

Prices and Exchange Rates

Information on prices and exchange rates are important in monitoring national economic performance. This chapter provides three sets of price deflators and six exchange rate indicators. The GDP deflator for national currency series shows changes in domestic prices only. The U.S. dollar series GDP deflator includes the effects of both domestic price changes, as reflected in the national currency series GDP implicit deflator, and changes in the exchange rate between national currencies and U.S. dollars. The consumer price index measures the price changes of a selected bundle of consumer goods, which differs among countries.

The U.S. dollar exchange rate (units of national currency per U.S. dollar) is reported because of extensive use of U.S. dollars to denominate international transactions; U.S. dollars are also widely used for statistical comparisons across countries. The special drawing right (SDR) exchange rate index (based on SDRs per unit of national currency) is a broader measure of the changes in the international value of

domestic currencies because it is based on five major currencies. For Sub-Saharan Africa, it may be more representative of movements in non-dual exchange rates than that expressed in U.S. dollars alone because a large share of the region's foreign trade and debt is not denominated in U.S. dollars. A decrease in the index shows that the currency has depreciated, which indicates that foreign goods have become relatively more expensive than domestic goods. We have included information on the parallel market exchange rate and the ratio of the parallel to the official exchange rates to provide a measure of the premium on the official rate. It is tempting to view the difference between the official and parallel rates as a measure of the disequilibrium in the official exchange rate. However, this is not necessarily true. Conversion factors are sometimes used in place of official exchange rates when the latter are considered to be especially unrepresentative of rates effectively applied to international transactions.

3-1. GDP deflator (local currency series)

	Index 2000 = 100											Annual average		
	1980	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	75-84	85-94	95-MR
SUB-SAHARAN AFRICA	20	60	67	77	85	88	94	100	107	114	120	18.3	39.5	94.7
excluding South Africa	21	60	66	78	85	89	94	100	107	114	120	19.2	39.6	94.8
excl. S.Africa & Nigeria	22	60	67	79	85	90	94	100	107	113	120	20.6	40.1	95.0
Angola	..	0	0	1	2	3	19	100	208	436	922	..	0.0	188.0
Benin	38	70	81	86	91	95	97	100	103	105	108	37.2	51.7	96.2
Botswana	14	62	67	77	85	88	93	100	107	116	120	12.8	41.1	94.9
Burkina Faso	45	76	82	88	90	97	95	100	105	109	111	44.5	66.1	97.5
Burundi	22	42	48	58	71	79	82	100	113	111	124	18.5	32.7	87.3
Cameroon	38	76	89	94	97	98	97	100	103	107	109	38.3	67.7	99.3
Cape Verde	26	77	81	85	92	96	101	100	103	105	107	24.3	62.5	96.8
Central African Republic	32	84	93	94	96	97	98	100	103	107	108	32.5	69.4	99.4
Chad	45	74	81	90	93	102	95	100	112	117	114	44.1	57.1	100.4
Comoros	36	80	87	89	90	91	97	100	109	113	119	45.2	70.3	99.5
Congo, Dem. Rep. of	0	0	0	1	2	3	16	100	503	638	723	0.0	0.0	220.7
Congo, Rep. of	29	51	52	61	64	53	68	100	86	84	82	29.7	39.6	72.3
Côte d'Ivoire	39	78	86	90	94	99	100	100	104	110	111	35.5	54.8	99.5
Djibouti	..	86	90	92	94	96	98	100	..	..	..	..	72.0	94.8
Equatorial Guinea	..	32	33	42	53	40	57	100	129	130	130	..	22.3	79.3
Eritrea	..	58	63	69	72	78	84	100	114	131	151	..	54.2	95.8
Ethiopia	..	72	82	82	85	94	97	100	94	88	100	34.1	51.7	91.4
Gabon	39	77	77	86	88	74	78	100	88	96	95	35.7	53.7	87.0
Gambia, The	15	81	84	87	90	92	96	100	115	134	170	14.8	58.7	107.7
Ghana	0	25	35	49	59	69	79	100	135	165	210	0.6	10.7	100.1
Guinea	..	79	83	84	85	87	90	100	105	108	121	..	51.2	95.8
Guinea-Bissau	0	31	46	63	85	92	97	100	95	99	97	0.1	10.0	86.0
Kenya	12	57	64	70	80	88	93	100	109	118	132	12.1	31.4	94.9
Lesotho	12	60	65	71	77	84	95	100	107	116	124	11.6	38.0	93.1
Liberia	2	3	3	3	3	100	101	100	112	144	158	1.5	2.1	80.3
Madagascar	4	43	62	73	78	85	93	100	107	124	127	4.8	21.4	94.4
Malawi	2	14	25	38	46	55	77	100	125	141	157	1.8	7.0	84.8
Mali	35	78	92	97	98	98	95	100	100	116	117	34.1	59.3	101.2
Mauritania	26	73	75	81	85	93	94	100	108	112	117	26.0	56.1	96.0
Mauritius	21	73	76	80	86	91	95	100	104	109	116	25.9	51.5	95.3
Mozambique	0	36	55	79	86	90	93	100	111	123	139	0.4	10.4	97.2
Namibia	12	60	64	73	78	85	90	100	114	127	125	14.3	37.8	95.1
Niger	49	80	84	88	91	94	96	100	104	107	107	47.1	65.1	96.8
Nigeria	2	34	53	73	74	70	78	100	121	126	150	1.7	11.8	93.8
Rwanda	19	51	77	85	98	100	97	100	100	100	109	19.1	32.8	96.2
São Tomé and Príncipe	..	11	19	29	58	80	93	100	108	114	133	..	3.7	81.5
Senegal	38	88	93	94	96	98	99	100	103	106	106	37.8	69.6	99.4
Seychelles	56	94	93	92	93	97	99	100	105	111	117	49.8	83.4	100.6
Sierra Leone	0	33	43	51	59	75	94	100	106	110	119	0.1	9.7	84.3
Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	9	62	68	74	80	86	92	100	108	119	124	8.9	37.3	94.4
Sudan	0	11	18	43	64	84	92	100	106	115	124	0.0	2.4	83.0
Swaziland	32	52	60	67	75	82	89	100	111	125	140	23.3	40.8	94.2
Tanzania	..	40	51	61	73	83	93	100	107	114	121	..	21.8	89.2
Togo	35	77	85	90	92	101	102	100	103	105	101	36.1	58.4	97.6
Uganda	..	72	79	83	86	96	96	100	107	102	113	0.2	29.1	95.8
Zambia	0	25	34	42	53	63	77	100	124	149	179	0.0	5.1	91.3
Zimbabwe	2	19	21	27	31	40	63	100	170	353	2,464	2.5	9.3	363.1
NORTH AFRICA	21	75	81	86	90	93	96	100	103	106	110	21.0	53.0	96.2
Algeria	6	45	58	72	76	73	81	100	105	107	111	5.7	20.4	87.1
Egypt, Arab Rep.	13	71	79	85	90	93	95	100	103	109	114	11.4	42.8	96.3
Libya	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Morocco	38	88	95	96	98	98	98	100	103	105	108	36.7	73.6	100.0
Tunisia	30	80	84	88	91	94	98	100	103	105	108	30.6	63.1	96.7
ALL AFRICA	20	62	68	79	85	90	94	100	107	112	119	18.3	39.9	94.9

Note: 2003 data are preliminary (see page 2). Group data are medians of individual country values for each year.

3-2. GDP deflator (U.S. dollar series)

