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# Management of Capital Flows: Comparative experiences and implications for Africa

### PART 7.



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### CAPITAL FLOWS, CAPITAL ACCOUNT REGIMES AND FOREIGN EXCHANGE REGIMES IN AFRICA

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#### **I. INTRODUCTION**

Until recently, the economics literature had paid relatively little attention to international private capital flows to Africa; most of the discussions focused on official aid (Kasekende, Kitabire and Martin, 1999). However, recent studies have revealed important empirical and policy issues associated with private capital flows to Africa, but research in this area is still severely constrained by the scarcity of data. The existing data on capital inflows to Africa are fragmented and inconsistent, which makes it difficult to assess the nature, the term structure (long-term versus short-term) and the sectoral distribution of foreign capital (Bhinda et al., 1999). As a result, it is still difficult to formulate consistent policy recommendations.

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This paper investigates a number of issues related to capital account regimes in Africa over the past two decades. First, recent studies have pointed to a "surge" of private capital inflows to Africa, especially in the 1990s (Bhinda et al., 1999). However, the volume of private capital flows is still small relative to domestic capital formation. Unlike in other developing regions, private capital flows to Africa have not increased enough to offset the recent decline in grants and official lending. This study discusses some of the factors that constrain private capital inflows to African countries.

Second, to varying degrees, African countries have pursued liberalization of their capital accounts. In some countries, capital account transactions have been fully liberalized (see appendix). However, liberalization has not been accompanied by improvement in macroeconomic performance. The economic situation in some countries (such as Kenya) has actually deteriorated under liberalization due to excessive speed and poor sequencing of liberalization. While liberalization can attract international capital, the process can also have adverse effects on the economy in the presence of structural macroeconomic imbalances.

Third, the exchange rate regime shifts around the world have been characterized by a "hollowing out" of the middle of the exchange-regime spectrum, where countries are moving from intermediate exchange rate regimes (pegged but managed, or "soft pegs") to either hard pegs or independently floating regimes. For African countries, however, the transition has been asymmetric, mostly involving countries moving from soft pegs to independently floating regimes with virtually no movement from soft to hard pegs. Most countries still have a relatively weak economic base, including an underdeveloped financial system, and a weak regulatory environment. Given these conditions, the transition by African countries to independently floating regimes is puzzling.

Fourth, the establishment of the European Monetary Union (EMU) and the adoption of the euro as the common currency in most of Europe have revived the debate over currency regimes. Some scholars have suggested that given the increasing globalization of finance and trade, countries should abandon exchange rate management and adopt a strong currency as legal tender (Berg and Borensztein, 2000; Calvo and Reinhart, 1999). For African countries, this could involve dollarization, or – with the creation of the euro – "euroization", or possibly the adoption of a strong African currency (e.g. the South African rand) or a regional currency. This study discusses the benefits and costs such a regime shift would entail on capital mobility and macroeconomic stability.

Fifth, an important aspect of capital movements in Africa is the high level of capital flight. According to recent studies, Africa as a region has the highest proportion of private assets held abroad (as a percentage of total assets or GDP) compared to other developing regions (Collier, Hoeffler and Pattillo, 1999). Capital flight has been pervasive in the severely indebted low-income countries, exacerbating a situation already overburdened by high levels of debt (Boyce and Ndikumana, 2001; Ndikumana and Boyce, 2002). Capital flight has imposed high costs on African economies, and it must be regarded as an urgent matter of concern. Capital flight can be interpreted as the outcome of international portfolio choice, as private actors seek to maximize returns on assets and minimize risk. It can also arise from illegal acquisition and use of national resources for private enrichment by private individuals and public officials. Controlling capital flight will require not only the improvement of the macroeconomic conditions to ameliorate incentives for domestic investment, but also the reform of the political and legal systems to improve accountability.

The remainder of the paper is organized as follows. Section II presents the trends and patterns of capital flows to Africa over the past two decades, and discusses the constraints to private capital inflows. Section III highlights recent reforms of capital account regimes and discusses motivations for capital account restrictions in Africa. Section IV discusses exchange rate regime transitions, their implications for capital mobility and economic performance. Section V examines the motivations, advantages, and disadvantages of dollarization for African countries. Section VI presents some estimates of capital flight, and discusses the conduits, causes and consequences of capital flight, as well as implications of capital account liberalization for capital flight. And finally, section VII summarizes and discusses some policy implications.

#### **II. CAPITAL FLOWS: RECENT TRENDS AND PATTERNS**

#### A. FDI "surge" in Africa: an illusion?

From 1990 to 1999, private net resource flows to all developing countries increased almost sixfold, from \$42 billion to about \$239 billion (World Bank, 2000a). Private capital flows increased substantially, bypassing official capital flows. This "surge" in flows to developing countries has been interpreted as a by-product of global financial integration (World Bank, 1997b). International investors penetrate markets in the developing world in search of investment opportunities that can yield higher returns and as a way of minimizing risk through portfolio diversification. At the same time, recent economic reforms undertaken by developing countries have contributed to attracting private capital (Singh, 1999; Singh and Weisse, 1998). Financial integration is supposed to benefit developing countries by allowing them to tap the pool of global capital and achieve higher economic growth from improved resource allocation through financial markets (Fischer, 1999).

At first glance, capital account movements in Africa share some similarities with these global trends. The volume of foreign direct investment (FDI) has increased substantially over the past decade. Annual FDI flows to Africa, excluding South Africa, increased from an average of \$1.2 billion in the 1981–1985 period to \$2.9 billion in 1986–1991, and \$5.3 billion in the 1992–1998 period (UNCTAD, 1995a; 1998; 2000). However, a closer look at the recent increase in FDI flows to Africa shows that it is not as substantial as it appears; it appears to be a "surge" only because the initial levels of flows to most African countries until the early 1980s were extremely low (table 1). For example, the average annual FDI inflows to Zimbabwe were only \$0.2 million in 1981–1985, increasing to \$125 million in 1992–1998; over the same periods, in Zambia they increased from \$19 million to \$108 million, and in Ghana from \$8.5 million to \$107 million.

Moreover, FDI still makes a relatively small contribution to capital formation in African countries. In the 1992–1998 period, FDI as a

#### Table 1

#### FDI INFLOWS: VOLUME AND SHARE OF GROSS DOMESTIC INVESTMENT, 1981–1998

(\$ million and per cent)

	(aı	FDI inflow	s age)	FDI a don	ns per cent o nestic inves	of gross tment
Country	1981– 1985	1986– 1991	1992– 1998	1981– 1985	1986– 1991	1992– 1998
Algeria	-7.9	8.0	9.0	0.0	0.0	0.1
Angola	278.0	169.0	420.0	22.5	14.4	33.3
Benin	0.5	3.0	16.0	0.3	1.3	4.6
Botswana	49.8	59.0	4.0	14.3	7.2	0.3
Burkina Faso	1.3	2.0	12.0	0.5	0.4	2.2
Burundi	0.5	1.0	1.0	0.3	0.6	0.9
Cameroon	158.9	-16.0	23.0	8.1	-0.7	1.6
Central African Republic	5.5	2.0	0.0	6.9	1.3	0.2
Chad	n.a.	12.0	15.0	n.a.	11.2	7.9
Congo, Dem, Rep. of	-17.8	-10.0	2.0	-1.7	-1.0	0.3
Congo	34.0	15.0	26.0	3.9	3.3	3.2
Côte d'Ivoire	33.7	49.0	187.0	2.4	4.9	14.5
Eavpt	688.7	932.0	772.0	8.5	8.7	7.0
Ethiopia	na	na	62.0	na	na	6.6
Gabon	64.3	53.0	67.0	5.0	4 1	5.3
Ghana	8.5	11.0	107.0	3.5	1.6	7.8
Guinea	0.2	18.0	12.0	na	4.3	17
Kenva	15.9	35.0	20.0	1.3	2.2	1.4
esotho	3.9	11.0	198.0	2.8	3.8	32.0
iberia	20.8	200.0	15.0	15.5	190.5	n a
ibva	-272.2	45.0	-39.0	-3.3	na	n a
Madagascar	22	12.0	13.0	0.7	3.7	3.3
Malawi	7.6	15.0	26.0	3.4	5.3	8.7
Mali	4.3	na	38.0	22	na	6.8
Vauritania	8.9	3.0	6.0	4.2	1.3	3.0
Mauritius	3.4	24.0	25.0	1.5	3.8	2.4
Vorocco	50.4	132.0	509.0	1.4	2.6	7.4
Mozambique	na	8.0	70.0	na	24	13.7
Namibia	n.a.	26.0	102.0	n.a.	6.8	16.2
Niger	3.1	16.0	14.0	1.2	5.9	8.9
Nigeria	400.3	728.0	1 352.0	5.8	17.0	23.6
Rwanda	15.9	14.0	3.0	6.7	4.3	1.4
Senegal	8.2	13.0	54.0	2.7	2.1	6.8
Sevchelles	10.1	20.0	34.0	25.2	28.1	20.4
Sierra Leone	-2.2	-10.0	-1.0	-5.6	-12.3	-1.1
South Africa	n.a.	-27.0	965.0	n.a.	-0.2	4.5
Sudan	n.a.	-4.0	94.0	n.a.	-0.1	n.a.
Swaziland	6.9	53.0	22.0	4.4	37.0	6 7
Tanzania, United Rep. of	8.8	n.a	102.0	n.a.	n.a.	8.9
Тодо	6.9	10.0	21.0	4.3	3.8	10.4
Tunisia	207.6	83.0	474 0	7.6	2.9	10.4
Uganda	 n a	n a	111 0	n a	n.a	14.2
Zambia	19.2	100.0	108.0	3 7	24.3	22.6
Zimbabwa	0.2	10.0	125.0	0.0	0.7	8.6

Source: UNCTAD (1995a, 1998 and 2000).

percentage of gross domestic investment was less than 5 per cent for 17 of the 41 countries in the sample in table 1 or less than 10 per cent for 30 of those countries (excluding countries with missing data). The notable exceptions were Nigeria, Seychelles and Zambia with ratios over 20 per cent, and Angola and Lesotho with ratios over 30 per cent. These countries also had high gross investment rates. For instance, the share of gross domestic investment in GDP for the 1992–1998 period was 23 per cent for Angola, 77 per cent for Lesotho and 39 per cent for Seychelles (World Bank, 2000b).

