1995–2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 Prel.
				(Indices 1990=100)			(Indices, 1990 = 100)				
Volume indices											
All exports	100	107	101	113	135	157	174	157	153	145	136
Nontraditional exports	100	102	99	115	157	169	175	172	155	133	122
All imports	100	92	91	80	101	133	136	137	133	125	132
Excluding special imports	100	96	93	88	98	140	146	136	138	132	135
Price indices 1/											
All exports	100	99	100	98	111	123	120	132	132	121	130
Nontraditional exports	100	104	111	113	127	158	165	148	152	154	160
All imports	100	92	88	87	88	101	96	103	109	101	107
Terms of trade	100	108	114	113	126	122	125	128	121	120	121
				(Percentage change)			(Annual percentage changes)				
Volume indices											
All exports		6.5	-5.0	11.7	19.1	16.6	10.9	-10.0	-2.0	-5.2	-6.1
Nontraditional exports		2.1	-2.7	15.4	37.3	7.0	3.8	-1.6	-10.3	-13.9	-8.7
All imports		-8.0	-0.7	-12.3	25.7	32.1	2.2	1.1	-3.2	-6.3	5.7
Excluding special imports		-4.0	-3.2	-5.6	11.7	43.2	4.5	-7.0	1.2	-4.3	2.1
Price indices 1/											
All exports		-0.6	1.0	-2.5	13.0	11.2	-2.3	9.9	-0.3	-8.0	7.1
Nontraditional exports		4.0	6.3	2.4	11.8	25.0	4.3	-10.2	2.5	1.4	4.1
All imports		-8.0	-3.9	-1.9	1.2	14.9	-4.8	7.7	5.0	-6.7	5.6
Terms of trade		8.0	5.1	-0.6	11.7	-3.2	2.6	2.0	-5.0	-1.4	1.4

Sources: Kenya authorities; and Fund staff estimates.

1/ In U.S. dollars.

Table 64. Kenya: Value, Unit Value, and Volume of Major Exports, 1995–2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 Prel.
								(In millions of U.S. dollars, unless otherwise specified)			
Coffee	191.5	158.6	128.0	176.5	233.3	282	287	296	212	172	154
Price (U.S. cents per pound)	75.4	84.8	73.8	90.0	131.8	142	112	192	187	107	79
Volume (thousands of tons)	115.2	84.8	78.7	89.0	80.3	90	116	70	51	73	88
Tea	292.4	277.1	294.7	298.6	301.1	331	396	406	546	472	463
Price (U.S. cents per kilogram)	164.2	155.4	174.4	156.1	169.5	147	156	204	207	182	213
Volume (thousands of tons)	178.1	178.3	169.0	191.3	177.6	226	253	199	264	260	217
Horticulture	83.0	73.3	70.3	67.8	83.7	119	137	146	161	173	209
Processed fruits and vegetables	44.1	49.3	46.0	44.7	44.0	94	87	65	63	60	45
Hides, skins, and leather	29.0	26.2	25.5	26.8	29.4	26	16	13	11	10	12
Price (U.S. dollar per kilogram)	113.8	101.4	91.1	99.6	108.1	216	154	118	117	89	88
Volume (thousands of tons)	11.6	11.7	12.7	12.2	12.4	5	5	5	4	5	6
Soda ash	21.0	22.4	16.8	19.6	17.3	20	20	23	20	18	19
Cement	10.9	11.8	15.2	20.8	29.1	33	44	40	24	18	18
Price (U.S. dollar per ton)	34.5	40.2	40.2	41.4	50.8	69	66	56	56	65	58
Volume (thousands of tons)	316.6	293.1	377.6	502.5	573.4	482	675	704	427	276	308
Pyrethrum	18.9	23.4	22.7	15.9	28.0	27	31	27	12	9	9
Oil products	59.1	75.7	68.7	62.3	63.6	95	97	170	149	138	127
Other exports	247.0	337.7	324.7	369.9	654.4	897	968	875	814	685	708
Total	997.0	1,055.5	1012.6	1102.9	1484.0	1,924	2,083	2,060	2,012	1,755	1,764

Sources: Kenyan authorities; and Fund staff estimates.