	Index 2000 = 100											Annual average		
	1980	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	75-84	85-94	95-MR
SUB-SAHARAN AFRICA	122	104	113	113	113	104	101	100	96	96	117	95.6	104.6	105.9
excluding South Africa	153	92	101	109	108	102	99	100	102	109	119	120.8	112.3	105.3
excl. S.Africa & Nigeria	130	99	108	113	113	107	102	100	100	109	119	109.1	119.9	107.9
Angola	..	67	75	101	95	75	69	100	95	101	124	..	97.4	92.9
Benin	130	90	116	120	111	115	112	100	100	107	132	96.7	109.9	112.5
Botswana	94	117	123	118	119	107	103	100	94	93	124	71.6	101.3	108.9
Burkina Faso	153	98	117	123	110	116	110	100	102	111	137	115.6	135.8	114.0
Burundi	176	120	139	137	145	127	104	100	98	86	82	143.5	142.3	113.3
Cameroon	121	115	113	123	117	106	108	100	92	101	123	94.3	138.0	109.3
Cape Verde	78	113	126	124	118	118	117	100	100	107	132	67.6	99.3	115.7
Central African Republic	109	108	132	131	117	116	113	100	100	109	133	82.6	153.3	116.8
Chad	151	96	116	126	113	124	110	100	109	120	140	115.3	125.1	117.4
Comoros	91	102	123	124	110	110	112	100	106	116	146	76.1	120.5	116.4
Congo, Dem. Rep. of	205	111	107	111	124	128	102	100	116	127	123	170.7	119.2	115.3
Congo, Rep. of	99	65	74	85	79	64	79	100	84	86	101	75.8	83.6	83.4
Côte d'Ivoire	131	100	123	126	115	120	116	100	101	112	137	91.7	119.1	116.6
Djibouti	..	86	90	92	94	96	98	100	..	..	..	..	72.0	94.8
Equatorial Guinea	..	41	47	58	65	49	66	100	125	132	159	..	48.5	89.0
Eritrea	..	90	95	104	96	102	99	100	97	91	105	..	99.0	98.8
Ethiopia	..	115	113	106	107	111	105	100	92	84	95	134.3	172.2	101.6
Gabon	131	99	109	120	108	90	90	100	86	98	117	90.6	114.5	101.9
Gambia, The	113	108	113	113	113	111	108	100	94	86	80	85.6	96.8	102.0
Ghana	168	141	160	164	157	163	161	100	102	114	132	150.6	175.3	139.2
Guinea	..	141	146	146	136	123	113	100	94	95	107	..	128.9	117.7
Guinea-Bissau	97	113	117	111	104	111	112	100	92	102	118	99.6	111.6	107.5
Kenya	122	78	95	93	104	111	101	100	106	114	132	98.1	91.0	106.2
Lesotho	108	117	125	115	115	105	107	100	86	76	114	84.0	97.1	104.9
Liberia	68	104	110	117	105	98	98	100	94	96	109	62.2	87.5	103.1
Madagascar	130	94	98	122	104	106	100	100	110	123	139	106.5	93.8	111.3
Malawi	124	96	97	148	166	105	103	100	103	110	96	106.9	127.3	114.2
Mali	116	99	131	135	119	118	110	100	97	118	143	87.7	130.0	119.0
Mauritania	135	140	139	140	134	118	107	100	100	98	106	125.6	153.9	115.9
Mauritius	76	103	112	116	115	103	98	100	96	92	103	68.7	86.5	103.8
Mozambique	167	90	92	105	113	115	110	100	83	80	90	178.9	143.2	98.7
Namibia	108	118	122	118	118	107	103	100	92	84	115	94.9	97.1	106.3
Niger	165	103	120	123	111	113	111	100	101	109	131	121.2	138.4	113.3
Nigeria	221	66	77	92	92	80	86	100	111	106	118	161.8	83.5	95.9
Rwanda	80	90	114	108	127	125	113	100	88	82	79	79.3	117.3	104.0
São Tomé and Príncipe	..	121	109	106	102	93	104	100	97	100	113	..	136.6	102.6
Senegal	129	113	133	131	117	118	115	100	100	108	130	98.6	153.8	116.8
Seychelles	51	106	112	105	105	105	106	100	102	115	124	42.5	86.7	108.3
Sierra Leone	118	118	120	116	127	101	109	100	112	110	107	104.2	82.9	111.3
Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	82	121	130	119	120	108	104	100	87	78	114	63.7	94.6	106.7
Sudan	139	96	80	89	105	108	94	100	105	112	122	137.4	183.4	101.6
Swaziland	289	101	116	109	113	102	101	100	89	82	128	170.1	109.2	104.4
Tanzania	..	63	71	84	96	100	100	100	98	94	93	..	68.0	92.8
Togo	118	99	122	125	112	121	118	100	100	107	124	94.3	128.9	114.3
Uganda	..	98	129	124	123	127	107	100	91	88	90	136.1	148.8	108.8
Zambia	142	115	123	108	126	106	100	100	107	105	118	114.4	101.6	110.4
Zimbabwe	167	105	109	118	114	75	73	100	137	285	157	146.7	126.2	129.7
NORTH AFRICA	111	87	93	98	98	98	98	100	98	94	96	87.6	91.8	96.9
Algeria	124	97	92	99	100	94	91	100	103	101	108	100.1	125.3	98.6
Egypt, Arab Rep.	61	72	79	85	90	93	95	100	96	86	77	54.9	65.9	89.0
Libya	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Morocco	103	101	118	117	109	108	107	100	96	101	120	76.4	89.1	108.4
Tunisia	101	108	121	123	113	113	113	100	98	101	115	82.9	96.0	110.9
ALL AFRICA	118	98	106	107	107	102	100	100	97	96	109	92.5	100.1	102.5

Note: 2003 data are preliminary (see page 2). Group data are obtained by dividing GDP in current US\$ by GDP in constant US\$ series for each group.

3-3. Consumer price index

	Index 2000 = 100											Average annual percentage growth		
	1980	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	75-84	85-94	95-MR
SUB-SAHARAN AFRICA	12	67	74	79	85	90	95	100	105	109	117	11.0	12.0	6.1
excluding South Africa	13	68	75	81	85	89	95	100	105	109	116	10.8	11.7	5.8
excl. S.Africa & Nigeria	14	70	77	82	85	90	95	100	105	109	115	10.7	11.5	5.4
Angola	..	0	0	1	3	7	24	100	241	528	1,046	..	..	315.0
Benin	..	73	83	87	90	96	96	100	104	107	108	..	..	4.0
Botswana	14	61	67	74	80	85	92	100	107	115	126	12.1	11.3	8.2
Burkina Faso	46	83	89	94	97	101	100	100	105	107	109	11.0	1.3	2.7
Burundi	12	35	42	53	69	78	80	100	109	103	119	13.4	7.0	14.4
Cameroon	29	82	90	93	97	101	102	100	105	107	..	11.5	3.6	2.9
Cape Verde	..	75	82	87	94	98	103	100	103	105	..	..	6.3	4.1
Central African Republic	51	80	95	99	100	98	97	100	103	107	..	..	-0.3	2.4
Chad	..	71	78	87	92	103	96	100	112	118	116	..	0.8	5.5
Comoros	..	87	90	92	93	95	96	100	103	103	105	..	1.7	2.1
Congo, Dem. Rep. of	0	0	0	1	3	4	16	100	460	605	..	57.3	421.9	241.7
Congo, Rep. of	..	70	77	85	0	96	101	100	100	105	104	..	2.2	4.3
Côte d'Ivoire	34	76	87	89	92	97	98	100	104	108	111	12.9	4.4	3.7
Djibouti	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Equatorial Guinea	..	71	79	84	86	89	94	100	105	108	113	..	0.5	5.0
Eritrea	..	55	61	68	70	77	83	100	115	142	171	..	..	12.8
Ethiopia	33	84	92	88	90	92	99	100	92	93	110	10.6	8.2	1.9
Gabon	45	87	96	96	100	101	99	100	..	..	..	12.5	0.2	2.0
Gambia, The	14	86	90	92	94	95	99	100	105	113	133	10.5	13.9	4.0
Ghana	0	21	33	48	62	71	80	100	133	153	193	67.9	25.5	25.4
Guinea	..	77	81	84	85	90	94	100	105	109	123	..	19.2	4.9
Guinea-Bissau	..	27	39	59	88	94	92	100	103	104	102	..	52.8	14.2
Kenya	7	65	66	72	81	86	91	100	106	108	118	13.6	17.8	7.1
Lesotho	11	63	68	75	0	0	94	100	90	121	129	14.3	14.0	7.7
Liberia	52	..	..	..	..	..	..	100	112	128	147	8.1	5.5	..
Madagascar	4	41	61	73	76	81	89	100	107	124	122	15.3	14.6	11.3
Malawi	1	15	27	38	41	53	77	100	123	141	154	..	19.3	28.6
Mali	..	81	92	98	98	102	101	100	105	110	109	..	1.3	2.7
Mauritania	..	74	79	82	86	93	97	100	105	109	114	..	7.4	4.9
Mauritius	24	70	74	79	84	90	96	100	105	112	117	14.9	7.7	6.0
Mozambique	..	35	53	79	85	86	89	100	109	127	144	..	49.8	13.6
Namibia	12	62	68	73	80	84	92	100	110	122	131	..	13.0	8.7
Niger	54	79	88	92	95	99	97	100	104	107	105	12.6	-2.0	2.8
Nigeria	1	31	54	70	76	83	87	100	113	128	145	16.9	28.9	15.1
Rwanda	17	0	77	83	93	98	96	100	103	106	113	11.1	5.6	4.3
São Tomé and Príncipe	..	16	22	31	51	77	90	100	110	120	131	..	33.6	26.7
Senegal	38	86	93	96	97	98	99	100	103	105	105	9.7	1.5	1.9
Seychelles	59	87	87	86	86	88	94	100	106	106	110	10.6	2.1	3.1
Sierra Leone	0	31	39	48	55	75	101	100	102	99	106	22.7	75.3	15.2
Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	11	67	72	78	84	90	95	100	106	114	121	12.8	14.3	6.7
Sudan	0	12	20	47	70	82	95	100	106	..	..	22.9	71.0	35.2
Swaziland	11	61	68	73	78	84	89	100	106	119	127	14.4	12.4	8.4
Tanzania	1	43	55	67	78	88	94	100	105	110	115	19.6	29.4	10.7
Togo	37	74	86	90	97	98	98	100	104	107	106	11.1	1.9	3.5
Uganda	0	73	80	86	91	91	97	100	102	102	110	..	76.9	4.0
Zambia	..	21	28	40	50	63	79	100	121	148	..	..	99.2	27.3
Zimbabwe	2	17	21	26	31	40	64	100	177	424	..	11.9	18.4	45.7
NORTH AFRICA	18	80	85	89	93	97	98	100	102	105	108	13.7	6.7	3.1
Algeria	9	57	74	87	93	97	100	100	104	106	108	10.9	16.0	5.9
Egypt, Arab Rep.	9	70	81	87	91	94	97	100	102	105	110	13.2	17.4	4.4
Libya	28	84	90	93	97	100	103	100	91	82	..	9.4	6.9	0.3
Morocco	34	86	91	94	95	97	98	100	101	103	105	9.9	5.3	1.9
Tunisia	..	80	85	89	92	95	97	100	102	105	108	..	6.8	3.1
ALL AFRICA	12	70	77	83	86	91	96	100	105	108	115	11.3	12.3	5.3