#### (i) Africa's shrinking share of FDI flows to developing countries

Africa's share in total FDI flows to developing countries has been declining since the second half of the 1980s, while the absolute volume has been increasing (figure 1 and table 2). In 1999, sub-Saharan Africa (SSA) received only 4.3 per cent of total FDI inflows to the developing world, down from an average of 10.5 per cent in the 1981–1989 period. It is clear that Africa has not benefited substantially from this global increase in capital flows as much as other developing countries. The low levels of FDI to Africa cannot be fully explained by rates-of-return considerations, as such rates have been comparable to or even higher than those in other developing regions (figure 2).

#### (ii) The changing distribution of FDI in Africa

FDI flows to Africa have traditionally been concentrated in extractive industries. The top 10 beneficiaries of FDI inflows accounted for 82 per cent of total FDI inflows to Africa (excluding South Africa) in the 1992–1998 period (figure 3). Oil exporters have been the main beneficiaries. However, their share has declined over the years, from 70 per cent of total inflows into Africa in the second half of the 1980s to 59 per cent in the 1990s.

While the initial drive behind FDI flows to Africa was the extraction of primary resources, especially oil and minerals, the destination for foreign capital seems to be changing slowly. Capital inflows are low, stagnating,

Figure 1 CAPITAL FLOWS TO AFRICA: VOLUME AND SHARE IN DEVELOPING COUNTRIES



Source: World Bank (1997a and 2000a); for FDI: UNCTAD (1995a,1998, 2000). Note: SSA = sub-Saharan Africa; DC = developing countries.

-	VOLUME	ATIONAL E AND SH	. CAPIT/ HARE IN (Millions	Table AL FLOW DEVELC	e 2 /S TO SL DPING C Int 1995 di	IB-SAHA OUNTRII ollars)	RAN AFI ES, 1989-	RICA: -1999			
Indicator	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Long-term debt <sup>a</sup> Volume Share <i>(per cent)</i>	7 055 17.3	4 306 9.2	3 705 7.8	3 709 5.8	5 245 6.8	4 520 6.9	3 973 4.8	821 0.8	2 246 2.0	-428 n.a.	1 347 3.0
Grants (excl. tech. cooperation) Volume Share ( <i>per cent</i> )	10 711 49.8	13 048 41.7	11 893 29.7	12 091 36.0	10 890 36.6	12 396 36.6	11 414 34.9	9 989 36.5	9 464 37.3	10 274 37.8	10 127 38.3
FDI Volume Share ( <i>per cent</i> )	5 335 16.8	2 361 6.5	2 998 6.9	3 377 6.2	3 826 5.0	5 835 5.4	4 699 4.2	5 399 3.8	6 743 3.9	7 540 4.2	8 974 4.3
Portfolio equity investment Volume Share ( <i>per cent</i> )	0.0	0.0	0.0	153 1.3	183 0.3	891 2.4	4 868 13.5	1 967 4.1	1 474 5.0	681 4.4	493 1.8
Net private resource flows Volume Share <i>(per cent)</i>	n.a. n.a.	1 377 3.0	n.a. n.a.	п.а. п.а.	2 887 1.7	5 087 2.8	9 501 4.6	5 424 1.9	9 396 3.2	3 461 1.3	7 264 3.0
Source: World Bank (1997a, 2000a); Note: Nominal values are converte a Net flows of long-term debt,	UNCTAD ( id into real v excluding If	1998; 2000) /alues usinç MF credit.	). g the United	d States pro	oducer price	index.					



(Per cent)



Source: UNCTAD (1995a, and 1998).

*a* The rate of return is net income of United States foreign affiliates divided by the average of the beginning-of-year and end-of-year FDI stock.

and even declining in some oil exporters such as Cameroon, Congo and Gabon (table 3). At the same time, some "newcomers" are attracting increasing attention from international investors (figure 4). Noteworthy cases are Mozambique, Uganda, the United Republic of Tanzania, Zambia,



**DISTRIBUTION ON FDI INFLOWS IN AFRICA<sup>a</sup>** 

Figure 3

Source: UNCTAD, World Investment Report (various). a Excluding South Africa.

and Zimbabwe. These are also among the African countries that have made significant progress in economic policy reforms over the last decade, which have contributed to price stability, fiscal discipline, improvement of the economic infrastructure, and the creation of a better environment for private investment. There is also evidence that the returns to investment in the extractive sectors are not higher than those in the manufacturing sector (figure 2), which may partly explain the increasing sectoral diversification of FDI.

#### Other capital flows to Africa В.

Private capital flows to developing countries have increased significantly relative to official capital flows over the last two decades. The share of private capital flows in total net resource flows to all developing countries increased from 58 per cent in 1980 to 82 per cent in 1999. By

		FDI FL	OWS T	O SELE (Milli	ons of co	AFRICA onstant	1995 dol	lars)	) )					
Country	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Oil exporting countries														
Angola	78	112	153	222	-360	712	307	317	176	472	177	403	1 117	1 803
Cameroon	24	15	78	0	-67	-16	31	5	ဝု	7	8	44	50	40
Congo	27	52	10	ო	8	5	4	156	5	e	8	ი	4	5
Egypt	1516	1 150	1 388	1 389	788	271	489	517	1 301	596	623	868	1 080	1491
Gabon	137	109	155	-34	79	-59	135	-120	-104	-113	305	140	212	199
Nigeria	208	732	440	2 092	631	762	955	1411	2 030	1 079	1 558	1 505	1 054	1 392
Tunisia	78	112	71	88	80	134	560	485	586	378	343	358	672	366
Others														
Botswana	87	138	47	47	41	<u>و</u>	-2	-301	-15	70	69	98	06	11
Côte d'Ivoire	88	107	61	21	23	17	-246	92	122	268	295	440	315	277
Kenya	41	52	0	69	61	20	9	2	4	32	13	39	42	42
Lesotho	0	7	24	4	18	6	ო	16	283	275	280	263	263	135
Mauritius	0	21	28	40	44	20	16	16	21	19	36	54	12	49
Mozambique	0	0	9	ო	10	25	27	34	36	45	71	63	214	382
Seychelles	17	23	27	26	29	21	10	20	31	40	29	53	55	60
South Africa	-66	-91	514	1 517	1 883	227	-45	-20	394	1 241	800	3 732	563	1 368
Tanzania, United Rep. of	-10	7	ß	7	ကု	ო	13	21	52	150	146	155	172	182
Uganda	0	0	ς	-7	-16	-	ო	58	91	125	117	171	211	179
Zambia	35	91	108	182	218	36	48	55	41	97	114	202	199	162
Zimbabwe	10	-38	-21	-1	-13	ო	21	40	42	118	79	132	445	59

Table 3



(Million constant 1995 \$)



Source: UNCTAD, World Investment Report (various issues, 1992 to 2000). Note: Nominal values are deflated to real values using the US PPI index (base 1995=100).

comparison, over the same period, the ratio for sub-Saharan Africa (SSA) increased only slightly, from 37 per cent to 41 per cent (figure 1).

The volume of official capital inflows to SSA has also decreased since the 1980s. Net long-term lending has declined both in absolute volume and as a share of total net lending to all developing countries. SSA's share in grants has slightly declined, although not as markedly as long-term lending. The decline in official long-term lending and grants has not been compensated by any increase in private lending. Sub-Saharan Africa's share in long-term lending to developing countries declined from 17 per cent in 1989 to just 3 per cent in 1999. The increase in FDI flows to Africa in recent years has been lower compared to other regions, and other private capital flows, such as equity portfolio investments, have declined after reaching a peak in 1995 (figure 1 and table 2). In 1999, portfolio equity investment in SSA was only \$493 million in nominal terms, compared to \$1.1 billion for South Asia and \$3.6 billion for Latin America and the Caribbean (World Bank, 2000a). After increasing substantially from 1992 to 1995 (from \$153 million to \$4.9 billion in constant 1995 dollars), the volume of portfolio investment in SSA declined sharply thereafter. Private net resource flows declined between 1980 and 1990 and then increased, while official net resource flows declined. This explains the increase in the share of private net resource flows after 1990 (figure 1).

#### C. Constraints on private capital inflows into Africa

Among the many constraints on the expansion of private capital inflows into Africa are the weakness of the macroeconomic environment, underdeveloped financial systems, high country risk, and exchange rate misalignment.

#### (i) The weak macroeconomic environment

The weakness of the macroeconomic environment in African countries is the result of a range of factors including low resource endowment, exogenous shocks, and misguided macroeconomic policies that have accentuated the adverse effects of exogenous shocks. Economic performance has been dismal in many countries, especially since the 1980s (Collier and Gunning, 1999a; 1999b). However, evidence shows that countries that have consistently pursued economic reforms aimed at redressing economic imbalances have experienced an improvement in economic performance, which has increased investor confidence. This may explain the recent increase in foreign capital inflows into countries such as Mozambique, Uganda and the United Republic of Tanzania (table 3).

#### (ii) Underdeveloped financial systems

The level of sophistication of the financial system is an important determinant both of the ability of a country to attract international capital and the ability of the financial system to withstand shocks to global capital flows. With the exception of a few countries, such as South Africa, Egypt, Morocco, and probably Kenya, Mauritius and Nigeria, most African countries still have an underdeveloped financial system.<sup>1</sup> The following features are especially worth emphasizing:

- *Size and depth:* In most African countries, financial systems are still shallow. With the exception of South Africa, African financial markets offer a limited range of financial products. Bank lending is predominantly short term, government securities are mostly of short maturity, banks in many countries do not issue credit cards (issued in only 15 sub-Saharan countries in 1997), and inter-bank lending is still underdeveloped (Gelbard and Leite, 1999).
- Low stock market development: The majority of African countries do not have active stock markets; most of them, where they exist, including the long-established stock markets such as the Egyptian Stock Exchange, are still small and illiquid (Ndikumana, 2001).
- *Poor performance:* The banking sector in African countries is still characterized by inefficiencies in credit allocation and poor loan repayment enforcement mechanisms, which result in a high proportion

of non-performing loans. Gelbard and Leite (1999) reported an average share of non-performing loans of over 20 percent in a sample of 38 sub-Saharan countries in 1997.