Table 65. Kenya: Destination of Exports, 1995–2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 Prel.
							(In millions of U.S. dollars)				
Western Europe	499	559	437	459	527	622	708	694	618	557	540
United Kingdom	189	194	203	187	177	190	216	236	269	242	244
Germany	106	90	69	85	119	144	154	130	92	82	73
Netherlands	60	48	45	46	64	83	112	97	88	87	96
Other	145	227	119	141	167	205	226	231	169	146	127
Eastern Europe	17	2	1	2	3	2	5	6	6	9	8
United States	36	43	40	43	52	51	56	58	51	38	37
Canada	9	7	8	9	11	12	11	10	10	6	6
Africa	232	276	330	403	680	924	968	944	948	807	812
Uganda	55	78	77	104	194	298	334	310	322	300	317
Tanzania	28	39	52	85	162	245	266	280	267	194	145
Zambia	3	2	3	2	3	4	4	5	4	2	2
Other	146	156	197	212	321	377	364	349	355	311	347
Middle East	40	34	32	34	26	44	66	66	80	78	86
Asia	134	128	150	141	173	211	221	213	259	227	213
Japan	13	12	15	10	12	13	17	15	16	15	19
India	17	7	8	9	9	13	13	20	30	25	18
Other	104	109	127	121	151	185	191	178	213	187	176
Aircraft and ship stores	79	131	95	67	46	17	30	41	24	8	23
Other	27	3	11	7	9	41	18	28	16	25	39
Total	1,073	1,183	1,103	1,166	1,527	1,924	2,083	2,060	2,012	1,755	1,764
				(In percent of total)				(In percent of total)			
Western Europe	46.5	47.3	39.6	39.4	34.5	32.3	34.0	33.7	30.7	31.7	30.6
Eastern Europe	3.4	3.6	3.6	3.7	3.4	0.1	0.2	0.3	0.3	0.5	0.5
United States						2.7	2.7	2.8	2.5	2.2	2.1
Canada						0.6	0.5	0.5	0.5	0.3	0.4
Africa	21.6	23.3	29.9	34.6	44.5	48.0	46.5	45.8	47.1	46.0	46.0
Middle East	3.7	2.9	2.9	2.9	1.7	2.3	3.2	3.2	4.0	4.4	4.9
Asia	12.5	10.8	13.6	12.1	11.3	11.0	10.6	10.3	12.9	12.9	12.1
Aircraft and ship stores	12.3	12.1	10.4	7.4	4.5	0.9	1.4	2.0	1.2	0.5	1.3
Other						2.1	0.9	1.3	0.8	1.4	2.2

Source: Kenyan authorities.

Table 66. Kenya: Commodity Composition of Imports, 1995–2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 Prel.
							(In millions of U.S. dollars)				
By economic category 1/											
Consumer goods	194	188	197	174	264	401	476	392	478	430	323
Food and beverages	30	31	45	21	48	40	63	76	114	79	115
Other nondurable goods	62	65	67	90	101	126	48	126	158	142	119
Durable goods	101	92	85	63	114	235	366	190	206	208	88
Of which											
Passenger cars	63	59	61	39	79	154	212	107	107	94	...
Intermediate goods	1,315	1,156	1,183	1,088	1,291	1,671	1,719	1,933	1,804	1,524	1,720
Primary industrial goods	93	72	141	84	185	96	189	338	235	160	57
Processed industrial goods	778	720	664	606	776	1,184	1,055	1091	1041	934	834
Fuels and lubricants	445	365	378	398	330	392	475	503	529	430	830
Capital goods	799	606	483	343	485	940	749	910	984	803	1,056
Transport equipment	223	157	101	108	172	359	213	361	406	323	542
Other machinery and equipment	576	449	382	235	314	581	536	549	577	480	514
Other goods	3	2	4	2	2	85	70	48	71	158	156
Total	2,311	1,952	1,866	1,606	2,042	3,097	3,014	3,283	3,337	2,915	3,255
By SITC category 2/											
Food and beverages (0 and 1)	140	91	181	102	305	130	209	414	327	202	296
Mineral fuels (3)	466	376	412	407	333	401	448	519	532	527	850
Raw materials (2 and 4)	117	131	153	108	144	220	199	195	250	215	188
Chemicals (5)	265	319	291	307	294	516	488	492	497	458	431
Machinery and transport equipment (7)	671	658	411	329	503	995	869	844	896	708	723
Other manufactured goods (6, 8, and 9)	652	542	417	354	463	836	801	818	834	806	766
Total	2311	2,117	1866	1606	2042	3,097	3,014	3,283	3,337	2,915	3,255

Source: Kenyan authorities.

1/ Customs data.

2/ Standard International Trade Classification (SITC) categories are shown in parentheses.