Note: 2003 data are preliminary (see page 2). Group data are medians of individual country values for each year.

3-4. Official exchange rate

	National currency per U.S. dollar											Annual average		
	1980	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	75-84	85-94	95-MR
SUB-SAHARAN AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excluding South Africa	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excl. S.Africa & Nigeria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angola	0.0	0.0	0.0	0.1	0.2	0.4	2.8	10.0	22.1	43.5	74.6	0.0	0.0	17.1
Benin	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Botswana	0.8	2.7	2.8	3.3	3.7	4.2	4.6	5.1	5.8	6.3	4.9	0.9	2.0	4.5
Burkina Faso	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Burundi	90.0	252.7	249.8	302.7	352.4	447.8	563.6	720.7	830.4	930.7	1,082.6	91.8	171.4	609.0
Cameroon	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Cape Verde	40.2	81.9	76.9	82.6	93.2	98.2	103.5	119.7	123.2	117.2	97.7	46.6	76.6	101.3
Central African Republic	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Chad	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Comoros	211.3	416.4	374.4	383.7	437.7	442.5	461.8	534.0	549.8	522.7	435.9	276.7	323.2	460.3
Congo, Dem. Rep. of	0.0	0.0	0.1	0.5	1.3	1.6	4.0	21.8	206.6	346.5	405.3	0.0	0.0	109.8
Congo, Rep. of	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Côte d'Ivoire	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Djibouti	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7
Equatorial Guinea	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Eritrea	2.1	5.5	6.2	6.4	6.8	7.4	8.2	9.6	11.3	14.0	13.9	2.1	2.8	9.3
Ethiopia	2.1	5.5	6.2	6.4	6.7	7.1	7.9	8.2	8.5	8.6	8.6	2.1	2.8	7.6
Gabon	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Gambia, The	1.7	9.6	9.5	9.8	10.2	10.6	11.4	12.8	15.7	19.9	27.3	2.3	7.6	14.1
Ghana	2.8	956.7	1,200.4	1,637.2	2,050.2	2,314.1	2,669.3	5,455.1	7,170.8	7,932.7	8,677.4	6.1	350.7	4,345.2
Guinea	19.0	976.6	991.4	1,004.0	1,095.3	1,236.8	1,387.4	1,746.9	1,950.6	1,975.8	1,984.9	21.1	610.0	1,485.9
Guinea-Bissau	0.5	198.3	278.0	405.7	583.7	590.0	615.7	712.0	733.0	697.0	581.2	0.6	60.9	577.4
Kenya	7.4	56.1	51.4	57.1	58.7	60.4	70.3	76.2	78.6	78.7	75.9	9.4	28.4	67.5
Lesotho	0.8	3.6	3.6	4.3	4.6	5.5	6.1	6.9	8.6	10.5	7.6	1.0	2.6	6.4
Liberia	1.0	1.0	1.0	1.0	1.0	41.5	41.9	41.0	48.6	61.8	59.4	1.0	1.0	33.0
Madagascar	211.3	3,067.3	4,265.6	4,061.3	5,090.9	5,441.4	6,283.8	6,767.5	6,588.5	6,832.0	6,191.6	297.7	1,559.3	5,724.7
Malawi	0.8	8.7	15.3	15.3	16.4	31.1	44.1	59.5	72.2	76.7	97.4	1.0	3.3	47.6
Mali	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Mauritania	45.9	123.6	129.8	137.2	151.9	188.5	209.5	238.9	255.6	271.7	263.0	49.0	87.8	205.1
Mauritius	7.7	18.0	17.4	17.9	21.1	24.0	25.2	26.2	29.1	30.0	27.9	8.5	15.2	24.3
Mozambique	32.4	6,038.6	9,024.3	11,293.7	11,543.6	11,874.6	12,775.1	15,227.2	20,703.6	23,678.0	23,782.3	34.3	1,643.7	15,544.7
Namibia	0.8	3.6	3.6	4.3	4.6	5.5	6.1	6.9	8.6	10.5	7.6	1.0	2.6	6.4
Niger	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Nigeria	0.5	22.0	21.9	21.9	21.9	21.9	92.3	101.7	111.2	120.6	129.2	0.6	9.8	71.4
Rwanda	86.1	140.7	262.2	306.1	301.3	313.7	337.8	393.4	442.8	476.3	537.7	92.4	105.3	374.6
São Tomé and Príncipe	34.8	732.6	1,420.3	2,203.2	4,552.5	6,883.2	7,119.0	7,978.2	8,842.1	9,088.3	9,347.6	36.5	217.7	6,381.6
Senegal	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Seychelles	6.4	5.1	4.8	5.0	5.0	5.3	5.3	5.7	5.9	5.5	5.4	6.7	5.6	5.3
Sierra Leone	1.0	586.7	755.2	920.7	981.5	1,563.6	1,804.2	2,092.1	1,986.2	2,099.0	2,347.9	1.3	224.8	1,616.7
Somalia	6.3	..	..	..	..	..	..	..	..	..	..	9.1	175.6	..
South Africa	0.8	3.6	3.6	4.3	4.6	5.5	6.1	6.9	8.6	10.5	7.6	1.0	2.6	6.4
Sudan	0.0	29.0	58.1	125.1	157.6	200.8	252.6	257.1	258.7	263.3	261.0	0.1	5.7	203.8
Swaziland	0.8	3.6	3.6	4.3	4.6	5.5	6.1	6.9	8.6	10.5	7.6	1.0	2.6	6.4
Tanzania	8.2	509.6	574.8	580.0	612.1	664.7	744.8	800.4	876.4	966.6	1,038.4	9.2	198.4	762.0
Togo	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Uganda	0.1	979.4	968.9	1,046.1	1,083.0	1,240.3	1,454.8	1,644.5	1,755.7	1,797.6	1,963.7	0.7	486.4	1,439.4
Zambia	0.8	669.4	864.1	1,207.9	1,314.5	1,862.1	2,388.0	3,110.8	3,610.9	4,398.6	4,733.3	0.9	143.2	2,610.0
Zimbabwe	0.6	8.2	8.7	10.0	12.1	23.7	38.3	44.4	55.1	55.0	697.4	0.8	3.5	105.0
NORTH AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	3.8	35.1	47.7	54.7	57.7	58.7	66.6	75.3	77.2	79.7	77.4	4.3	13.6	66.1
Egypt, Arab Rep.	0.7	3.4	3.4	3.4	3.4	3.4	3.4	3.5	4.0	4.5	5.9	0.6	1.8	3.9
Libya	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.6	1.3	1.3	0.3	0.3	0.7
Morocco	3.9	9.2	8.5	8.7	9.5	9.6	9.8	10.6	11.3	11.0	9.6	5.2	8.8	9.9
Tunisia	0.4	1.0	0.9	1.0	1.1	1.1	1.2	1.4	1.4	1.4	1.3	0.5	0.9	1.2
ALL AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Note: 2003 data are preliminary. Uganda changed its currency in 1987 and Congo Dem. Rep. in 1993. Angola and Congo Dem. Rep. again changed their currency in 1998. Guinea-Bissau joined W.A.M.U. in 1997.