• Weak regulatory and supervisory framework: Some of the basic institutional requirements for effective banking supervision (e.g. modern banking laws, central bank autonomy) and prudential regulation (e.g. establishment and enforcement of minimum bank capitalization ratios, deposit insurance) are still non-existent in many countries (Gelbard and Leite, 1999; Mehran et al., 1998; Nissanke and Aryeetey, 1998).

In the context of adjustment programmes, some countries have made significant progress in reforming their banking systems, in particular, by establishing new banking laws or reforming existing ones to improve supervision and prudential regulation. Moreover, the participation of the State in the banking sector has decreased as a result of the privatization of State-owned banks and the easing of licensing requirements, which have accelerated the creation of new private banks. To the extent that these reforms are supported by market-friendly macroeconomic policies (especially fiscal discipline and non-inflationary monetary policy), they will enhance investor confidence and attract more foreign private capital.

#### (iii) High country risk

Africa has traditionally been considered as being "atypically risky" with a "capital-hostile environment" (Collier and Pattillo, 2000: 3). Surveys reveal that investors (foreign as well as local) view the main obstacles to investment as being fear of political instability and the risk of policy reversal. High country risk is also attributable to weak and volatile macroeconomic fundamentals, such as variable inflation rates, exchange rate instability and chronic fiscal deficits. Another important factor of high investment risk in Africa is *effective distance* as perceived by international investors, which is influenced by geographic distance, transactions costs and cultural/psychological distance.

African countries can improve their risk ratings through sustained economic reform. It should be noted, however, that international rating agencies tend to rate Africa as being riskier than is warranted by objective conditions (Haque, Mark and Mathieson, 2000). As a result, the impact of economic reforms on risk rating for a particular country may be retarded by a "bad neighbourhood" effect.

### III. CAPITAL ACCOUNT REGIMES: OPENNESS AND RELATED ISSUES

#### A. Recent developments in capital account policies

#### (i) Towards greater openness

In the context of the macroeconomic reforms initiated in the 1980s, which accelerated in the 1990s, many African countries moved towards greater capital account openness by abolishing or relaxing existing capital controls. The text in the appendix and table A.1 provide a summary of important recent reforms for some countries. The following is a non-exhaustive list of samples of recent reforms in the current account regimes.

- Limits to foreigners' participation in domestic investment have been relaxed and even abolished in some countries. However, governments have maintained controls in strategic sectors, such as crude oil and gas in the case of Nigeria.
- Countries have relaxed or abolished restrictions on non-residents' ability to repatriate dividends, interest income, and proceeds of sales or liquidation of the initial investments.
- Investment by residents in foreign-currency-denominated assets locally and abroad is now allowed in a number of countries. However, even in countries with relatively liberal regimes, some limitations are maintained for strategic reasons. For example, in South Africa, the

Government maintains a limit on the amount of investment abroad by residents. Corporations can invest up to 250 million rand within the Southern African Development Community (SADC) region (there are no limits for Lesotho, Namibia, and Swaziland) and 50 million rand elsewhere. Domestic/resident institutional investors are allowed to invest abroad up to 15 per cent of their assets, while the maximum allowed for individuals is 750,000 rand.

• Recent reforms have allowed non-residents to purchase stocks and government securities. Kenya and South Africa are the leading reformers in capital account liberalization.

#### (ii) Liberalization in the context of regional arrangements

Liberalization of capital account regimes has also accelerated in the context of new or existing regional arrangements. With the exception of the Communauté financière africaine (CFA), which is an integrated monetary union, African regional arrangements have traditionally emphasized trade integration. Recently, countries have pursued greater capital mobility. A noteworthy example is the Cross-Border Initiative in Eastern and Southern Africa (CBI) (Fajgenbaum et al., 1999). However, in the case of overlapping regional arrangements, economic incentives can be distorted when obligations under the various bodies are inconsistent. For example, it is not clear how countries that belong to both the CBI and SADC can reconcile discrepancies in tariff arrangements, since some of these are different between the two bodies. Harmonization of obligations across regional entities is necessary to allow countries to take full advantage of regional integration.

#### (iii) Scope, speed and sequencing of liberalization

Three important points are worth emphasizing with respect to recent capital account liberalization in Africa. First, despite the visible trend towards liberalization, there is still a wide diversity in capital account openness across the continent. Some countries have very open capital accounts, such as Kenya and South Africa, with few restrictions on FDI and other capital account transactions by individuals and firms. In other countries, transactions are tightly controlled, including restrictions based on the sectoral allocation of FDI (table A.1).

Second, countries must pay serious attention to the scope, speed and sequencing of capital account liberalization to minimize potential adverse effects of openness. Evidence shows that speedy liberalization results in macroeconomic instability, generating effects that are opposite to the intended objectives of liberalization. A compelling example is Kenya. Facing an imminent crisis at the end of the 1980s, the Kenyan Government embarked on a set of aggressive reforms, including the opening up of the capital account and liberalization of the foreign exchange market. However, the crisis continued throughout the 1990s as a result of severe macroeconomic imbalances. Capital account liberalization ultimately increased the country's vulnerability to fluctuations in capital flows, especially by providing "legal" channels of capital flight (Ariyoshi et al., 2000: 67).

Third, to attract foreign capital, capital account openness must be supported by broad-based macroeconomic reforms aimed at improving the investment environment. In particular, countries need to pursue fiscal discipline, responsible monetary policy committed to price stability,<sup>2</sup> and institutional reforms aimed at fostering a legal and regulatory environment that is conducive to financial intermediation. There is evidence that countries that have made progress in economic and institutional reform and have improved the credibility of their macroeconomic policy are also attracting greater attention among international investors.

#### B. Motivations for capital account restrictions in Africa

#### (i) Why liberalize the capital account?

Proponents of capital account liberalization have advanced two main arguments in its favour (Fischer, 1999). The first is that capital account liberalization is an "inevitable step on the path of development which cannot be avoided and should be embraced" (Fischer, 1999: 2). Historical evidence demonstrates, so the argument goes, that the most advanced economies have open capital accounts. The second, and arguably more powerful, motivation for capital account liberalization is that the potential benefits of liberalization outweigh the costs. Potential benefits include increased access to a larger and more diversified pool of funds by investors (local and foreign), resulting in greater opportunities for portfolio diversification.

However, even proponents of capital account liberalization acknowledge important risks associated with it (Fischer, 1999: 2–3). International capital flows – especially short-term flows – tend to be highly volatile and capital reversals are costly. Capital markets tend to react erratically following shocks to the economy. Through contagion and spillover effects, capital market shocks tend to spread quickly across countries, often irrationally, reflecting herd behaviour among investors. The risks associated with capital account openness are particularly high for countries with weak macroeconomic fundamentals, underdeveloped financial systems and poor banking regulatory institutional infrastructure. African countries should therefore exercise great caution in liberalizing their capital accounts.

#### (ii) Capital controls versus capital restrictions

The literature on the management of international capital flows has focused primarily on the desirability and effects of capital controls. However, as Cooper (1999) points out, capital controls are a subset of a larger set of policy options for managing international capital flows. Such controls are typically quantitative limitations on capital flows. There are, however, administrative and price penalties on capital movements that may have similar effects as capital controls. These include differential reserve requirements on assets, and tax preferential treatment of certain categories of capital deemed favourable for economic growth (such as FDI, as opposed to short-term portfolio equity investment). Therefore, countries have more than the option of imposing or not imposing capital controls. They can also select and sequence various strategies in order to manage the volume and distribution of capital inflows and the volume of capital outflows. The debate over capital restrictions is almost ironic in the context of African countries. Because capital inflows are still low, one may argue that African countries need to attract them, not control them. However, there are good reasons for a proactive approach to capital account management in African countries. The conditions for full liberalization of capital movements are very hard to meet, and they are largely lacking in most African countries. These conditions include low barriers to international trade, a well-developed, well-diversified and well-regulated financial system, and no large differences between a country's and the world's tax regime relating to capital (Cooper 1999: 124). The following are some of the reasons why African countries should selectively impose certain restrictions on capital flows.

#### Argument 1: Protecting domestic financial systems

A surge in international capital inflows can destabilize domestic financial systems. This is particularly the case for short-term capital and other forms of capital flows that have a high propensity for quick and sudden reversal. Given that financial systems are still underdeveloped in most African countries and that the regulatory framework is still weak, it may be necessary to adopt a selectively proactive approach to capital account management. For example, South Africa suffered from the contagion effects of the Asian financial crisis in 1997–1998, whereby shaken investor confidence caused large capital outflows and a depreciation of the rand.

#### Argument 2: Shaping industrial growth

Evidence shows that private capital inflows to African countries still primarily target extractive activities, which contributes to perpetuating the dependence on the primary sector. Because extractive activities are predominantly capital-intensive, capital inflows in those areas have little contribution to employment creation. It is desirable to design policies that can redirect foreign capital into new, growth-promoting activities. Such policies include imposing a minimum stay requirement on foreign capital, establishing differential reserve requirements in favour of growth-promoting capital, and providing preferential tax treatment to foreign capital that is directed to new employment-creating and growth-promoting activities.

#### Argument 3: Redistributive capital restrictions

In Africa, as in other developed and developing countries, participation in capital markets is heavily skewed in favour of the wealthiest segments of the population. The majority of citizens are bystanders who seldom benefit from financial market booms, yet they often bear disproportionately high costs of financial fragility. African countries can devise policies aimed at redistributing the gains from expansion of the capital market, which can contribute to improving the living standards of the population. For example, taxation of capital gains with the aim of increasing funding for socially productive public investment (e.g. health, education and nutrition) can induce significant progressive effects.

#### Argument 4: Protecting export performance

Unregulated capital flows can result in sharp fluctuations in exchange rates that can damage export performance. High capital inflows that result in an appreciation of the national currency will discourage international demand for national exports while encouraging imports of foreign goods; this will depress the current account balance. For emerging market economies in Africa and others that have experienced a substantial increase in capital inflows, national authorities must consider options for active management of capital flows to minimize the potential adverse effects of those flows on trade.