Table 67. Kenya: Imports by Country of Origin, 1995–2000

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000 Prel.
	(In millions of U.S. dollars)										
Western Europe	1,162	904	715	610	674	1,306	1,180	1,103	1,116	960	1,038
United Kingdom	423	318	222	191	270	381	390	367	403	329	329
Germany	180	170	127	114	127	206	179	217	184	159	114
Netherlands	...	...	...	...	...	86	84	81	89	72	114
Other	559	416	366	305	278	633	527	438	440	400	481
Eastern Europe	16	18	11	13	22	27	37	38	38	47	67
United States	102	98	153	93	135	126	154	240	273	188	132
Canada	14	18	13	13	10	12	31	27	23	25	13
Africa	69	58	59	39	266	273	282	490	282	311	298
Uganda	1	2	5	5	4	3	1	8	1	4	7
Tanzania	11	8	9	8	18	12	16	15	10	7	12
Zambia	9	8	10	6	4	3	5	2	2	3	4
Other	47	40	35	20	239	255	260	465	269	297	275
Middle East	474	390	407	369	315	389	476	557	595	456	963
Asia	421	441	427	305	494	827	837	741	794	718	679
Japan	207	224	175	122	176	332	219	245	260	217	164
India	41	37	54	43	78	162	168	140	143	127	133
Other	166	173	191	132	237	333	450	356	391	374	383
Other	169	307	247	269	271	137	17	87	216	210	65
Total 1/	2,311	2,117	1,866	1,606	2,042	3,097	3,014	3,283	3,337	2,915	3,255
	(In percent of total)										
Western Europe	50.3	42.7	38.3	38.0	33.0	42.2	39.2	33.6	33.4	32.9	31.9
United Kingdom	18.3	15.0	11.9	11.9	13.2	12.3	12.9	11.2	12.1	11.3	10.1
Germany	7.8	8.0	6.8	7.1	6.2	6.7	5.9	6.6	5.5	5.5	3.5
Netherlands	...	...	...	...	...	2.8	2.8	2.5	2.7	2.5	3.5
Other	24.2	19.6	19.6	19.0	13.6	20.4	17.5	13.3	13.2	13.7	14.8
Eastern Europe	0.7	0.8	0.6	0.8	1.1	0.9	1.2	1.2	1.1	1.6	2.0
United States	4.4	4.6	8.2	5.8	6.6	4.1	5.1	7.3	8.2	6.4	4.1
Canada	0.6	0.8	0.7	0.8	0.5	0.4	1.0	0.8	0.7	0.9	0.4
Africa	3.0	2.8	3.2	2.4	13.0	8.8	9.4	14.9	8.5	10.7	9.2
Uganda	0.0	0.1	0.3	0.3	0.2	0.1	0.0	0.2	0.0	0.1	0.2
Tanzania	0.5	0.4	0.5	0.5	0.9	0.4	0.5	0.5	0.3	0.2	0.4
Zambia	0.4	0.4	0.5	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.1
Other	2.0	1.9	1.9	1.3	11.7	8.2	8.6	14.2	8.1	10.2	8.5
Middle East	20.5	18.4	21.8	23.0	15.4	12.6	15.8	17.0	17.8	15.6	29.6
Asia	18.2	20.8	22.9	19.0	24.2	26.7	27.8	22.6	23.8	24.6	20.9
Japan	9.0	10.6	9.4	7.6	8.6	10.7	7.3	7.5	7.8	7.4	5.0
India	1.8	1.8	2.9	2.7	3.8	5.2	5.6	4.3	4.3	4.4	4.1
Other	7.2	8.2	10.2	8.2	11.6	10.8	14.9	10.8	11.7	12.8	11.8
Other	7.3	14.5	13.2	16.8	13.2	4.4	0.6	2.6	6.5	7.2	2.0

Source: Kenyan authorities.

1/ Imports, c.i.f.

Table 68. Kenya: External Services, Income, and Transfer Accounts, 1995–2000
(In millions of U.S. dollars)

	1995 1/	1996	1997	1998	1999	2000 Prel.
Services						
Transportation Account	-148	-127	-54	-3	140	69
Credit	283	289	285	306	376	411
Debit	-431	-416	-339	-309	-236	-342
Foreign travel	827	737	578	390	436	388
Credit	341	285	190	100	136	128
Debit	486	452	388	290	301	259
Government	204	177	279	337	363	473
Credit	31	17	81	138	149	207
Debit	174	160	198	200	214	266
Other services: private	7	-26	-82	-78	-85	-126
Credit	-75	-77	-126	-113	-126	-159
Debit	82	52	45	35	41	33
Investment income	-320	-226	-172	-130	-173	-134
Credit	0	0	0	0	0	0
Debit	-320	-226	-172	-130	-173	-134
Transfers	1,100	1,239	1,208	1,145	1,248	1,909
Private	924	991	1,076	1,030	1,193	1,693
Credit	516	558	579	554	627	923
Debit	409	433	497	476	566	769
Public	175	248	131	116	55	216
Credit	175	233	110	114	55	194
Debit	1	15	21	1	0	22

Source: Kenyan authorities; and Fund staff estimates.

1/ Following the move to the *IMF Balance of Payments Manual* (5th. ed.) methodology, there is a break in some of the series in 1995.

Table 69. Kenya: Public and Publically Guaranteed External Debt Outstanding, 1995-2000

	1995	1996	1997	1998	1999 Prov.	2000 Est.
(In millions of US dollars, unless otherwise specified)						
Bilateral creditors	2440	2317	2110	2114	2057	1889
Austria	67	58	41	40	32	31
Canada	90	68	53	60	64	63
Denmark	67	65	58	60	37	33
France	302	348	274	298	263	201
Germany	93	133	112	116	109	101
Italy	105	140	124	122	137	126
Japan	992	1114	1089	971	1108	1063
The Netherlands	129	121	100	83	61	52
Saudi Arabia 1/	36	31	-	-	11	12
United Kingdom	98	76	74	66	68	51
United States	107	77	91	77	93	92
Other	354	86	94	221	74	64
Multilateral creditors	3364	3348	3008	3071	3005	3001
AfDB/AfDF	305	333	322	342	384	355
EU/EIB	201	194	163	143	178	161
IBRD	465	364	213	154	91	47
IDA	1977	2043	2032	2210	2219	2309
IMF	382	381	255	189	131	128
Other	34	33	23	33	2	1
Other Creditors	477	507	548	570	411	378
Total Outstanding Debt	6281	6172	5666	5755	5473	5268
Debt service payments	735	738	681	670	734	636
Principal	478	513	522	522	570	516
Non-IMF	439	452	498	460	510	474
IMF	39	61	24	62	60	42
Interest	257	225	159	148	164	120
Non-IMF	253	221	156	147	163	119
IMF	4	4	3	1	1	1
Memorandum items:						
Debt service (in percent of exports of goods and services)	24.9	24.3	22.9	23.6	27.3	23.2
Stock of debt in percent of GDP	70.9	66.9	52.9	50.9	52.0	50.9
Stock of arrears	92.2	67.3	104.3	25.3	113.0	59.6