3-5. SDR exchange rate index

	SDRs per unit of national currency, index 1995=100											Annual average		
	1980	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	75-84	85-94	95-MR
SUB-SAHARAN AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excluding South Africa	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excl. S.Africa & Nigeria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angola	5.0E+06	6,952	100	4	1	0	0	0	0	0	0	5,637,727	3,513,572	12
Benin	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Botswana	416	109	100	88	84	74	66	63	57	51	61	402	163	72
Burkina Faso	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Burundi	323	105	100	86	78	63	49	40	36	32	25	354	188	57
Cameroon	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Cape Verde	223	99	100	97	91	88	83	76	74	77	..	240	118	86
Central African Republic	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Chad	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Comoros	207	95	100	102	94	95	90	81	81	84	93	184	139	91
Congo, Dem. Rep. of	6.7E+11	3,019	100	14	5	4	2	0	0	0	0	1.4E+12	1.2E+10	14
Congo, Rep. of	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Côte d'Ivoire	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Djibouti	117	106	100	104	110	112	111	115	119	117	108	130	117	111
Equatorial Guinea	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Eritrea	347	120	100	101	101	94	84	74	66	52	..	386	305	84
Ethiopia	347	120	100	101	101	97	86	86	87	84	..	386	306	93
Gabon	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Gambia, The	647	106	100	102	103	100	93	86	73	57	..	568	161	89
Ghana	50,406	132	100	76	64	57	50	26	20	18	..	76,474	854	52
Guinea	6,145	106	100	104	110	112	111	106	61	59	..	6,101	783	95
Guinea-Bissau	61,655	148	100	73	52	52	50	45	45	46	51	62,731	3,799	57
Kenya	796	98	100	93	96	94	80	77	77	75	72	727	267	85
Lesotho	543	108	100	89	87	74	66	60	51	41	52	510	168	69
Liberia	117	106	100	104	110	3	3	3	2	2	..	130	117	41
Madagascar	2,349	160	100	110	92	87	75	72	77	73	74	2,029	416	85
Malawi	2,199	211	100	104	103	59	38	31	25	23	..	2,087	684	61
Mali	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Mauritania	329	111	100	99	94	77	69	63	60	56	..	345	181	77
Mauritius	264	103	100	101	91	81	77	76	71	68	68	284	136	81
Mozambique	31,524	154	100	81	84	83	76	66	51	43	40	33,660	6,950	69
Namibia	543	108	100	89	87	74	66	60	51	41	52	510	168	69
Niger	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Nigeria	4,669	106	100	105	110	112	27	25	23	21	18	4,415	822	60
Rwanda	326	181	100	82	88	86	79	71	65	59	49	338	287	75
São Tomé and Príncipe	4,681	210	100	67	36	23	22	20	19	18	16	5,055	1,897	36
Senegal	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Seychelles	87	100	100	100	104	101	99	96	97	102	96	92	100	99
Sierra Leone	81,552	133	100	84	85	53	46	41	44	41	34	78,935	4,278	59
Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	543	108	100	89	87	74	66	60	51	41	52	510	168	69
Sudan	129,561	212	100	47	40	31	132	249	256	247	231	141,389	14,281	148
Swaziland	543	108	100	89	87	74	66	60	51	41	52	510	168	69
Tanzania	8,149	119	100	103	103	96	86	82	78	69	..	8,361	1,098	90
Togo	275	95	100	102	94	95	90	81	81	84	93	245	182	91
Uganda	1,520,277	105	100	97	99	88	74	68	66	63	53	1,025,920	3,825	79
Zambia	126,813	121	100	75	72	52	40	32	28	23	20	127,103	9,896	49
Zimbabwe	1,570	113	100	91	80	45	25	23	19	18	..	1,556	423	50
NORTH AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	1,441	150	100	91	91	90	79	73	73	70	67	1,447	701	81
Egypt, Arab Rep.	565	106	100	105	110	112	111	112	102	88	63	823	368	100
Libya	165	129	100	100	100	100	100	94	83	39	35	183	168	83
Morocco	253	98	100	102	99	99	97	92	90	91	97	225	114	96
Tunisia	272	99	100	101	94	93	89	80	78	78	80	254	125	88
ALL AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Note: 2003 data are preliminary. Uganda changed its currency in 1987 and Congo Dem. Rep. in 1993. Angola and Congo Dem. Rep. again changed their currency in 1998. Guinea-Bissau joined W.A.M.U. in 1997.

3-6. Currency conversion factor

	Units of national currency per U.S. dollar											Annual average		
	1980	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	75-84	85-94	95-MR
SUB-SAHARAN AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excluding South Africa	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excl. S.Africa & Nigeria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angola	..	0.0	0.0	0.1	0.2	0.4	2.8	10.0	22.1	43.5	74.6	..	0.0	17.1
Benin	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	345.6	613.7
Botswana	0.8	2.7	2.8	3.3	3.7	4.2	4.6	5.1	5.8	6.3	4.9	0.9	2.0	4.5
Burkina Faso	211.3	555.2	499.1	511.5	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	360.8	613.7
Burundi	90.0	252.7	249.8	302.8	352.4	447.8	563.6	720.7	830.3	930.7	1,082.6	91.8	171.4	609.0
Cameroon	209.2	434.3	518.6	501.8	541.1	602.1	588.4	656.3	735.7	697.0	581.2	265.6	333.3	602.5
Cape Verde	40.2	81.9	76.9	82.6	93.1	98.2	103.5	119.7	123.2	117.2	97.7	46.6	76.6	101.3
Central African Republic	211.3	555.2	499.1	511.6	582.4	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.6
Chad	211.3	555.2	499.1	511.5	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	360.8	613.7
Comoros	211.3	416.4	374.4	383.7	437.8	442.5	461.8	534.0	549.8	522.7	435.9	276.7	323.2	460.3
Congo, Dem. Rep. of	0.0	0.0	0.1	0.5	1.3	1.6	11.0	69.0	300.0	346.5	405.3	0.0	0.0	126.1
Congo, Rep. of	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	348.3	613.7
Côte d'Ivoire	211.3	555.2	499.1	511.5	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Djibouti	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7	177.7
Equatorial Guinea	110.6	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	146.9	337.0	613.7
Eritrea	..	6.2	6.4	6.4	7.2	7.4	8.2	9.6	11.3	14.0	13.9	..	5.3	9.4
Ethiopia	2.1	5.1	5.9	6.3	6.5	6.9	7.5	8.1	8.3	8.5	8.6	2.1	2.6	7.4
Gabon	211.3	555.2	499.1	511.5	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	343.7	613.7
Gambia, The	1.7	9.6	9.5	9.8	10.2	10.6	11.4	12.8	15.7	19.9	27.3	2.3	7.6	14.1
Ghana	9.6	956.7	1,200.4	1,637.2	2,050.2	2,314.1	2,669.3	5,455.1	7,170.8	7,932.7	8,677.4	17.5	352.2	4,345.2
Guinea	19.0	976.6	991.4	1,004.0	1,095.3	1,236.8	1,387.4	1,746.9	1,947.8	1,976.2	1,986.0	21.1	611.3	1,485.8
Guinea-Bissau	0.8	198.3	278.0	405.7	583.7	590.0	615.7	712.0	733.0	697.0	581.2	0.8	61.2	577.4
Kenya	7.4	56.1	51.4	57.1	58.7	60.4	70.3	76.2	78.6	78.7	75.9	9.4	28.4	67.5
Lesotho	0.8	3.6	3.6	4.3	4.6	5.5	6.1	6.9	8.6	10.5	7.6	1.0	2.6	6.4
Liberia	1.0	1.0	1.0	1.0	1.0	41.5	41.9	41.0	48.6	61.8	59.4	1.0	1.0	33.0
Madagascar	211.3	3,067.3	4,265.6	4,061.3	5,090.9	5,441.4	6,283.8	6,767.5	6,588.5	6,832.0	6,191.6	297.7	1,559.3	5,724.7
Malawi	0.8	8.7	15.3	15.3	16.4	31.1	44.1	59.5	72.2	76.7	97.4	1.0	3.3	47.6
Mali	211.3	555.2	499.1	511.5	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.1	613.7
Mauritania	45.9	123.6	129.8	137.2	151.9	188.5	209.5	238.9	255.6	271.7	263.0	49.0	87.8	205.1
Mauritius	7.1	18.2	17.4	17.7	19.1	22.6	24.8	25.5	27.6	30.1	28.6	9.8	15.1	23.7
Mozambique	32.4	6,158.4	9,203.4	11,517.8	11,722.6	12,110.2	13,028.6	15,447.1	20,703.6	23,678.0	23,782.3	34.3	1,673.0	15,688.2
Namibia	0.8	3.6	3.6	4.3	4.6	5.5	6.1	6.9	8.6	10.5	7.6	1.0	2.6	6.4
Niger	211.3	555.2	499.1	511.5	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	347.9	613.7
Nigeria	0.8	52.3	70.4	80.0	81.1	88.0	92.3	101.7	111.2	120.6	129.2	1.1	16.4	97.2
Rwanda	92.8	220.0	262.2	306.8	301.5	312.3	333.9	389.7	443.0	476.3	537.7	93.7	113.0	373.7
São Tomé and Príncipe	34.8	732.6	1,420.3	2,203.2	4,552.5	6,883.2	7,119.0	7,978.2	8,842.1	9,088.3	9,347.6	36.5	217.6	6,381.6
Senegal	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Seychelles	6.4	5.1	4.8	5.0	5.0	5.3	5.3	5.7	5.9	5.5	5.4	6.7	5.6	5.3
Sierra Leone	1.0	586.7	755.2	920.7	981.9	1,563.6	1,819.4	2,099.0	1,986.2	2,099.0	2,347.9	1.3	224.8	1,619.2
Somalia	28.8	..	..	..	..	..	..	..	..	..	..	28.1	512.9	..
South Africa	0.8	3.6	3.6	4.3	4.6	5.5	6.1	6.9	8.6	10.5	7.6	1.0	2.6	6.4
Sudan	0.1	29.0	58.1	125.1	157.6	200.8	252.6	257.1	258.7	263.3	261.0	0.1	6.0	203.8
Swaziland	0.8	3.5	3.6	4.3	4.6	5.5	6.1	6.9	8.6	10.5	7.6	0.9	2.6	6.4
Tanzania	8.2	509.6	574.8	580.0	612.1	664.7	744.8	800.4	876.4	966.6	1,038.4	9.2	198.4	762.0
Togo	211.3	555.2	499.1	511.6	583.7	590.0	615.7	712.0	733.0	697.0	581.2	276.7	337.0	613.7
Uganda	1.0	1,102.7	932.5	1,012.8	1,058.1	1,149.7	1,362.1	1,512.0	1,762.9	1,754.6	1,883.4	1.1	440.1	1,380.9
Zambia	0.8	669.4	864.1	1,207.9	1,314.5	1,862.1	2,388.0	3,110.8	3,610.9	4,398.6	4,733.3	0.9	144.3	2,610.0
Zimbabwe	0.6	8.1	8.7	10.0	12.1	23.7	38.3	44.4	55.1	55.0	697.4	0.8	3.4	105.0
NORTH AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	3.8	35.1	47.7	54.7	57.7	58.7	66.6	75.3	77.2	79.7	77.4	4.3	13.6	66.1
Egypt, Arab Rep.	0.7	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.7	4.3	5.0	0.7	2.2	3.7
Libya	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.6	1.3	..	0.3	0.3	0.6
Morocco	3.9	9.2	8.5	8.7	9.5	9.6	9.8	10.6	11.3	11.0	9.6	5.2	8.8	9.9
Tunisia	0.4	1.0	0.9	1.0	1.1	1.1	1.2	1.4	1.4	1.4	1.3	0.5	0.9	1.2
ALL AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Note: Official exchange rate adjusted for some countries to better reflect the rate at which international transactions are carried out. Guinea Bissau joined W.A.M.U. in 1997.