### IV. EXCHANGE RATE REGIMES: TRANSITIONS AND IMPLICATIONS FOR CAPITAL MOBILITY

# A. The global context: regime shifts and the "hollowing-out" of the middle ground

Recent studies have observed marked shifts in exchange rate regimes around the world. These shifts are characterized by a "hollowing out" of the middle of the exchange rate regime spectrum; countries are moving from intermediate regimes ("soft pegs") to very hard pegs and independently floating regimes (Fischer, 2001; Mussa, et al., 2000; Calvo and Reinhart, 2000).<sup>3</sup> These developments have been interpreted as the natural outcome of the increasingly global integration of finance and trade. The recent crises experienced by emerging market economies have motivated research on the connections between the chances and severity of capital account crises and the exchange rate regimes. Some scholars have concluded that, with few exceptions, the effects of these crises were the worst in those emerging market economies that had either explicitly fixed exchange rate pegs or where movements in exchange rates were artificially constrained. In contrast, the argument goes, emerging market economies that allowed flexibility of exchange rates fared better during crises (Mussa et al., 2000: 21).

Whether the recent experiences of crises in emerging market economies constitute evidence for a causal relationship between financial crises and exchange rate regimes remains unclear. Nonetheless, the nature of the exchange rate regime is relevant because it can determine the ability of a country to hedge against a crisis, and the magnitude of the crisis may depend on the particular exchange rate regime in place. In practice, however, sorting out the effects attributable to the exchange rate regime is difficult, partly because in many cases financial market disturbances only amplify the effects of shocks that originate from the real side or from fundamental domestic policy misalignments. Recent experiences show that the main causes of financial crises are: the weakness of the domestic financial system (as in the Russian Federation and Brazil) and excessive foreign-currency-denominated borrowing in the corporate sector (as in the Republic of Korea and Thailand), the loss in competitiveness of the export sector, and other changes in the fundamental aspects of the economy. Nevertheless, for countries that are significantly integrated in the global financial markets, the choice of the exchange rate regime matters. In particular, such countries may find it costly to maintain rigidly fixed exchange rates.

## B. Exchange rate regime shifts in Africa: asymmetric transition

Many African countries have liberalized their foreign exchange markets and moved away from soft pegs towards independently floating or managed floating exchange rate regimes (table A.2). However, these transitions have been asymmetric. While countries have moved out of the middle of the exchange regime spectrum, there has been virtually no movement out of or into the category of hard-peg regimes (table A.2 and figure 5). Out of 51 African countries, 53 per cent were classified as having soft-peg regimes in 1991. In 1999, only 24 per cent of the countries are in this category. In contrast, while the category of independently floating exchange rates counted only 9 countries (or 18 per cent of the sample) in 1991, the number had increased to 24 (or 47 per cent of the sample) in 1999. Only Guinea-Bissau moved from the intermediate category to the hard-pegs category. The transition matrix in table 4 indicates that over 55 per cent of the countries (15 out of 27 countries) that were in the softpegs category in 1991 had adopted an independent floating regime by 1999. In contrast, no shifts - with a single exception of Namibia which shifted from a hard peg to a soft peg – occurred among countries in both extremes of the exchange regime spectrum. The countries in the hard-pegs category in 1999 are older members of the CFA zone, again except for Namibia, and Guinea-Bissau which joined the CFA zone in 1997. Similarly, all nine countries in the independent-float category in 1991 were still in the same category in 1999. The existing evidence on African countries is inconclusive as to the relative advantages and disadvantages of alternative exchange rate regimes. Some of the findings are discussed below.

#### Figure 5

#### EXCHANGE RATE REGIME TRANSITION IN AFRICA AND OTHER REGIONS FROM 1991 TO 1999



(Number of countries by regime and share in the sample)

Source: Fischer (2001).

Note: Figures in square brackets indicate the number of countries in the corresponding exchange rate regime category.

a Excluding emerging markets.

**b** Excluding developing countries and emerging markets.

#### Table 4

#### EXCHANGE RATE REGIME SHIFTS IN AFRICA: TRANSITION MATRIX FOR 1991 AND 1999

			1999	regime	
		Hard pegs	Soft pegs	Independent floats	Total
	Hard pegs	14 (93.3%)	1 (6.7%)	0 (0%)	15 (29%)
egime	Soft pegs	1 (3.7%)	11 (40.7%)	15 (55.6%)	27 (53%)
1991	Independent floats	0 (0%)	0 0%)	9 (100%)	9 (18%)
	Total	15 (29%)	12 (24%)	24 (47%)	51 (100%)

Note: The cells contain the number of countries (and percentage of the sample) belonging to different currency regimes in 1991 and 1999. The "hard peg" category includes regimes with a currency board or arrangements with no special legal tender; the "soft peg" category includes other conventional fixed pegs, pegged rates in horizontal bands, crawling pegs, and rates with crawling bands; the "independent floats" category includes independently floating and managed float with no pre-announced exchange rate path.

# C. Exchange rate regimes and economic performance: some casual observations

It is difficult to establish a definitive relationship between economic performance and exchange rate regimes in Africa for many reasons. First, the classification of countries along the spectrum of exchange rate regimes, from very hard pegs to independently floating regimes, is not arbitrary. Second, while the level and fluctuations in exchange rates can affect economic performance, it is only one of many interrelated factors that determine a country's economic outcomes. Therefore, sorting out the effects that are attributable to shifts in exchange rate regimes is difficult. Sophisticated econometric analysis can help to address this issue, but such an exercise is not attempted in this study; for this reason, the following observations are rather casual and should not be interpreted as based on definitive empirical observations. Tables 5 and 6 present some indicators of economic performance for African countries classified by exchange rate regime. The results show that performance indicators have varied widely within different regime categories. The information is summarized in table 7, which presents the percentage of countries in each category whose economic indicators improved in the 1990s compared to the 1980s.

For the majority of countries in the hard-peg category (CFA zone members), there was little improvement in the growth of per capita GDP from the 1980s to the 1990s. While 50 per cent of the countries in this group had a positive growth rate in the 1990s, the growth rate was higher than in the 1980s for only 36 per cent of these countries. Furthermore, inflation was higher and trade lower in the 1990s compared to the 1980s for 71 per cent of the countries in this group. However, two important empirical facts are worth emphasizing for the CFA zone. First, countries in this group experienced much lower inflation rates than countries in the other groups, both in the 1980s and the 1990s. Virtually all the countries in the hard-peg group had single-digit inflation rates (except for Guinea-Bissau, which joined the CFA zone in 1997). Second, as the data in table 8 show, countries in the CFA zone experienced some improvement in economic performance following the devaluation of the CFA franc in 1994.<sup>4</sup> The average annual growth rate of GDP per capita for the group was higher in 1995–1998, at 2.3 per cent, than in 1990–1994, at -2.8 per cent. Exports also were higher in 1995–1998 for all the countries in the group, with the export-to-GDP ratio averaging 36 per cent in 1995–1998 compared to 28 per cent in 1990-1994. No similar patterns are observed in other regional groupings on the continent (see table 9 for the SADC group).<sup>5</sup>

In the soft-pegs category, a larger proportion of countries (82 per cent) achieved positive GDP growth, although growth was positive and higher in the 1990s than in the 1980s for only 36 per cent of these countries. This group also experienced improvement in inflation (lower in 82 per cent of the countries), in the current account balance (which improved in 60 per cent of the countries) and in international reserves (with a higher stock of reserves in 80 per cent of the countries).

The proportion of countries showing improvements in GDP growth was lowest in the independent floats category. Inflation was higher in more

			Table	e 5				
INFI	GDP GROWTH LATION IN AF	I, CURRENT RICAN COU	· ACCOUNT, NTRIES BY	, INTERNAT EXCHANGE	IONAL RES E RATE REG	ERVES ANG IME, 1980–1	) 1998	
	Growth of pe	r capita GDP	Current acco	ount balance	Net internatic	onal reserves	Infla	ntion
	(Annual pe	rcentage) <sup>a</sup>	(Percentaç	ge of GDP)	(Percentaç	je of GDP)	(Average ann change in G	iai percentage DP deflator)
Country/regime, 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Group I – Hard pegs								
Benin	-0.5	1.7	-6.6	-2.2	0.7	11.4	2.9	7.9
Burkina Faso	1.4	1.1	-2.1	-4.6	8.9	14.3	4.6	4.8
Cameroon	1.6	-2.1	-4.2	-2.7	1.3	0.1	6.2	4.8
Central African Republic	-0.8	-0.6	-4.6	-5.6	7.5	14.4	9.3	4.2
Chad	3.9	6.0-	-0.6	-4.8	3.2	7.0	2.7	7.5
Congo	0.9	-1.9	-13.1	-24.5	1.5	1.4	4.4	4.4
Côte d'Ivoire	-2.9	0.6	-9.7	-5.4	0.1	3.1	3.5	6.2
Djibouti	n.a.	-5.3	n.a.	-10.0	15.5	17.1	n.a.	4.1
Equatorial Guinea	-1.4	14.3	-17.3	-37.0	3.4	2.1	-0.8	9.3
Gabon	-2.9	0.7	-3.6	1.8	4.0	3.2	3.5	6.2
Guinea-Bissau	1.7	-1.2	-41.0	-21.1	6.2	6.7	57.7	41.3
Mali	-1.8	0.8	-10.4	-8.7	1.7	13.1	5.3	7.6
Niger	-3.6	-1.3	-7.7	-8.3	7.1	6.7	3.3	4.8
Senegal	0.3	0.2	-11.4	-5.4	0.3	4.0	6.7	4.4
Togo	-1.5	-0.7	-4.9	-8.5	23.1	12.7	5.6	7.5
								/