Sources: Kenyan authorities; and Fund staff estimates.

1/ Data the period 1997-2000 not available, hence assummed to fall under others

Taxes	Nature of Tax	Exemptions and Deductions	Rates
1. Income taxes **1.1 Taxes on companies, corporations, and enterprises** Income Tax Act, 1973 (No. 16 of 1973); 1974 Finance Act.	Tax is charged on income accruing in Kenya.	Income of specified agricultural produce boards, registered pension schemes, and provident funds is exempt. Income deriving from interest on government tax reserve certificates and on specified loans to government and other public authorities, etc., is exempt, as are dividends from companies of which the recipient company controls more than 12.5 percent of the voting stock. Export processing zone enterprises are exempt for ten years commencing from date of first production, sale, or receipt. Dividend distributions are subject to compensatory tax at a rate of $t/(1-t)$ if the distributions exceed the value of the dividend tax account, where t is the current corporate tax rate of the company. Dividends received on trading account by a financial institution are exempt from taxation, but the expenses attributable to earning exempt dividend income are nondeductible. Gains of insurance companies from stock market trading are exempt. Gains of licensed dealers from stock market trading are exempt subject to maintaining minimum turnover rates. (Securities which have been held for a period not exceeding 24 months). Annual depreciation allowances as a percent of written-down value (declining balance) are as follows: machinery, 12.5 percent; mining operations, 10 percent of the capital investment; motor vehicles and aircraft, 25 percent; computers and peripheral hardware, calculators, copiers and duplicating machines, 30 percent; heavy earthmoving equipment and agricultural machinery, 37.5 percent.	Effective 2000, resident company rate of 30 percent; nonresident company rate of 37.5 percent. For 1998 and 1999 resident companies, the rate was 32.5 percent; for nonresident companies (branches), 40 percent. The rate for export processing zone enterprises is 25 percent after the first ten years. Withholding and similar taxes Following are rates on payments to residents (offsetable against tax liability unless otherwise specified): • On interest including discounts, rates are 10 percent on housing bond interest, 25 percent on bearer bond of less than 2 years duration interest, and 18 percent on all other interest. This is a final tax where interest is paid by a financial institution, including the central bank, to an individual; otherwise, interest is subject to income tax. • On dividends, rate is 5 percent on dividends from resident corporations (excluding savings cooperatives) as a final tax; otherwise it is 15 percent. • On insurance brokerage fees and commissions, rate is 5 percent. For insurance agents' fees, rate is 10 percent. • On contract, consultancy, or agency fees of an individual in excess of K Sh 24,000, rate is 2 percent but only if he or she is not working under a registered business name or PIN and the amount is not recorded and reported. • On royalties, the rate is 5 percent. • On consultancy, agency or contractual fee in excess of K Sh 200,000 per month to a recipient working under a registered business income and with a PIN, rate is 2 percent.

Taxes	Nature of Tax	Exemptions and Deductions	Rates
Corporate income tax (continued)		Annual depreciation allowances based on original expenditure (straight-line method) are as follows: buildings, 2.5 percent (hotels, 4 percent); agricultural land improvements, $33^1/_3$ percent. An initial "investment deduction" of 85 percent is granted for new investment in buildings (including hotels) and equipment outside the municipalities of Nairobi and Mombasa, and 35 percent within these municipalities. Regular depreciation is disallowed on that share of the expenditure qualifying for investment deduction. Effective 1995, investment deduction is 60 percent in all regions and qualifying investments expanded to include infrastructure and environmental expenditures. Investment deduction as percentage of capital expenditure	• Taxable amount of pension payments or withdrawals from registered funds, if not taxed under PAYE system, at the following rates: Effective 1/1/2000

Investment deduction as percentage of capital expenditure

Year of first use	Nairobi/ Mombasa	All other regions
	(In percent)	
1/1/1988	10	60
1/1/1989	25	75
1/1/1990	35	85
1/1/1995	60	60
1/7/2000	100	100
1/1/2002	85	85
1/1/2003	70	70
1/1/2004	60	60

If manufacturing under bond for export, investment deduction is increased to 100 percent. An optional 100 percent for export processing zone enterprises is claimable within the first 20 years from date of establishment.