3-7. Parallel market exchange rate

	National currency per U.S. dollar											Annual average		
	1980	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	75-84	85-94	95-MR
SUB-SAHARAN AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excluding South Africa	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excl. S.Africa & Nigeria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angola	..	..	..	1,266.7	1,087.5	31,740.0	203,137.5	569,573.8	163,370.0	283,138.8	564,250.0	900.0	30,572.7	395,083.2
Benin	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	304.2	343.5	536.3
Botswana	0.8	2.3	1.9	2.4	2.5	2.8	2.9	2.8	3.4	3.7	4.4	1.2	2.4	3.6
Burkina Faso	209.5	324.8	281.8	289.0	270.1	..	..	..	..	..	..	304.2	320.0	..
Burundi	106.0	214.0	186.1	269.3	310.9	370.7	409.4	340.8	369.6	459.2	568.1	122.3	235.5	434.4
Cameroon	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	304.2	343.5	536.3
Cape Verde	..	..	..	88.0	79.5	87.0	92.0	89.3	89.5	99.5	98.2	..	86.6	94.1
Central African Republic	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	603.2	304.2	343.5	553.0
Chad	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	304.2	343.5	536.3
Comoros	209.5	324.8	281.8	289.0	270.1	288.0	446.0	390.6	415.6	467.6	468.3	304.2	329.4	435.5
Congo, Dem. Rep. of	6.4	469.4	738.1	19,318.8	756,558.3	3,112,920.5	1,209.8	7,452.1	52,429.4	160,358.3	69,064.0	14.3	389,165.8	72,325.9
Congo, Rep. of	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	304.2	343.5	536.3
Côte d'Ivoire	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	304.2	343.5	536.3
Djibouti	..	217.9	191.8	213.8	205.8	212.0	208.6	198.5	192.1	183.9	184.0	..	207.1	189.6
Equatorial Guinea	209.5	324.8	281.8	289.0	270.1	288.0	586.4	586.4	516.4	593.3	..	304.2	343.5	565.4
Eritrea	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ethiopia	2.8	5.9	6.0	6.7	9.5	13.3	12.0	10.7	10.2	7.5	7.2	3.5	7.3	8.9
Gabon	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	334.6	343.5	536.3
Gambia, The	1.7	7.4	8.3	8.8	11.5	9.1	9.0	10.4	10.8	10.8	11.2	2.5	8.2	10.8
Ghana	15.9	328.8	360.8	382.2	451.6	665.7	976.4	1,224.3	1,663.4	2,080.7	2,334.8	41.7	394.7	1,825.8
Guinea	41.7	580.1	693.3	793.0	1,608.1	1,156.9	1,074.1	1,017.9	1,025.9	1,125.3	1,265.8	102.9	759.4	1,108.7
Guinea-Bissau	..	..	..	4,172.5	6,075.0	9,883.3	14,012.5	19,166.7	26,855.0	..	..	..	7,188.7	23,010.8
Kenya	8.2	22.4	23.3	30.0	44.4	91.7	66.8	53.4	59.5	62.1	63.6	11.9	35.1	59.6
Lesotho	..	2.7	2.7	2.9	3.0	3.5	3.8	3.7	4.5	4.7	5.6	1.4	2.8	4.6
Liberia	..	..	..	..	..	40.0	45.0	42.3	45.8	48.5	48.5	..	28.8	46.3
Madagascar	265.0	1,639.1	1,589.2	2,071.3	2,239.2	2,217.9	3,122.9	4,397.5	4,551.7	5,582.1	5,630.6	521.1	1,690.8	5,040.5
Malawi	1.6	3.6	3.3	3.9	4.6	5.9	9.2	16.7	16.5	17.6	33.3	1.7	4.1	21.0
Mali	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	304.2	343.5	536.3
Mauritania	65.0	..	..	213.3	221.7	247.5	145.0	139.3	144.0	158.9	194.3	93.2	192.4	159.1
Mauritius	..	16.0	15.7	17.1	16.8	18.3	18.4	18.2	19.4	21.4	24.4	..	15.9	20.8
Mozambique	80.0	1,250.0	..	2,100.0	2,800.0	3,950.0	6,875.0	9,865.7	12,172.5	12,533.7	12,851.3	322.2	2,862.5	11,855.8
Namibia	..	..	..	..	..	..	..	..	..	4.9	5.8	..	..	5.3
Niger	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	304.2	343.5	536.3
Nigeria	0.9	10.7	9.3	6.7	21.9	56.8	71.7	78.3	81.8	84.7	91.5	1.4	19.8	84.1
Rwanda	115.0	109.8	104.2	209.1	238.9	297.4	286.5	268.1	331.8	360.5	642.1	135.4	169.3	400.6
São Tomé and Príncipe	..	..	..	222.5	360.0	432.5	810.0	1,503.3	2,407.5	7,300.0	..	..	456.3	3,736.9
Senegal	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	304.2	343.5	536.3
Seychelles	..	..	5.9	5.7	5.5	5.4	5.5	5.5	5.4	5.5	5.7	..	5.6	5.5
Sierra Leone	1.4	180.9	470.6	535.7	845.1	647.5	618.7	741.3	942.1	1,137.9	2,024.4	2.1	355.0	1,211.4
Somalia	9.9	398.8	1,982.1	4,675.0	6,095.0	7,456.3	6,961.3	6,549.2	7,789.8	5,919.3	7,850.0	14.7	2,829.0	7,027.1
South Africa	0.9	2.7	2.7	2.9	3.0	3.5	3.8	3.7	4.5	4.7	5.7	1.2	2.8	4.6
Sudan	1.0	15.9	43.6	105.3	62.4	31.6	45.3	77.5	147.2	171.2	221.6	1.3	33.0	154.4
Swaziland	..	3.0	2.7	3.1	3.3	3.8	3.9	3.9	4.7	4.9	5.8	..	3.0	4.8
Tanzania	21.0	263.5	292.4	348.5	405.9	443.5	523.2	587.3	604.7	656.9	709.8	30.5	289.1	639.7
Togo	209.5	324.8	281.8	289.0	270.1	288.0	586.4	499.3	516.4	593.3	..	304.2	343.5	536.3
Uganda	75.7	597.5	685.8	859.2	1,365.4	1,515.8	1,289.2	1,076.2	1,135.2	1,178.1	1,333.8	203.8	2,412.3	1,180.8
Zambia	1.3	107.8	121.2	133.3	104.2	531.0	805.4	935.6	1,281.8	1,583.0	2,411.7	1.7	186.3	1,553.0
Zimbabwe	1.1	3.5	3.3	5.3	6.7	7.7	9.4	8.9	10.8	13.9	195.0	1.7	4.6	57.1
NORTH AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	10.9	37.1	29.8	33.8	87.4	106.8	128.7	131.9	127.6	129.8	131.4	13.6	52.3	130.2
Egypt, Arab Rep.	0.8	2.6	2.6	3.4	3.4	3.4	3.4	3.4	3.6	3.4	3.4	0.9	2.6	3.5
Libya	0.5	0.9	1.0	1.2	1.6	1.7	1.6	1.3	2.0	2.2	2.5	0.5	1.2	2.0
Morocco	4.1	9.2	9.3	9.2	8.9	9.4	9.4	8.6	8.8	9.7	9.8	6.0	9.2	9.2
Tunisia	0.4	1.0	0.9	1.0	1.0	1.0	1.1	0.9	1.0	1.1	1.2	0.6	0.9	1.0
ALL AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Note: Rates are annual average of month-end estimates, based on a sample of transactions. Guinea Bissau joined the W.A.M.U. in 1997. The new Ugandan shilling introduced in 1987.