L Z	LATION IN AF							
	Growth of pe	r capita GDP	Current acco	ount balance	Net internatic	unal reserves	Infla	tion
	(Annual pe	rcentage) <sup>a</sup>	(Percentaç	ge of GDP)	(Percentaç	je of GDP)	(Average ann change in G	iai percentage DP deflator)
Country/regime, 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Group II – Soft pegs								
Botswana	6.4	1.7	0.3	6.8	56.9	102.0	12.7	9.2
Cape Verde	4.4	2.7	-1.2	-6.8	27.7	13.9	5.4	4.0
Comoros	0.3	-3.2	-9.8	-7.5	9.9	17.5	7.6	3.6
Egypt	2.8	2.2	-5.8	2.1	3.1	22.1	12.8	10.8
Lesotho	1.3	4.7	3.4	-9.8	15.4	42.2	13.8	8.1
Libyan Arab Jamahiriya	n.a.	n.a.	-1.8	n.a.	23.7	n.a.	n.a.	n.a.
Morocco	2.0	0.4	-5.4	4. L-	1.5	11.7	7.2	3.7
Namibia	-1.8	0.8	n.a.	3.4	n.a.	6.0	13.6	9.0
Seychelles	2.6	4.1	-13.6	-7.9	6.2	5.7	4.2	1.6
Swaziland	3.3	-0.2	-6.5	-0.1	20.2	25.3	10.5	11.2
Tunisia	0.6	2.7	-4.8	4.5	6.2	8.0	8.4	4.9
Zimbabwe	-0.1	0.0	-2.0	4.8	1.8	4.3	12.4	22.4
Group III – Independent flo	oat							
Algeria	0.0	-1.0	-0.7	3.7	4.2	6.9	7.9	23.3
Angola	0.8	-3.2	-0.6	-4.3	n.a.	4.9	4.2	1 254.1
Burundi	1.6	-5.6	-4.5	-4.0	5.3	14.7	4.3	11.1
Congo, Dem. Rep. of	-1.2	-8.4	-4.4	-8.4	1.8	1.7	63.8	4 010.7
Eritrea	n.a.	2.4	n.a.	-5.6	n.a.	n.a.	n.a.	11.2
Ethiopia	-2.1	2.6	-5.4	-6.4	2.2	7.2	5.4	8.2
Gambia	0.0	-1.0	-5.1	-0.9	4.5	24.5	16.6	5.3

	Growth of pe	r capita GDP	Current accc	ount balance	Net internatio	nal reserves	Infla	tion
	(Annual pe	rcentage) <sup>a</sup>	(Percentaç	je of GDP)	(Percentag	e of GDP)	(Average annu change in G	al percentage DP deflator)
Country/regime, 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Ghana	-0.7	1. 5	-2.7	-5.2	5.6	7.8	47.2	27.1
Guinea	1.7	1.5	-6.2	-5.5	n.a.	2.8	24.0	9.9
Kenya	0.5	-0.5	4.9	-2.2	4.8	5.2	9.3	14.6
Liberia	n.a.	n.a.	-0.9	n.a.	0.5	n.a.	n.a.	n.a.
Madagascar	-1.9	-1.6	-7.2	-7.4	3.6	4.4	18.6	19.1
Malawi	-0.8	1.0	-9.0	-15.4	4.5	7.0	15.3	29.0
Mauritania	-2.8	1.3	-16.4	-1.8	10.6	9.4	9.8	5.1
Mauritius	5.0	3.8	-3.4	-1.7	9.3	22.5	9.6	6.7
Mozambique	-2.6	3.2	-12.6	-16.0	4.3	10.9	41.7	38.2
Nigeria	-2.3	-0.3	-1.6	0.9	6.0	11.3	18.9	33.9
Rwanda	-0.7	-4.2	-4.4	-3.4	8.3	5.8	4.2	16.3
São Tome and Príncipe	-1.0	-1.0	-33.9	-24.1	n.a.	18.6	30.2	53.4
Sierra Leone	-2.1	-7.2	-3.3	-6.4	1.0	3.4	59.2	43.4
Somalia	n.a.	n.a.	-15.5	n.a.	1.4	n.a.	n.a.	n.a.
South Africa	-1.6	-0.2	0.8	0.1	0.7	1.5	15.1	11.4
Sudan	-2.1	5.6	-5.7	-17.6	0.2	0.8	40.0	72.5
Tanzania, United Rep. of	0.7	0.0	-7.0	-13.0	1.3	6.4	31.3	24.0
Uganda	-0.1	3.9	-4.6	6.6-	1.6	6.2	116.5	20.1
Zambia	-2.1	-1.7	-12.2	-13.6	3.3	5.8	39.0	75.0

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Table 5 (concluded)

	Nominal ex (Nat. cu	<pre>cchange rate urr./US\$)</pre>	Real exci (Index 15	hange rate 395=100) <sup>a</sup>	Ex <sub>i</sub> (Percenta	ports ige of GDP)	Averaç (Percentaç	ge trade ge of GDP) <sup>b</sup>
Countries/regime 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Group I – Hard pegs								
Benin	334.3	426.9	n.a.	100.7	26.2	24.5	33.2	29.0
Burkina Faso	334.3	426.9	140.4	118.0	10.4	12.1	20.7	19.6
Cameroon	334.3	426.9	113.1	112.7	26.4	22.2	26.3	20.8
Central African Republic	334.3	426.9	154.3	111.5	20.5	16.7	26.5	20.8
Chad	334.3	426.9	132.9	116.7	14.3	15.8	21.0	23.1
Congo	334.3	426.9	91.3	98.8	52.0	57.4	52.3	60.7
Côte d'Ivoire	334.3	426.9	117.6	109.7	37.1	38.2	35.5	35.5
Djibouti	177.7	177.7	n.a.	n.a.	n.a.	44.9	n.a.	56.6
Equatorial Guinea	334.3	426.9	n.a.	n.a.	35.9	59.1	50.2	82.2
Gabon	334.3	426.9	152.3	118.8	53.3	53.8	48.5	45.0
Guinea-Bissau	6.3	267.5	146.9	112.5	9.9	12.0	26.4	24.6
Mali	334.3	426.9	152.6	116.6	15.8	20.0	24.6	27.6
Niger	334.3	426.9	183.7	113.9	21.0	16.1	25.0	19.1
Senegal	334.3	426.9	136.8	113.3	28.7	29.6	34.7	32.7
Togo	334.3	426.9	130.5	106.3	46.1	31.6	49.7	35.3
Group II – Soft pegs								
Botswana	1.4	2.8	99.2	93.4	58.9	48.3	52.6	43.7
Cape Verde	69.8	80.3	77.9	94.5	15.5	17.4	30.0	34.7
Comoros	334.3	350.8	n.a.	n.a.	14.7	18.5	31.3	30.1

Table 6

EX								
	Nominal e. (Nat. c	xchange rate urr./US\$)	Real exc. (Index 1;	hange rate 995=100) <sup>a</sup>	Ext (Percenta	oorts ge of GDP)	Averaç (Percentaç	ge trade ge of GDP) <sup>b</sup>
ountries/regime 1999;	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
gypt	0.7	3.1	153.1	98.1	22.2	23.0	28.8	26.0
esotho	1.7	3.7	96.3	95.8	15.6	23.0	75.0	74.9
ibyan Arab Jamahiriya	0.3	0.3	n.a.	n.a.	54.7	n.a.	44.5	n.a.
lorocco	7.5	8.9	95.7	91.5	17.8	19.1	23.2	23.4
amibia	1.7	3.7	104.8	93.0	58.6	53.8	62.2	57.3
eychelles	6.3	5.1	90.2	94.4	62.1	59.7	63.3	63.9
waziland	1.7	3.7	101.6	91.4	70.7	83.0	77.5	85.2
unisia	0.7	1.0	91.4	93.3	36.9	42.4	40.0	44.7
imbabwe	1.3	8.9	156.7	96.3	21.4	33.1	21.8	34.6
roup III – Independent fl	oats							
lgeria	5.1	36.3	245.1	117.2	23.8	26.0	23.0	25.4
ngola	0.0	83 633.9	n.a.	55.1	34.7	59.2	30.2	56.9
urundi	114.0	267.7	135.2	96.0	10.4	9.2	17.1	16.8
ongo, Dem. Rep. of	0.0	1 370.2	220.9	120.2	21.4	22.6	21.8	21.8
ritrea	n.a.	n.a.	n.a.	n.a.	n.a.	27.8	n.a.	54.1
thiopia	2.1	4.9	189.0	139.2	9.3	10.5	13.0	15.1
iambia	4.4	9.4	107.3	96.9	47.8	53.7	54.4	60.8
ihana	82.3	1 104.3	589.4	108.6	11.2	21.3	12.7	26.7
iuinea	196.2	952.9	n.a.	n.a.	29.7	22.3	29.5	23.9

	Nominal ex (Nat. cu	cchange rate ırr./US\$)	Real exci (Index 19	hange rate 995=100)ª	Exµ (Percenta)	oorts ge of GDP)	Avera; (Percentaç	ge trade <sub>J</sub> e of GDP) <sup>b</sup>
Countries/regime 1999	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998	1980–1989	1990–1998
Kenya	14.3	47.1	103.9	92.3	24.7	31.4	26.9	32.7
Liberia	1.0	1.0	n.a.	n.a.	47.3	n.a.	46.0	n.a.
Madagascar	725.8	3 226.0	178.6	106.1	13.6	19.6	17.2	23.5
Malawi	1.6	11.2	146.6	130.1	23.9	24.8	27.3	31.2
Mauritania	64.8	122.4	128.9	110.9	42.2	42.8	52.9	48.4
Mauritius	12.3	18.0	98.7	93.9	54.6	62.0	56.2	64.1
Mozambique	183.2	6 503.2	218.4	116.3	6.8	12.8	15.9	26.0
Nigeria	2.2	18.5	117.9	79.8	21.4	40.9	20.9	38.7
Rwanda	89.8	208.5	123.8	100.3	10.4	6.0	15.5	16.1
São Tome and Príncipe	54.9	1 250.6	n.a.	n.a.	29.8	23.4	56.2	55.9
Sierra Leone	15.5	702.4	125.4	94.4	11.5	23.1	14.0	23.3
Somalia	93.7	n.a.	n.a.	n.a.	15.5	9.8	33.0	23.8
South Africa	1.7	3.7	96.7	94.3	28.3	23.3	25.9	21.9
Sudan	2.1	663.7	185.1	195.7	8.2	n.a.	12.8	n.a.
Tanzania, United Rep. of	40.9	450.9	255.9	106.7	10.0	16.7	19.5	26.6
Uganda	39.9	978.8	334.5	88.9	11.6	9.6	14.7	15.4
Zambia	4.8	737.5	79.7	100.7	34.4	34.0	35.4	36.9

Table 6 (concluded)

*a* The real exchange rate is computed as: (country's CPI) / (United States' CPI) × Official exchange rate. *b* Average trade is the average of exports and imports as a percentage of GDP.