Effective 1/1/2000

Taxable amount	Rate of tax (percent)
First K Sh 400,000	10.0
Next K Sh 400,000	15.0
Next K Sh 400,000	20.0
Next K Sh 400,000	25.0
Above K Sh 1,600,000	30.0

Payments to nonresidents are taxed at following rates:

• Interest, including discounts, 15 percent, except for oil exploration, 10 percent, and bearer bonds, 25 percent;
• Dividends, 10 percent;
• Rent of immovable property, 30 percent, and rent of other tangible property, 15 percent;
• Management and professional fees, 20 percent, except for oil exploration, 12.5 percent;
• Royalty, 20 percent;
• Pension, 5 percent;
• Entertainment and sporting events, 20 percent; and
• Oil exploration fees, 12.5 percent.
• Advance tax on commercial vehicles: goods carrying vehicles at K Sh 1,500 per ton load capacity per year, and passenger carrying at K Sh 60 per passenger capacity per month (see 5.5.1)

Taxes	Nature of Tax	Exemptions and Deductions	Rates
Corporate income tax (concluded)		In ascertaining total income, all expenditure incurred wholly and exclusively in the production of income is deductible, including, inter alia, pre-production business expenditures, capital expenditure on farmland for the purpose of preventing soil erosion or for clearing and planting permanent or semipermanent crops, and interest on money employed in the production of income.	
Presumptive tax on agricultural sector (PIT), effective July 1, 1989)	PIT is payable on the gross sales price of selected agricultural produce sales. Qualifying produce include maize, wheat, barley, rice, sugarcane, pyrethrum flower, tobacco leaf, ta lef, coffee, cashews, pigs, cotton, and hides and skins. For individual producers, PIT is a final tax, but for companies it is a withholding tax.		Two percent. Terminated effective January 1, 1994 but reintroduced from July 1, 1996. Suspended for 1999 and subsequent years. Re-introduced from 1st January 2000. Suspended from 1st October 2000. Re-introduced to be effective from 1st January, 2002
1.2 Taxes on individuals			

Income Tax Act, 1973 (No. 16 of 1973); 1974 Finance Act.

Tax is charged on income derived from, and accruing in, Kenya. A pay-as-you-earn (PAYE) system is in operation for employees.

The nonemployment income of a married woman living with her husband is deemed to be her husband's income for tax purposes. A wife's employment, self-employment, and professional income are taxed separately from her husband's income.

The President of Kenya is exempt from taxes on his salary, etc., as are allowances of members of parliament. Interest on post office savings bank deposits and on tax reserve certificates and specified government securities held by nonresidents are also exempt. Basic personal tax allowance of K Sh 8,712 effective January, 1998 and K Sh 9,600 effective January, 2000 and K Sh 11,520 effective Jan. 1, 2000. Fringe benefits up to K Sh 2,400 (as from 1st January, 2002 it will be Kshs.12,000) a year are exempt, as are pension and retirement annuity payments payable to residents up to K Sh 150,000 per annum. As of January 1, 1993, one-time lump-sum payments of up to K Sh 1.4 million to the estate of a deceased pensioner are exempt.

Taxable income effective from: Rate of tax

	Jan 1, 1999	Jan 1, 2000	(percent)
First K Sh	94,800	104,400	10.0
Next K Sh	94,800	104,400	15.0
Next K Sh	94,800	104,400	20.0
Next K Sh	94,800	104,400	25.0
Next K Sh	94,800	104,400	30.0
Above K Sh	474,000	417,600	32.5

	Jan 1, 2001	
First	109,440	10.0
Next	119,440	15.0
Next	119,440	20.0
Next	119,440	25.0
Above	437,760	30.0

Taxes	Nature of Tax	Exemptions and Deductions	Rates
		Effective June 11, 1998, a fringe benefit tax is applicable to benefit from employer-provided low interest rate loans.	The top individual income tax rate was lowered from 45 percent to 40 percent effective January 1, 1993, to 35 percent effective January 1, 1995, to 32.5 percent effective January 1, 1998, and to 30 percent effective January, 2000. An additional 2.5 percent drought levy was charged on top-bracket income in 1995. The 30 percent bracket was added in 1996.

Withholding and similar taxes at same rates as in Section 1.1. |
| Individual income tax (concluded) | | Interest not exceeding K Sh 100,000 on amounts borrowed for the purchase or improvement of owner-occupied housing may be deducted. Pension contributions to a registered pension, provident, or individual retirement fund up to the amount of 30 percent of pensionable income or K Sh 150,000 in 1999, K Sh 180,000 in 2000, K Sh 210,000 in 2001 onward per annum per employee are also deductible. In ascertaining total income, all expenditure incurred wholly and exclusively in the production of income is deductible, including, inter alia, capital expenditure to prevent soil erosion and interest on money employed in the production on income. Contributions to a registered home ownership savings plan are deductible up to K Sh 48,000 per year for ten years by nonhomeowners. Withdrawals are exempt if used to buy or construct a permanent residence. Deduction of interest expenses incurred in earning investment income is limited to the amount of investment income. | Penalty for late payment or underpayment of tax, 20 percent of tax due; for unpaid taxes, 2 percent interest for each month overdue on compounding basis; for nonsubmission of returns, 5 percent of amount due. |
| Presumptive tax on agriculture (effective July 1, 1989) | See under Section 1.1. | | |