3-8. Ratio of parallel market to official exchange rates

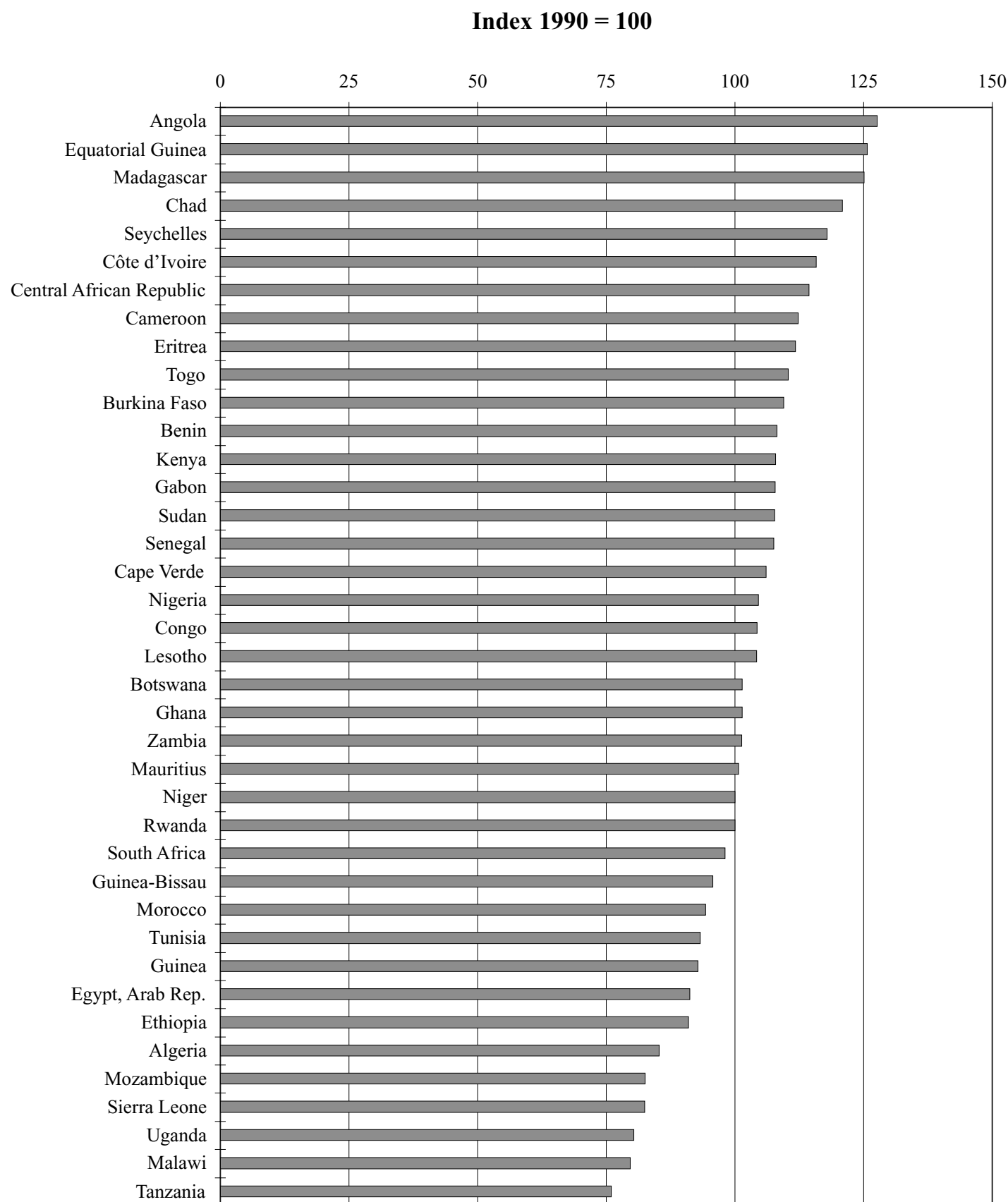
	Ratio of parallel market to official exchange rates											Annual average		
	1980	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	75-84	85-94	95-MR
SUB-SAHARAN AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excluding South Africa	..	..	..	..	..	..	..	..	..	..	..	..	..	..
excl. S.Africa & Nigeria	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Angola	..	..	..	2.30E+10	4.33E+09	1.19E+10	3.41E+09	2.07E+08	1.28E+06	1.24E+06	1.44E+06	3.01E+10	3.60E+10	5.28E+07
Benin	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.03	1.02	1.01
Botswana	1.03	1.14	1.02	1.19	1.18	1.16	1.08	1.01	1.02	1.01	1.03	1.23	1.20	1.02
Burkina Faso	0.99	1.02	1.04	1.02	1.02	..	..	..	..	..	..	1.03	1.01	..
Burundi	1.18	1.35	1.09	1.48	1.49	1.53	1.62	1.36	1.22	1.30	1.27	1.28	1.33	1.29
Cameroon	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.03	1.02	1.01
Cape Verde	..	..	..	1.23	1.17	1.08	1.12	1.16	1.08	1.07	1.00	..	1.15	1.08
Central African Republic	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	1.02	1.03	1.02	1.01
Chad	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.03	1.02	1.01
Comoros	0.99	1.02	1.04	1.02	1.02	1.02	1.07	1.04	1.08	1.07	1.06	1.03	1.02	1.06
Congo, Dem. Rep. of	6.86E+11	3.69E+11	3.08E+11	3.72E+11	3.52E+11	1.24E+11	1.01E+05	1.06E+05	1.04E+05	1.22E+05	4.30E+04	6.49E+11	2.78E+11	9.39E+04
Congo, Rep. of	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.03	1.02	1.01
Côte d'Ivoire	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.03	1.02	1.01
Djibouti	..	1.23	1.08	1.20	1.16	1.19	1.17	1.12	1.08	1.03	1.04	..	1.17	1.07
Equatorial Guinea	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.17	1.01	1.02	..	1.03	1.02	1.07
Eritrea	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ethiopia	1.35	2.85	2.90	3.24	3.39	2.66	2.20	1.74	1.61	1.12	1.01	1.70	2.68	1.37
Gabon	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.02	1.02	1.01
Gambia, The	0.99	0.98	1.05	1.00	1.29	1.00	0.94	1.09	1.10	1.06	1.05	1.06	1.08	1.08
Ghana	5.78	1.22	1.11	1.04	1.03	1.03	1.02	1.02	1.02	1.01	1.01	7.98	1.36	1.01
Guinea	2.20	0.98	1.05	1.05	1.78	1.21	1.10	1.03	1.02	1.03	1.02	4.62	2.33	1.02
Guinea-Bissau	..	..	..	74.13	56.95	63.72	70.65	68.94	66.19	..	..	..	74.18	67.56
Kenya	1.11	1.09	1.02	1.09	1.38	1.58	1.19	1.04	1.04	1.06	1.05	1.18	1.17	1.05
Lesotho	..	1.03	1.04	1.05	1.05	1.07	1.07	1.02	1.05	1.02	1.02	1.09	1.07	1.03
Liberia	..	..	..	..	..	40.00	45.00	42.30	45.80	48.50	1.17	..	28.83	34.44
Madagascar	1.25	1.02	1.06	1.13	1.20	1.16	1.02	1.03	1.12	1.10	1.03	1.53	1.08	1.07
Malawi	1.97	1.30	1.21	1.39	1.28	1.34	1.05	1.09	1.08	1.07	1.07	1.77	1.25	1.08
Mali	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.03	1.02	1.01
Mauritania	1.42	..	..	2.60	2.55	2.05	1.17	1.07	1.05	1.05	1.03	1.79	2.23	1.05
Mauritius	..	1.05	1.06	1.09	1.08	1.04	1.02	1.05	1.08	1.02	1.01	..	1.04	1.04
Mozambique	2.47	1.68	..	1.46	1.11	1.02	1.14	1.09	1.08	1.09	1.08	8.19	12.85	1.08
Namibia	..	..	..	..	..	..	..	..	..	1.06	1.04	..	..	1.05
Niger	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.03	1.02	1.01
Nigeria	1.65	1.45	1.16	0.68	1.27	2.57	3.26	3.58	3.74	3.87	4.18	2.09	2.01	3.84
Rwanda	1.34	1.37	1.24	1.67	1.78	2.06	2.04	1.02	1.08	1.20	2.05	1.48	1.53	1.34
São Tomé and Príncipe	..	..	..	1.10	1.12	1.01	1.11	1.06	1.09	1.60	..	..	1.08	1.25
Senegal	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.03	1.02	1.01
Seychelles	..	..	1.11	1.08	1.07	1.04	1.09	1.15	1.09	1.09	1.09	..	1.08	1.11
Sierra Leone	1.33	3.02	3.11	1.81	1.69	1.14	1.05	0.98	1.02	1.16	1.29	1.42	2.11	1.11
Somalia	1.57	0.81	..	..	..	..	..	..	..	..	..	1.45	1.76	..
South Africa	1.16	1.03	1.04	1.05	1.05	1.07	1.07	1.02	1.05	1.02	1.03	1.12	1.07	1.03
Sudan	20.00	35.33	96.89	151.39	6.40	1.98	1.56	1.33	1.18	1.09	1.10	16.25	37.57	1.18
Swaziland	..	1.14	1.04	1.12	1.16	1.16	1.10	1.08	1.09	1.06	1.05	..	1.11	1.07
Tanzania	2.56	1.84	1.50	1.59	1.36	1.09	1.03	1.02	1.04	1.07	1.07	3.02	2.20	1.05
Togo	0.99	1.02	1.04	1.02	1.02	1.02	1.06	1.00	1.01	1.02	..	1.03	1.02	1.01
Uganda	1,020.63	2.68	1.60	1.17	1.20	1.27	1.32	1.11	1.09	1.09	1.08	535.92	76.51	1.09
Zambia	1.65	7.80	4.00	2.06	0.61	1.17	1.20	1.08	1.06	1.20	1.30	1.69	2.49	1.16
Zimbabwe	1.71	1.65	1.35	1.46	1.31	1.19	1.15	1.03	1.08	1.15	8.23	2.09	1.42	2.87
NORTH AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Algeria	2.84	4.88	3.33	1.83	4.00	4.57	3.67	2.77	2.33	2.25	2.24	3.08	4.15	2.40
Egypt, Arab Rep.	1.14	3.00	1.68	1.08	1.02	1.01	1.00	1.00	1.06	1.00	1.01	1.42	1.95	1.02
Libya	1.69	3.00	3.53	4.27	5.68	5.59	4.59	3.11	4.58	4.77	5.30	1.64	4.07	4.44
Morocco	1.04	1.08	1.13	1.06	1.04	1.01	1.02	1.01	1.01	1.02	1.02	1.07	1.04	1.01
Tunisia	0.99	1.05	1.02	1.08	1.13	1.00	1.09	0.95	1.03	0.99	1.02	1.02	1.05	1.00
ALL AFRICA	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Note: Guinea-Bissau joined the WAMU in May 1997. New Ugandan shilling = 100 old Ugandan shillings, introduced in 1987. Values for Angola and Congo, Dem. Rep. are in scientific notation.