				(Percentage)					
			Growth in	1990–1998	Inflation in	1990–1998	Trade	Current accoun balance	t Reserves
Category	Regimes		Positive growth	Higher than 1980–1989	Below 10 per cent	Lower than 1980–1989	Higher	Improved	Higher
Non-shifters	Hard pegs		50.0	35.7	92.9	28.6	28.6	50.0	57.1
	Soft pegs		81.8	36.4	72.7	81.8	54.5	60.0	80.0
	Independent	Group	47.8	30.4	21.7	43.5	72.7	47.8	85.0
	10415	(without conflict countries) <sup>a</sup>	(57.9)	(36.8)	(26.3)	(50.0)	(72.2)	(47.4)	(88.2)
Shifters	Shifting from	Group	53.8	38.5	15.4	23.1	83.3	46.2	6.06
	son pega to independent floats	(without commer countries) <sup>a</sup>	(70.0)	(50.0)	(20.0)	(30.0)	(88.9)	(40.0)	(100.0)
Source: World Note: This ta this tal a "Confil	Bank (2000b). ble summarizes infu ole. Djibouti, Eritrea ct countries" in the	ormation from tables 5 al 1, Liberia, Libyan Arab Ja floating regimes categor	nd 6. Table A.2 amahiriya and y are Angola,	2 presents inforr Somalia are not Burundi, Rwand	mation on coun i included in thii la and Sierra Le	tries that shifted s summary table eone (and Soma	from soft p due to lach lia, which is	egs to independer < of data. s excluded due to	it float used in lack of data).

Table 7

	Growth	'i of per capita	GDP <sup>a</sup>	(Per	Exports centage of G	(AO	Infla (Avera	ttion in CPI in age annual ch	dex ange)
Country	1980–1989	1990–1994	1995–1998	1980–1989	1990–1994	1995–1998	1980–1989	1990–1994	1995–1998
Benin	4.0-	0.0	2.2	26.2	24.1	25.1	n.a.	19.5	7.1
3urkina Faso	4.1	-0.1	2.7	10.4	11.9	12.2	1.7	5.1	5.2
Cameroon	1.8	-6.4	1.8	26.4	20.0	25.0	9.0	6.6	6.7
Central African Republic	-0.9	-3.0	1.3	20.5	15.4	18.3	3.7	3.5	5.7
Chad	4.0	-1.4	1.2	14.3	13.2	19.1	3.0	6.9	9.8
Congo	2.7	-2.9	0.1	52.0	49.8	6.9	7.6	11.6	10.6
Côte d'Ivoire	-2.6	-2.9	3.7	37.1	33.1	44.7	5.9	6.7	6.4
Equatorial Guinea	-1.9	2.6	31.7	35.9	39.3	83.9	n.a.	n.a.	n.a.
Sabon	-1.5	-0.1	1.7	53.3	50.0	58.5	5.8	4.6	4.8
Guinea-Bissau	2.9	1.4	-5.6	9.9	10.0	14.5	70.5	44.7	38.3
Aali	-1.5	-1.4	2.4	15.8	17.9	22.5	-0.1	3.8	6.0
Viger	-2.9	-3.2	0.9	21.0	15.6	16.6	2.8	4.3	5.8
Senegal	0.3	-1.3	2.4	28.7	26.1	33.9	6.7	6.0	3.4
logo	-1.7	-4.0	2.1	46.1	29.8	34.0	4.2	8.2	7.6
Sample <sup>b</sup>	-0.4	-2.8	2.3	31.7	27.9	35.6	6.7	9.7	9.1

	Growth	h of per capita	ı GDP <sup>a</sup>	(Pei	Exports centage of G	(ad	Infla (Avera	ition in CPI in age annual ch	dex ange)
Country	1980–1989	1990–1994	1995–1998	1980–1989	1990–1994	1995–1998	1980–1989	1990–1994	1995–1998
Vngola	-0.1	-8.6	5.4	34.7	55.4	63.9	n.a.	876.1	3 174.5
Sotswana	6.7	1.7	2.5	58.9	50.4	45.6	10.5	12.8	9.0
esotho	2.0	2.6	4.3	15.6	18.8	28.2	13.6	13.6	9.3
1alawi	-1.3	-1.6	5.3	23.9	23.4	26.6	16.8	21.1	40.0
Aauritius	5.0	4.2	4.3	54.6	61.0	63.3	7.7	8.6	6.6
Aozambique	-1.2	0.9	6.1	6.8	12.1	13.7	45.1	46.2	35.0
Vamibia	-1.8	1.3	-0.2	58.6	52.7	55.2	13.0	12.2	8.3
South Africa	-0.9	-1.9	0.6	28.3	22.4	24.5	14.7	12.5	7.8
Swaziland	3.1	0.7	-0.1	70.7	79.8	86.9	14.7	11.1	8.5
anzania, United Rep. of	0.7	-0.2	0.8	10.0	14.0	20.1	30.1	28.9	19.6
ambia (	-1.8	-2.7	-1.1	34.4	34.7	33.1	69.3	122.2	35.1
limbabwe	0.8	-0.3	1.5	21.4	27.9	39.6	13.6	26.5	23.6
ample <sup>b</sup>	-2.9	-2.1	0.6	29.4	25.7	28.5	18.2	72.5	304.9
							(18.2) <sup>b</sup>	(28.7) <sup>b</sup>	(18.0) <sup>b</sup>
than half of the countries in this group (54 per cent). However, the majority of the countries in this group showed better performance in trade (73 per cent) and international reserves (85 per cent).

In examining the links between exchange rate regimes and economic performance, the group of countries that shifted from one regime to another may provide better information than those countries whose regimes remained unchanged over the investigation period. Looking at the group of countries that shifted from soft pegs to independent floats, the shift was not associated with much gain in terms of output growth, while inflation and the current account were worse than in the three categories of "nonshifters". However, this category had the highest proportion of countries with improved performance in trade and international reserves.

Overall, these casual observations reveal no systematic relationship between indicators of economic performance and patterns of exchange rate regime shifts. The transition toward floating regimes was not accompanied by much gain in GDP growth, while inflation and current account performance worsened for the majority of regime shifters. In the case of the CFA-zone countries, the realignment of the CFA exchange rate in 1994 was followed by significant improvements in output growth and trade. Due to the ill-advised delayed adjustment in the exchange rate of the CFA franc, price stability was achieved at the cost of lower output growth and lower trade performance. Much more empirical work is needed to establish empirical regularities about the relationship between economic performance and exchange rate regimes in African countries.

### D. Further issues related to exchange rate regimes

### (i) The exchange rate as a nominal anchor

As African countries move towards liberalization of their exchange rate regimes, they confront some important policy questions. In particular, under a flexible regime the exchange rate no longer plays the role of a nominal anchor of monetary policy. National authorities must then determine a credible alternative nominal anchor. One alternative is to target inflation. This option appears to have worked fairly well in industrialized countries. However, important institutional conditions are necessary for this alternative to work. In particular, successful inflation targeting requires a high degree of *instrument independence* of the central bank;<sup>6</sup> monetary policy must be free from fiscal policy pressures and political intrusion. Moreover, inflation targeting requires a sound information base in forecasting inflation and output. These conditions are typically not met in most African countries. Furthermore, inflation targeting is difficult when the economy is hit frequently by supply shocks. The majority of African economies have experienced frequent supply shocks, which include both domestic shocks (e.g. natural disasters, such as drought) and international shocks (e.g. energy crisis and commodity price shocks). These effects can be hard to disentangle, which makes it difficult to determine whether inflation is the outcome of policy mistakes or the result of purely exogenous shocks, or a combination of these factors.

### (ii) No exchange regime is good for all, all of the time

When the economy is predominantly subject to real/supply shocks, a rigidly fixed exchange regime can be destabilizing as it prevents the normal adjustment of the current and capital accounts to the shocks. A number of scholars support the following prescription: "if shocks are mostly real, float; otherwise fix" (Calvo and Reinhart, 1999; Berg and Borensztein, 2000). In some ways, the experience of the CFA zone lends some support to this view. Failure to adjust the exchange rate as the economies in the zone were hit by exogenous real shocks (e.g. terms of trade shocks, energy crisis) proved to be costly for these economies. However, as Calvo and Reinhart (1999) indicate, in some recent crises, shocks have come through the capital account, thus containing real as well as nominal components. African countries that opt for fixed exchange rate regimes should preserve enough flexibility to respond to shocks in a timely manner by adjusting the official exchange rate.

Many scholars have argued that along the spectrum of exchange rate regimes, between a very hard peg and a freely floating regime, those in the intermediate range (or soft pegs) are not viable beyond the short term (Obstfeld and Rogoff, 1995; Mussa, et al., 2000; Fischer, 2001). For countries that are significantly integrated into the world financial markets, so the argument goes, the only viable option is a flexible (possibly managed) exchange rate regime. However, for African countries that are not integrated into the international financial markets, a hard peg seems to be a sensible option. The recent transition of African countries towards floating exchange rate regimes is puzzling. Except probably for emerging market countries (Egypt, Morocco, Nigeria, and South Africa), African countries do not seem to have the institutional and infrastructural conditions required to benefit from fully flexible exchange rate regimes.

## V. CURRENCY REGIMES, DOLLARIZATION/"EUROIZATION", AND IMPLICATIONS FOR CAPITAL FLOWS

### A. Dollarization/"euroization": the new context

The increasing interest in the topic of currency regimes and dollarization (and, more recently, "euroization") is, to a large extent, motivated by the changing international environment; the newly emerging environment has cast doubts on the adequacy of many of the traditional policy prescriptions with regard to the management of international trade, foreign exchange markets and international capital flows. Here, three of the important new developments that have changed the international context of policy-making in the domain of currency regimes are discussed.

The first change in the global environment is the fact that inflation crises around the world have abated significantly since the early 1990s. With the decline and stabilization of inflation in many countries, the traditional argument for using exchange rate management as a stabilization tool has lost momentum. However, since inflation is still a significant problem for many African countries, exchange rate management should remain an important means of economic stabilization for these countries.