Taxes	Nature of Tax	Exemptions and Deductions	Rates
2. Social security contributions. National Social Security Fund Act, 1965 (No. 28 of 1965).		Persons in the public service covered by the Pensions Act are exempt, as are members of the armed forces, police force, prison services, and National Youth Service. However, temporary employees who do not enjoy government pension benefits are covered by the social security scheme	The employer and employee contribute 5 percent each of salary up to a maximum contribution of K Sh 80 per month each. This is equivalent to applying a monthly wage ceiling of K Sh 1,600.
3. Other payroll taxes	None		
4. Taxes on property			
4.1 Real estate taxes	There are no central government taxes on land or urban property.		
4.2 Death and gift taxes	The estate duty has been eliminated.		
4.3 Property transfer taxes	See stamp duties under Section 7.2		
5. Taxes on goods and services			
5.1 Value-added tax (VAT) VAT Act, Cap 476.	VAT is based on the destination principle and levied on locally produced or imported taxable goods or taxable services. It is levied at the manufacturing level for all taxable goods and at the retail point on designated goods, which include all taxable goods except zero rated goods, coffee and tea (including instant coffee and tea) sweet biscuits, tomato sauces, baking powders and yeasts, sausages, tams and marmalade, prepared or preserved fish, whole or in pieces but not minced.	Unprocessed agricultural products and electric generators are exempt. Rental services are exempt if the equipment or vehicles are zero rated or exempt except charter of aeroplane and hire of busses which will become taxable with effect from 1/9/2001. Pharmaceuticals, medical equipment, fertilizers, seeds, some seedlings, infant milk foods, animal feeds, agricultural machinery and equipment, educational textbooks, and all exports of goods and taxable services are zero-rated. Tax can also be waived by the Minister for Finance under specific program conditions detailed in the Act.

Certain Public Bodies, Privileged persons and institutions are conferred zero-rated status on imports and purchases. Effective from 15/6/2001, sheath contraceptives and oil seed cakes became zerorated. | A standard rate of 16 percent in 1998/99, 15 percent in 1999/00, 18 percent in 2000/01 is levied on the sale price or, in the case of imports, on the customs duty value plus the amount of customs duty. A low rate of 12 percent applies to electricity, vegetable oils, and restaurant services, and to most capital equipment applied through to June 10, 1999 when all these items were raised to 15 percent, except restaurant and accommodation services which was set at 13 percent, together with 2 percent catering training levy.

With effect from. 15/6/2000 the standard rate was revised to 18% and the rate on restaurant and accommodation to 16% with 2% catering training levy. |

Taxes	Nature of Tax	Exemptions and Deductions	Rates
VAT (concluded)	VAT is levied on the following services: business and professional services; legal and accountancy; computer; secretarial, copying, printing, telecommunication; hotels and restaurants; agency and security services; construction; architectural and quantity surveying; materials-testing services; goods transportation, handling and storage, and courier services; advertising; rental/repair/maintenance of all machinery and equipment, including vehicles; entertainment services; cleaning and photographic services; and beauty parlors and hairdressers.	Exports of goods and services are zero rated. The minimum turnover level for registration is K Sh 3.6 million per year effective June 10, 1999 from all related businesses. K Sh 2.4 million per year for the combined turnover of taxable goods and services from all related businesses.	
	Effective Jan. 1, 2001, VAT was levied on all services except financial services, insurance/reinsurance, education and training services at registered institutions, medical, veterinary, dental, nursing, social welfare services by registered charitable organizations, burial and cremation services, public transportation of passengers, real property rentals, postal and money order services by Postal Corp. of Kenya, local authority services, insurance agents and brokers, stock exchange brokers, tea and coffee brokers, rental of exempt or zero-rated goods, tour operators and travel agents, shed operators, airport services. With effect from. September 1, 2001 the following services will also be exempt: services rendered by trade, professional and labour associations, sanitary and pest control services rendered to domestic households, Agricultural animals husbandry, horticultural pestal services, conference services, conducted for educational institutions. Car park services rendered by local authorities; Accommodation and restaurant services provided within the following establishments – Charitable or religious organisations, educational training institutions, medical institutions and cafeteria and canteens operated by employers for benefit of low income employees.		