3-9. Real effective exchange rate index

	Index 2000 = 100											Annual average		
	1980	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	75-84	85-94	95-MR
SUB-SAHARAN AFRICA	163.4	95.0	100.5	103.1	106.3	103.0	101.2	100.0	102.7	102.0	104.3	140.5	126.6	102.6
excluding South Africa	162.7	94.4	99.5	102.9	104.6	102.4	100.4	100.0	103.0	102.2	104.4	130.2	127.8	102.2
excl. S.Africa & Nigeria	159.6	93.9	98.6	102.8	102.8	102.4	101.3	100.0	102.7	102.0	104.3	128.9	128.7	101.9
Angola	..	27.9	47.3	72.9	117.2	102.4	83.2	100.0	113.0	115.0	127.7	..	27.9	97.6
Benin	..	83.3	95.9	98.4	96.5	103.8	100.2	100.0	103.2	108.2	..	..	113.2	100.8
Botswana	220.8	106.6	114.7	118.2	97.2	98.6	98.6	100.0	101.4	101.4	101.4	213.9	141.8	103.5
Burkina Faso	..	..	..	..	..	106.2	104.3	100.0	103.3	105.4	109.5	..	..	104.8
Burundi	125.4	92.7	102.0	107.1	127.5	114.8	96.1	100.0	94.3	80.0	65.5	140.6	113.4	98.6
Cameroon	138.0	90.7	104.7	106.3	101.4	106.8	111.6	100.0	103.2	106.9	112.3	129.7	146.5	105.9
Cape Verde	103.4	102.6	104.5	103.8	107.4	109.9	103.8	100.0	100.3	103.3	106.1	113.4	111.4	104.3
Central African Republic	185.3	95.0	112.1	114.5	110.9	108.1	102.4	100.0	103.3	107.0	114.4	176.9	161.1	108.1
Chad	156.5	89.8	98.6	102.1	102.4	102.4	94.6	100.0	112.6	118.5	120.9	175.1	156.4	105.8
Comoros	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Congo, Dem. Rep. of	166.4	40.9	36.0	35.8	43.9	45.6	122.4	100.0	89.6	39.3	35.1	147.0	49.3	60.8
Congo, Rep. of	135.4	91.8	104.6	99.5	102.8	105.7	106.3	100.0	104.3	..	..	135.3	125.6	103.3
Côte d'Ivoire	153.5	89.2	103.1	103.6	101.9	108.7	106.5	100.0	103.5	107.7	115.8	126.6	135.7	105.6
Djibouti	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Equatorial Guinea	..	83.2	97.8	98.6	96.4	103.5	100.4	100.0	105.9	114.4	125.7	..	126.9	104.7
Eritrea	..	76.3	79.1	84.7	91.1	93.1	93.7	100.0	102.0	92.4	111.7	..	76.9	94.2
Ethiopia	203.1	109.3	108.2	101.5	102.8	99.3	96.4	100.0	90.1	89.2	91.0	237.5	217.0	97.6
Gabon	228.0	101.0	111.5	110.2	108.6	112.3	107.4	100.0	101.4	101.9	107.8	206.1	177.8	106.8
Gambia, The	109.8	104.4	103.8	103.3	108.5	107.0	104.5	100.0	87.8	72.3	52.1	105.6	98.5	93.3
Ghana	802.0	108.0	124.5	134.6	142.6	154.3	155.1	100.0	100.6	100.0	101.4	1,380.9	194.1	123.7
Guinea	..	103.9	98.0	93.7	98.5	98.2	99.2	100.0	97.6	95.4	92.8	..	112.0	97.1
Guinea-Bissau	..	85.3	78.9	82.7	92.9	99.1	94.1	100.0	97.0	95.9	95.7	..	102.9	92.9
Kenya	107.8	86.7	86.6	84.7	97.3	101.9	93.6	100.0	105.3	103.0	107.9	106.6	84.4	97.8
Lesotho	128.5	124.9	124.9	113.7	117.1	106.4	104.2	100.0	86.7	75.9	104.3	123.9	122.3	103.7
Liberia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Madagascar	190.7	89.1	80.9	102.8	92.4	93.3	90.8	100.0	110.3	119.2	125.1	197.6	111.1	101.6
Malawi	162.7	101.8	88.8	122.3	136.6	99.3	99.7	100.0	103.4	102.2	79.7	158.7	140.4	103.6
Mali	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mauritania	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mauritius	..	97.4	97.7	93.7	95.7	97.0	94.6	100.0	102.7	100.7	100.7	..	97.6	98.1
Mozambique	179.8	93.9	89.8	103.1	112.7	101.8	103.8	100.0	90.7	84.9	82.5	229.6	214.3	96.6
Namibia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Niger	..	89.3	100.5	106.0	106.3	108.8	102.3	100.0	..	..	..	..	147.4	104.0
Nigeria	420.9	145.8	123.6	152.9	175.5	192.5	97.6	100.0	111.0	111.6	104.5	543.9	191.7	129.9
Rwanda	78.3	121.0	73.3	80.1	96.1	97.0	98.5	100.0	100.0	100.0	100.0	57.3	96.6	93.9
São Tomé and Príncipe	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Senegal	193.6	105.2	114.0	114.8	107.2	109.6	107.0	100.0	101.8	104.7	107.6	175.7	173.8	107.4
Seychelles	84.5	97.4	95.1	90.7	94.2	94.2	102.3	100.0	108.8	114.2	117.9	96.7	98.5	101.9
Sierra Leone	154.6	106.7	96.4	97.2	111.5	95.0	110.9	100.0	110.7	90.1	82.4	226.5	132.4	99.4
Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Africa	164.1	125.7	122.2	112.7	120.6	107.9	102.1	100.0	88.3	75.5	98.0	160.8	123.8	103.0
Sudan	224.7	164.8	127.0	126.5	130.8	99.6	91.4	100.0	108.0	110.0	107.8	216.7	300.5	111.2
Swaziland	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tanzania	..	64.3	66.6	80.9	93.6	98.9	96.5	100.0	99.0	90.2	76.0	..	75.7	89.1
Togo	178.2	87.6	101.6	104.0	106.4	110.7	106.5	100.0	103.3	107.1	110.3	168.7	136.8	105.5
Uganda	1,225.4	121.7	119.1	118.7	127.3	112.6	104.5	100.0	97.2	91.3	80.3	558.7	174.4	105.7
Zambia	127.1	92.2	88.3	92.4	110.7	101.1	98.8	100.0	108.7	103.1	101.3	130.5	88.7	100.5
Zimbabwe	..	..	..	..	..	..	..	..	..	..	..	..	..	..
NORTH AFRICA	145.6	94.3	92.8	95.0	98.0	98.8	99.5	100.0	98.1	95.7	92.3	154.0	100.3	96.7
Algeria	248.6	112.3	93.2	96.9	106.4	111.5	102.6	100.0	102.8	94.8	85.3	288.9	204.1	99.3
Egypt, Arab Rep.	..	64.7	68.3	72.9	75.4	89.8	93.2	100.0	98.6	95.7	91.3	..	59.8	87.2
Libya	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Morocco	128.2	89.5	92.4	93.2	94.0	96.3	97.3	100.0	95.9	95.6	94.3	114.3	87.5	95.4
Tunisia	145.6	99.2	101.4	102.0	101.9	101.3	101.7	100.0	97.6	96.7	93.3	154.0	105.9	99.5
ALL AFRICA	162.7	95.0	98.6	102.1	102.8	102.4	101.1	100.0	102.0	101.1	101.4	149.5	122.4	101.3