The second development is the recent surge in cross-border capital mobility around the world. This phenomenon has revived the debate over the choice of exchange rate regime. Two views have emerged on this subject. The first view (the bipolar view) is that only very hard pegs and independently flexible exchange rate regimes are viable in a financially integrating world (Fischer, 2001). The second view suggests that countries should simply abandon national currencies and adopt a strong and stable international currency, especially since, in today's global capital markets, it is unwise to peg the exchange rate because it is too costly to defend. Obstfeld and Rogoff (1995: 74) suggest that "for most countries, it is folly to try to recapture the lost innocence of fixed exchange rates". Calvo and Reinhart (1999: 13) echo the proposition by arguing that "the limited effectiveness of capital controls provides the basis for reassessing the relative merits of fixed and flexible exchange rate policies. Dollarization may offer emerging market economies a viable and more market-friendly alternative to capital controls". Below, we discuss the advantages and disadvantages of dollarization.

The third development is the creation of the European Monetary Union (EMU) and the adoption of the euro. The question is whether the creation of the EMU will spark more interest in the strengthening of monetary unions in Africa or the creation of new ones, or even the establishment of a continent-wide African monetary union (AMU).

### B. Advantages and disadvantages of dollarization/"euroization"

### (i) Advantages of dollarization

Proponents of dollarization have suggested a number of advantages that countries may derive from adopting a strong foreign currency. Here we elaborate on four of these (see Berg and Borensztein, 2000 for more details).<sup>7</sup> The first benefit from dollarization is that it shields the national economy from the adverse effects of sharp fluctuations in exchange rates. The second advantage is that it raises international investors' confidence in the economy by lowering the risks arising from currency fluctuations,

and thus stimulates capital inflows. Dollarization also reduces the spread between domestic and international interest rates by lowering domestic interest rates, which stimulates private domestic investment.

However, critiques of dollarization point out that while dollarization eliminates the risk of currency devaluation, it does not eliminate countryspecific or sovereign risk. In fact, it may even increase sovereign risk in countries that are not fully dollarized (Berg and Borensztein, 2000). In the case of African countries, sovereign risk is likely to remain high due to weak economic fundamentals, loose macroeconomic policies and a turbulent political environment. Dollarization or "euroization" cannot be an insurance against fundamental political uncertainty or the adverse effects of bad macroeconomic policies.

The third alleged advantage of dollarization is that it facilitates integration into the world economy, especially by reducing uncertainty and transaction costs associated with the divergence in cross-country exchange rates.

Finally, proponents of dollarization argue that it can serve as an external agent of fiscal and monetary discipline and foster sound financial policies. The adoption of a foreign currency amounts to surrendering the option of monetary financing of government deficits as well as the possibility of using monetary policy for macroeconomic stabilization. However, evidence suggests that currency unions are not an antidote to fiscal indiscipline or political intrusion in the financial system. As shall be discussed further below, the experience of the CFA-zone countries in the 1980s testifies to this point.

### (ii) Disadvantages of dollarization

There are many disadvantages of dollarization, of which four are emphasized here. The first is the loss of a national currency; this is likely to face political resistance because a national currency is a symbol of national sovereignty. Second, dollarization implies a loss of seignorage revenue, that is the resources created from printing interest-free cash in exchange for government securities. The adoption of dollarization or "euroization" implies that all the seignorage revenue accrues to the United States or to the EMU members respectively, which amounts to free credit by the dollarizing countries to the United States or the EMU countries, with the exception of the provision of these currencies through official development assistance (ODA). In principle, it is possible to design a scheme through which the United States or the EMU can share the seignorage revenues with members of the currency zone, but as of today there are no clear guidelines for the design of such a scheme.

The third disadvantage of dollarization is its high degree of irreversibility, or the lack of an "exit option". Unlike other currency arrangements (such as a currency board) where countries can elect to exit whenever they see fit, the costs of exiting from dollarization are rather prohibitive (Berg and Borensztein, 2000). The reintroduction of a national currency is possible, but it is likely to absorb substantial administrative and logistical resources. Most importantly, it is likely that the new currency will be perceived as weaker than the dollar (or the euro), which, among other things, will adversely affect investor sentiment and probably depress capital inflows while fuelling capital outflows.

The fourth disadvantage of dollarization is that the country relinquishes a large part of its autonomy for macroeconomic policy by losing three important policy tools: devaluation as a tool of current account and capital account management, the lender-of-last-resort function of the central bank, and monetary policy as a tool of macroeconomic stabilization. With respect to the lender-of-last-resort function, the inability of national authorities to intervene to protect the financial sector against adverse internal and external shocks is a high price to pay for dollarization. It is possible to argue that the increased presence of highly capitalized foreign banks that is likely to accompany dollarization can serve as an alternative potential rescue mechanism in the event of a liquidity crisis in the domestic banking sector. Another alternative rescue mechanism would be direct intervention of the central bank of the guarantor country (the United States or EMU countries). However, this leaves open the question of whether the penetration of foreign banks is necessarily desirable and whether the United States or EMU countries have the incentives to intervene to rescue troubled financial institutions in the dollarizing/ "euroizing" country.

### C. Currency unions in Africa: opportunities and constraints

In this subsection, we explore three questions related to currency regimes in Africa. First, are currency areas or monetary integration the means towards greater trade integration? One of the potential advantages of currency unions is that they can foster trade among their members. However, evidence from African countries shows that currency unions and regional integration in general have not promoted trade. For example, intrazone trade in the CFA area represented less than 7 per cent of total external trade of CFA countries between 1994 and 2000, down from 9 per cent between 1970 and 1993 (Hadjimichael and Galy, 1997: 30).<sup>8</sup> Low intraregional trade in sub-Saharan Africa is due to a range of structural constraints, including lack of complementarity in production across countries and weak infrastructural linkages. Therefore, the adoption of a common currency does not necessarily increase intraregional trade.

Second, are currency unions a means to fiscal discipline, efficiency and stability of the financial system? In principle, transferring financial and monetary policy to a supranational institution can foster financial stability by reducing political pressure on credit allocation. However, evidence from the CFA zone is not compelling in this regard either. The operating structure of the CFA zone, which delegates monetary and financial policies to two regional central banks, has not insulated the economies from fiscal indiscipline and intrusive manipulation of credit allocation by member governments, especially through lending to State-owned enterprises, regional organizations and government suppliers (Honohan and Lane, 2000). These loans have been characterized by very high default rates. As a result, the banking system was in severe crisis by the mid-1980s. African countries cannot count on successfully "outsourcing" fiscal and monetary policy by simply delegating it to regional monetary organizations. Nor can they expect dollarization or "euroization" to be a substitute for fiscal and financial reform.

Third, can currency unions foster international capital inflows? The creation of a currency union is expected to be accompanied by an expansion of markets, and, possibly, a reduction of country risk, which would increase international capital inflows. One potential negative effect is that with the expansion of the markets, African economies may no longer be "below the radar screen of international speculators" (Honohan and Lane, 2000). This implies a need for efficient management of capital flows to reduce the risk of financial fragility.

### **VI. CAPITAL FLIGHT FROM AFRICA**

### A. Magnitude of the problem in African countries

The problem of capital flight from African countries has attracted much attention in the academic literature (for surveys, see Ajayi and Khan, 2000; Boyce and Ndikumana, 2001; Ndikumana and Boyce, 2002). Existing studies show that African countries have experienced massive capital flight over time. Let us present estimates of capital flight for a sample of 30 African countries for the period 1970–1996, using the methodology developed by Boyce and Ndikumana (2001) who compute capital flight as follows:

$$KF_{it} = \Delta DEBTADJ_{it} + DFI_{it} - (CA_{it} + \Delta RES_{it}) + MISINV_{it},$$

where  $\Delta DEBTADJ$  is the change in debt adjusted for cross-currency exchange rate fluctuations, taking into account the fact that a country's debt is denominated in various currencies; *DFI* is direct foreign investment, *CA* is the current account balance,  $\Delta RES$  is the change in the stock of international reserves, and *MISINV* is net trade misinvoicing. Two modifications are made to the value obtained with the above equation. First nominal values of capital flight are deflated to real values using the United States producer price index (base 1996 = 100). Second, the accumulated stock of capital flight is computed by imputing interest earnings to past capital flight using the United States Treasury Bill rate. Table 10 presents capital flight estimates for 30 sub-Saharan African countries. The table contains estimates of total real capital flight from 1970 to 1996 in constant 1996 US dollars (column II), the stock of accumulated capital flight including interest earnings on past capital flight (columns III–V), and calculated net external assets (column VI) obtained by subtracting the stock of external debt in 1996 from the stock of accumulated capital flight with imputed interest earnings.

The results indicate that for the 30 African countries, real capital flight over the 26-year period amounted to about \$182 billion. Including interest earnings, the accumulated stock of capital flight was \$272 billion for the period. Total capital flight was higher if we consider only severely indebted low-income countries (SILIC). For this group, the estimates were \$189.7 billion and \$281 billion for total real capital flight and the accumulated stock of capital flight respectively. The sample as a whole was a "net creditor to the world" in the sense that private assets held abroad, as measured by capital flight, exceeded total liabilities, as measured by the stock of debt. Estimated net external assets amounted to \$81.7 billion for the entire sample of 30 African countries and \$102.7 billion for the SILIC group.

The magnitude of capital flight varied significantly across African countries. Angola, Cameroon, Côte d'Ivoire, the Democratic Republic of Congo and Nigeria had particularly high levels of capital flight, with as much as \$86.8 billion for Nigeria. The capital-flight/GDP ratio exceeded 200 per cent for nine countries in the sample. The data also indicate a high per capita burden of capital flight, amounting to several multiples of per capita income (comparing columns I and V in table 10).