Taxes	Nature of Tax	Exemptions and Deductions	
5.21 Tobacco. Customs & Excise Act (Chapter 474 of the Laws of Kenya);.	Tax is levied on the ex factory price of cigarettes, cigars, pipe tobacco, and snuff, on the import value (including customs duty).	Not applicable. Transit shed operators and airport services were removed from exempt services. Supply of taxable services in respect of goods in transit, taxable Airport Services to transit aircrafts and taxable supplied to Aid Agencies were zero-rated.	Cigarettes, pipe and other Tobacco 130 percent Cigars 30 percent In 2000/01 130 percent plus excise stamp per pack of K Sh 1 on imported or domestic cigarettes over 72 mm. Excise stamp per pack of cigarettes below 72 mm is shs. 0.50
5.22 Liquor			
5.221 Excise duty on beer. Customs & Excise Act (Chapter 474 of the Laws of Kenya).	Duty is levied on ex factory price of locally brewed beer, or import value (including customs duty).	Not applicable.	Light beer in 2000/01 85 percent Heavy beer (stout and porter) in 2000/01 60 percent Nonmalt beer and other Fermented beverages 60 percent Local beer (chibuku) 15 percent
5.222 Excise duty on spirits, wines and mineral waters. Customs & Excise Act (Chapter 474 of the Laws of Kenya).	Levied on ex factory price of locally produced products, or on import value (including customs duty).	Not applicable.	Mineral water and soda water 10 percent Other nonalcoholic drinks 20 percent Cider 35 percent Wine 45 percent Spirits 65 percent
5.23 Refinery throughput tax. Refinery Throughput Tax Act, 1982.	Tax is levied on all charges made by a refinery with respect of refining crude petroleum.	Charges pertaining to any class or consignment of petroleum or petroleum products or to any part of the refining process may be waived by the Minister for Finance.	Fifteen percent of refining charges. Refinery throughput tax was reduced to zero effective November 1, 1994.
5.24 Other excises			
5.241 Second-hand motor vehicle purchase tax	Tax is levied on purchase of second-hand motor vehicles.	Ambulances, etc, are exempt.	K Sh 1,525 for vehicles with fewer than four wheels and K Sh 1,525 to K Sh 5,225 for all other vehicles, depending upon the engine capacity (1996 Finance Act).

Taxes	Nature of Tax	Exemptions and Deductions	Rates
5.242 Matches	Tax is levied on production of matches and imports.	Not available	K Sh 12.50 per 100 containers of less than 25 matches per container and K Sh 25.00 per 100 containers of between 25 and 50 matches per container; otherwise, K Sh 25.00 per 5,000 matches. Exempted effective June 19, 1997.
Vehicles	Ex factory price or import value (including customs duty) is taxed.		Passenger car, 1,800 cc to 2,000 cc 10 percent Passenger car, 2,000 cc to 3,000 cc 20 percent Passenger car, over 3,000 cc 40 percent
Soft Drinks	Ex factory price or import value (including customs duty) is taxed.		Twenty percent.
Cosmetics	Ex factory price or import value (including customs duty) is taxed.		Ten percent.
5.243 Oil	Specific duty is applied.		Rates per 1,000 liters Premium petrol K Sh 16,945 Regular petrol K Sh 16,555 Other white spirits K Sh 5,800 Other petroleum oil K Sh 2,600 Automotive diesel K Sh 7,301
5.3 Selective excises on services			
5.31 Air passenger service charge. Air Passenger Tax (Amendment) Act, 1973 (No. 8 of 1973).	Charge is collected by airlines from all passengers embarking at an airport on an international or domestic ticket.		From July 2001. US$20 per passenger on international ticket. K Sh 300 per passenger on domestic ticket.
5.32 Betting and gambling tax. Betting, Lotteries, and Gaming Act, 1966 (Chapter 131 of the Laws of Kenya).	Tax is levied on all bets made (1) with a bookmaker other than at an authorized race meeting, (2) with totalizators, (3) on pool betting, and (4) on gaming in public premises.		

Taxes	Nature of Tax	Exemptions and Deductions	Rates
5.3 Selective excises on services	Not available.		Bets made with bookmaker 12.5 percent of each stake, 3.5 percent of total turnover of bookmaker. Totalization 5 percent of the authorized commission, additional 5 percent of all money staked if totalizator not operated at race course. Pool betting 2 1/2 percent of gross stakes (1987 Finance Act). Gaming 13.5 percent of gross casino turnover.
5.33 Entertainment tax Entertainment Tax Act, 1950 (Chapter 479 of the Laws of Kenya).	Tax is levied on entrance charges where VAT on entertainment services does not apply.	Exemptions include stage plays and charitable and sporting events.	Eighteen percent (1991 Finance Act, Section 79(b)).
5.34 Insurance premium tax Insurance Act.	(1) Tax is levied on direct premium. (2) Tax is levied on reinsurance premium paid to reinsurance business outside Kenya on Kenyan risk.	(1) Premium paid to registered pension funds is exempt. (2) Premiums paid on marine, aviation, and industrial fires are exempt.	1) Rate of 1.5 percent of first premium. (2) Rate of 5 percent of reinsurance premium.
5.4 Business and professional licenses	All firms are required to have a license for all categories of business in which they are engaged. Fees vary according to the type of business and are graduated according to whether a business is located in a general business area or elsewhere in the city or a rural area.	Not available.	License fees under Trade Licensing Act range from K Sh 220 to K Sh 12,000 per annum (1974 Finance Act). Trading license fees were discontinued effective January 1997.
5.42 Professional license fees	All professionals are required to have a license to practice.		Cancelled in 2001.
5.43 Liquor license fees	Firms engaged in the sale of beer, wine, and spirits are required to obtain an annual liquor license. Licenses are in three broad categories: general licenses, off-licenses, and on-licenses, and fees vary with the location of the business and the specific form of license.	Not available.	License fees range from K Sh 120 to K Sh 12,000 per annum (Legal Notice No. 205 of June 15, 1989).