Note: 2003 data are preliminary (see page 2).

Figure 3-1. Real effective exchange rate, 2003*

*Or most recent available data.

Technical notes

Tables

Table 3-1. GDP deflator (local currency series).

The implicit GDP deflator for the national currency series is obtained by dividing, for each year of the time series, the value of GDP at current prices (World Bank country desks) by the value of GDP at constant 2000 prices (World Bank country desks), both in national currency.

Table 3-2. GDP deflator (U.S. dollar series).

The GDP deflator for U.S. dollar series (with base year 2000 = 100) (World Bank country desks) is obtained by dividing, for each year of the time series, the value of GDP at current U.S. dollars (Table 2-5) by the value of GDP at constant 2000 dollars (Table 2-1). GDP at current U.S. dollars was obtained by converting the current national series at single-year exchange rates, while GDP at constant 2000 dollars was obtained by converting the constant national series at 2000 prices at a fixed (2000) exchange rate. As a result, the GDP deflator for U.S. dollar series includes both the effects of domestic price changes and the effects of exchange rate variations.

Table 3-3. Consumer price index.

Consumer price indexes (IMF, *International Financial Statistics [IFS]*, line 64) are generally compiled using the Laspeyres formula: goods in the consumption basket selected according to consumption patterns in the base year, derived from household expenditure surveys, are weighted by their relative prices in the base year. The data often relate only to selected representative income groups in capital cities or major urban areas. Thus, the consumer price indexes shown for some countries may not accurately represent price movements because the underlying consumption basket may not be representative of overall national

consumption patterns, and the weights assigned to prices may be outdated.

Table 3-4. Official exchange rate. The official exchange rate (IMF, *IFS*, line rf) is expressed as the annual average of the official market exchange rate in national currency per U.S. dollar.

Table 3-5. SDR exchange rate index. This index is based on the average annual exchange rate for SDRs per unit of national currency (IMF, *IFS*, line rd-zf).

Table 3-6. Currency conversion factor. These are the annual exchange rates used by the World Bank (World Bank country desks) to convert the national currency series into U.S. dollars. For most countries, in most years, the conversion factor is identical to the average annual official exchange rate. However, where the official exchange rate is judged to diverge by an exceptionally large margin from the rate effectively applied to international transactions, a more appropriate conversion factor is estimated. An alternative conversion factor is used when there are egregious differences between the official and effective transaction rates, when officially recognized multiple exchange rates have analytically significant spreads, or when exchange rates need to be adjusted to a fiscal year base. The objective in estimating alternative conversion factors is to approximate as closely as possible exchange rates actually used. For example, where multiple exchange rates are maintained, a transaction-weighted rate is calculated.

Note that national statistical compilers sometimes use an official exchange rate to assign a national currency value to international transactions originally denominated in foreign currencies. In these cases, the official rate must be used to convert the same items back to dollars, regardless of whether it was the rate

actually applied to the international transactions, even if an alternative conversion factor is used for other components of GDP.

Table 3-7. Parallel market exchange rate. Data reported here are from *Pick's Currency Yearbooks* and *Currency Alerts* (now discontinued) and the *Global Currency Report*. They are averages of month-end rates for the period covered, based on a sample of transactions, usually in a capital city or a financial center of the country. They include the rates at the *Bureaux de Change* that have been established in some countries with auction markets as semi-official foreign exchange windows for small transactions. The current table corrects some errors contained in *ADI 1994/95*.

Table 3-8. Ratio of parallel market to official exchange rates. This ratio is obtained by dividing parallel market exchange rates (Table 3-7) by official exchange rates (Table 3-4), to measure the premium on the official exchange rate. The premium is usually high in the presence of an overvalued exchange rate. This table reflects the corrected series for Table 3-7.

Table 3-9. Real effective exchange rate index. This index (World Bank country desks) gives a measure of price competitiveness of the country's exports relative to its trading partners. A decline (increase) in the index indicates real depreciation (appreciation) of the exchange rate. The data have been rebased to 1990. The year 1987 coincided with the early period of massive devaluations in the process of adjustment by several Sub-Saharan African countries. As a result, the substantial devaluations that continued to take place after 1987 may not be very pronounced in the data. Relative movements in the inflation rates between a country and the trading partner (or partners) may diminish the real impact of a devaluation, particularly if inflationary tendencies are stronger domestically than abroad.

Figure

The following indicator has been used to derive the figure in this chapter.

Figure 3-1. Real effective exchange rate (Table 3-9).

Methodology used for regional aggregations and period averages in chapter 3

Table	Aggregations ^a			Period averages ^b	
	(4)	(7)	(8)	(1)	(2)
3-1		X		X	
3-2	X			X	
3-3		X			X
3-4			X	X	
3-5			X	X	
3-6			X	X	
3-7			X	X	
3-8			X	X	
3-9		X		X	

Note: Regional aggregations are shown in the rows for Sub-Saharan Africa, North Africa, and All Africa. Period averages are shown in the last three columns. This table shows only the methodologies used in this chapter.

a. Regional aggregations: (1) simple total; (2) simple total of the first indicator divided by the simple total of the second indicator (same country coverage); (3) simple total of the gap-filled indicator; (4) simple total of the gap-filled main indicator divided by the simple total of the gap-filled secondary indicator; (5) simple total of the first gap-filled main indicator less the simple total of the second gap-filled main indicator, all divided by the simple total of the secondary indicator; (6) weighted total (by population); (7) median; (8) no aggregation; (9) simple arithmetic mean.

b. Period averages: (1) arithmetic mean (using the same series as shown in the table; i.e., ratio if the rest of the table is shown as ratio, level if the rest of the table is shown as level, growth rate if the rest is shown as growth rate); (2) least-squares growth rate (using main indicator); (3) least-squares growth rate (using main indicator in constant terms, with the rest of the table in current terms).