Taxes	Nature of Tax	Exemptions and Deductions	Rates
5.44 Banking and financial	License fees are levied under the Banking Act on all banks and, financial institutions; and under the Building Societies Act and the Insurance Act on all the building societies and insurance companies respectively. Fees vary with location with the exception of insurance companies.	Not available.	Banks and Non-bank financial institutions Annual fee of K Sh 400,000 plus K Sh 150,000 for each branch in a municipality; K Sh 100,000 for each branch in a town council; and K Sh 30,000 for each branch in an urban council. (Legal Notice 1888 of 1994) Other financial institutions Insurance companies Annual fee of K Sh 150,000 for insurance company and K Sh 250,000 for reinsurance company. Building societies Annual fee of K Sh 100,000 plus K Sh 40,000 for each branch in a municipality; Kshs.20,000 for each branch in a town council; and Kshs.6,000 for an urban council. Other places are free. Application fee, K Sh 5,000. (Section as of the Finance Act 1994)
5.5 Motor vehicle taxes	Annual fees vary with the weight and type of vehicle. The rates for diesel-driven vehicles are twice those for gasoline-driven vehicles.		Motor cars Annual fee varies from K Sh 975 for vehicles with engines not exceeding 1,000 cc to K Sh 16,250 for vehicles with engines not exceeding 5,500 cc. A fee of K Sh 815 is charged for each additional 1,000 cc (Legal Notice 242 and 241 of June 16, 1988; LN 125, 126, and 127 of 1996; LN 163, 164 of 1997). Other vehicles Annual fee based on weight varies from K Sh 975 for vehicles not exceeding 1,000 kg. to K Sh 7,315 for those not exceeding 6,000 kg. A fee of K Sh 410 is charged for each additional 500 kg.
5.5.1 Advance tax	Tax is payable annually upon registration of commercial vehicles (goods carrying) and public service vehicles (passenger carrying).	Tax can be offset against income tax liable.	Commercial vehicles Higher of K Sh 2,400 or K Sh 1,500 per ton of load capacity. Public service vehicles Higher of K Sh 2,400 or K Sh 60 per passenger capacity per month.

Taxes	Nature of Tax	Exemptions and Deductions	Rates
6. Taxes on international trade and transactions 6.1A Suspended duties	Specific duty is applied	The tax is only applicable to petroleum products	Rate of Ksh.450 per 1000 lts in respect of gasolene and kerosene and Ksh 300 in respect of other fuels.
6.1 Taxes on imports Customs & Excise Act Cap 472	There are both specific and ad valorem rates: Specific duties rates are determined by multiplying the rate with the quantity. Advaroleum duties are determined by multiplying the advalorem rate with a valuer that represents the price actually paid for the goods. It includes inter alia the cost of freight and insurance to the place or port of the importation. Fifty percent of the cost of air freight is excluded from the tax base.	Exemptions include goods purchased for use by the President and by charitable bodies and approved educational institutions; by the military and police; in aid-funded projects; and by diplomatic and international organizations. Waiver can be granted only by the Minister for Finance on cases specified in law.	Ad valorem duty rates of nil, 3, 5, 15, 20, 25, 30%, 35, and 40 percent are charged. Intermediate inputs are generally at 5 percent or 15 percent. Primary raw materials are generally duty free or 3 percent. Capital equipment is mainly charged duty free. Final products, agricultural products, and selected intermediate goods are charged at rates of 20 percent, 25 percent, 30 percent, or 35 percent. Sugar is charged at 100 percent except industrial sugar used in domestic production is 25 percent.
		Duty free items are live animals (except live swine, live poultry, nonbreeding horses, asses, mules and hinnies), medicine; fertilizers, fungicides and herbicides; maps and hydrographic or similar charts, including atlases, printed books, brochures, dictionaries, and encyclopedias; some agricultural and horticultural machinery and appliances; medical, surgical, dental and veterinarian appliances; hearses; firefighting and street-cleaning vehicles; airplanes and helicopters; mobile radiological units and mobile clinics; invalid carriages and their parts; and contact lenses.	Alternative specific rates are charged on a number of categories of goods (clothing and textiles, footwear, wheat, maize, sugar, rice milk and spirits). Specific duty rates are also charged on petroleum oil products. Since November 2000, goods from COMESA countries are duty free, but partial rate reductions to regular rates are provided on a reciprocal basis. Except/Tanzania and Uganda where the rate applied is 90%
6.2 Export Duty (Effective July 1989)	All export duties were rescinded effective June 10, 1994.		
6.2 Export Compensation Scheme	Discontinued effective August 31, 1993.		
7. Other Taxes			
7.1 Poll Taxes	None		