### Table 10

### INDICATORS OF CAPITAL FLIGHT FROM 30 SUB-SAHARAN AFRICAN COUNTRIES, 1970–1996

	GDP/cap 1996	ita Real capital fligl	nt c	Cumulative apital stoc	e k	Net external assets ª
	(1)	(11)	(111)	(IV)	(V)	(VI)
Country		(Million 1996 \$)	Stock (Mill. 1996 \$)	Per cent of GDP	Per capita \$	5
Angola	673	17 032.5	20 405.0	267.8	1 803	9 179.9
Benin <sup>b</sup>	392	-3 457.4	-6 003.8	-271.9	-1 067	-7 598.1
Burkina Faso	201	1 265.5	1 896.6	96.5	194	700.4
Burundi	143	818.9	980.9	108.9	156	-146.0
Cameroon	672	13 099.4	16 906.0	185.6	1 248	7 364.4
Cent. African Republic	281	250.2	459.0	50.8	143	-482.1
Congo, Dem. Rep. of	130	10 099.4	19 199.9	327.1	424	6 373.5
Congo	959	459.2	1 254.0	49.6	476	-3 986.6
Côte d'Ivoire	770	23 371.0	34 745.5	324.7	2 502	15 221.9
Ethiopia	103	5 522.8	8 017.9	133.4	138	-2 060.7
Gabon <sup>®</sup>	5 139	2 988.7	5 028.1	87.0	4 469	717.7
Ghana	395	407.3	289.3	4.2	17	-6 152.9
Guinea	586	342.8	434.2	11.0	64	-2 806.1
Kenya	330	815.1	2 472.6	26.8	89	-4 458.4
Madagascar	291	1 649.0	1 577.5	39.5	115	-2 568.3
Malawi	132	705.1	1 174.8	93.8	124	-971.3
Mali	266	-1 203.6	-1 527.2	-57.5	-153	-4 533.2
Mauritania	469	1 130.8	1 830.0	167.4	786	-572.2
Mauritius <sup><i>b</i></sup>	3 792	-267.8	465.9	10.8	411	-1 351.7
Mozambique	175	5 311.3	6 206.9	218.4	382	-1 359.4
Niger	210	-3 153.1	-4 768.9	-247.7	-521	-6 392.1
Nigeria	308	86 761.9	129 661.0	367.3	1 1 3 2	98 254.4
Rwanda	209	2 115.9	3 513.9	249.9	522	2 470.8
Senegal <sup>b</sup>	544	-7 278.1	-9 998.2	-214.9	-1 168	-13 661.1
Sevchelles <sup>b</sup>	6 6 3 2	566.5	1 032.3	203.4	13 487	884.3
Sierra Leone	196	1 472.8	2 277.8	257.1	505	1 072.7
Sudan	265	6 982.7	11 613.7	161.1	428	-5 358.3
Tanzania, U. Rep. of	191	1 699.1	6 203.4	106.3	203	-1 158.4
Uganda	306	2 154.9	3 316.1	54.8	168	-358.3
Zambia	461	10 623.5	13 131.2	354.9	1 637	5 491.8
Sample	311	182 222.3	271 795.4	172.8	538	81 756.6
SILIC only <sup>c</sup>	286	189 670.4	281 271.1	201.1	576	102 765.5

**Source:** For severely indebted low-income countries (SILIC), Boyce and Ndikumana (2001), including revision of the data for the Democratic Republic of the Congo for 1990–1996. For other countries, the author's computations using the methodology developed in Boyce and Ndikumana (2001). The sample period varies by country depending on data availability.

a Net external assets = accumulated capital flight (with interest earning) minus stock of debt.

**b** These are not SILIC (according to the World Bank's classification as of December 1998).

c Prior to 1998, Kenya was classified as a SILIC. In this table, it is included in the SILIC sample statistics for purposes of comparison with earlier studies on capital flight from SILIC that included Kenya in this group (Ajayi 1997; Boyce and Ndikumana 2001).

# B. Conduits, causes and macroeconomic consequences of capital flight

There are various conduits through which private actors can channel capital abroad illegally. Capital flight occurs through illicit bank transfers, embezzlement of exports of minerals and other natural resources, and misinvoicing of exports and imports. The amounts are notoriously high for such countries as Nigeria with \$23.6 billion, the Democratic Republic of the Congo with \$7.4 billion, and Côte d'Ivoire with \$6.7 billion (Boyce and Ndikumana, 2002).

Some studies have investigated the causes or determinants of capital flight using both cross-country data and country case studies. In examining the determinants of capital flight from 30 sub-Saharan African countries, Ndikumana and Boyce (2002) have found that external borrowing is positively and significantly related to capital flight; this suggests that to a large extent capital flight is *debt-fuelled*. Their results also indicate that capital flight exhibits a high degree of persistence in the sense that past capital flight is correlated with current and future capital flight. Furthermore, the growth rate of per capita GDP and an index of voice and accountability are negatively related to capital flight. These findings are consistent with the results from studies on smaller samples and from country case studies. For example Lensink, Hermes and Murinde (2000) found that capital flight was higher in countries with high corruption, bad governance and high political instability. Olopoenia (2000) found that capital flight from Uganda was higher during the periods of political and economic instability in the 1970s and the first half of the 1980s. Nyoni (2000) found that the black market premium, which is an indicator of market distortions, significantly and positively influenced the level of capital flight. And Lensink, Hermes, and Murinde (1998) found that capital flight declined following financial liberalization, indicating that reducing market distortions can contribute to reducing capital flight.

Compared to other developing regions, sub-Saharan Africa has experienced a relatively higher level of capital flight. Collier, Hoeffler and Pattillo (1999) found that Africa has the highest proportion of private capital held abroad (as a percentage of total private assets or GDP). Using a portfolio choice approach, these authors found econometric results suggesting that high capital flight from Africa was due, among other things, to overvalued exchange rates, high country-specific risk and high indebtedness.

Capital flight implies a high opportunity cost for the economy and a heavy burden on the population. A high level of capital flight implies that scarce resources are used to channel private assets abroad instead of financing imports of investment equipment or consumption goods. It also puts pressure on the exchange rate by increasing the demand for foreign currency to funnel wealth abroad. Furthermore, it constitutes a drain on national resources, and thus reduces the current and future growth potential of the country. It contributes to increasing macroeconomic uncertainty, which depresses lending and investment. Market participants may interpret a high level of capital flight as a signal of loss of control of economic policy by national authorities. Through herd effects, capital flight can lead to more capital flight, as agents seek to minimize expected portfolio losses in the face of an uncertain future political and economic environment.

### C. Capital account liberalization and capital flight

The net effects of capital account liberalization on capital flight are unpredictable. It can curtail capital flight by removing market distortions, but only if it is part of a broader reform agenda aimed at fostering an environment that is conducive to investment.

Three issues are worth emphasizing with regard to capital account liberalization. First, it has adverse effects when financial markets are repressed. If domestic interest rates are significantly lower than foreign interest rates due to financial repression, then profit-maximizing savers prefer to hold their wealth in foreign assets. Substantially repressed interest rates can lead to disintermediation, as savings are channelled abroad and banks refuse to lend at negative real interest rates. The implication of this highly stylized argument is that African countries need to coordinate their capital account liberalization programmes with financial reforms to eliminate interest rate repression. There is some evidence that financial liberalization can in fact play an important role in curtailing capital flight (Lensink, Hermes and Murinde, 1998).

Second, the liberalization of capital account operations in the context of overvalued exchange rates can cause greater capital flight and can have detrimental effects on the current account. An overvalued exchange rate induces agents to underinvoice exports while overinvoicing imports, which increases capital flight. African countries need to coordinate capital account liberalization with exchange regime liberalization to avoid costly market distortions.

Third, political instability causes capital flight as agents seek to minimize the risk of expropriation and future portfolio losses due to political crisis. Current account liberalization or any other economic reform would have little effect on reducing capital flight in the presence of high political uncertainty. Therefore economic liberalization must go hand in hand with institutional reforms aimed at fostering transparent and accountable governance.

### **VII. SUMMARY AND POLICY IMPLICATIONS**

### A. Attracting and monitoring capital flows

African countries need to design strategies to attract foreign private capital to compensate for the recent decline in official lending. The evidence suggests that private capital flows are responsive to the macroeconomic policy environment. The focus should be on reforms aimed at improving fiscal discipline, controlling inflation and creating an investment-friendly environment. Indeed countries that have made progress in economic reform have also experienced an increase in capital inflows (e.g. Mozambique, the United Republic of Tanzania and Uganda). Gauging the effects of capital flows on macroeconomic performance and designing appropriate policy responses requires good information on the nature, magnitude, sectoral distribution and variability of capital flows. Unfortunately such information is still scarce in African countries. African governments need to invest financial and human resources to establish mechanisms for systematic monitoring of the inflows and outflows of capital. This could include the creation or strengthening of specialized divisions within central banks and national bureaus of statistics, whose mission would be to compile and disseminate information on capital movements.

### B. Liberalization and openness: a cautionary note

Two points are worth emphasizing with regard to the recent moves towards greater flexibility of exchange rates and openness of capital account regimes in African countries. First, liberalization of current and capital accounts will enhance economic performance only if it is supported by appropriate macroeconomic and sectoral policies, especially disciplined fiscal and monetary policies committed to price stability. Second, to avoid potential adverse effects of capital account liberalization, African countries need to undertake the necessary steps to reduce market distortions.

### C. Strengthening financial markets

Underdeveloped financial markets constitute an enormous constraint on private capital inflows into Africa, especially because of the lack of opportunities for portfolio diversification. At the same time, with underdeveloped financial markets and a weak regulatory infrastructure, African countries are ill-equipped to absorb large and sudden surges in capital inflows. Among other things, these countries need to pursue reforms aimed at enforcing creditor and investor rights and improving the efficiency of the clearing system. These measures would both facilitate financial development and encourage capital inflows. The role of stock markets in attracting private capital to Africa is a topic that deserves careful investigation. The evidence shows that countries such as Kenya and Zimbabwe have failed to attract significant capital inflows despite the fact that they have long-established stock markets. Thus, while stock markets can contribute to attracting private capital, they are not a sufficient condition. African countries need to pursue policies aimed at facilitating financial intermediation in general, which will promote the banking sector as well as equity markets. A solid banking system is essential to the development of the stock market because stock market development and banking development are complementary (Levine and Zervos, 1998).

Given the small size of national stock markets in Africa (with the exception of South Africa), they are not yet in a position to attract sizeable foreign capital. And the creation of national stock markets involves high costs (infrastructure and administrative costs) that small economies cannot afford in the short run. The development of regional stock exchanges could contribute to alleviating the small-size constraint. Operating rules (such as accounting rules and prudential regulation rules) need to be coordinated across countries to facilitate cross-border listings and increase the benefit of regional integration.

### APPENDIX

## CAPITAL ACCOUNTS AND FOREIGN EXCHANGE REGIMES: RECENT DEVELOPMENTS IN SOME AFRICAN COUNTRIES

### 1. Egypt

### a. Capital flows

Egypt experienced a surge in capital inflows during the 1990s, motivated primarily by increased confidence among foreign investors in the Egyptian economy following economic reform. Noteworthy developments included successful fiscal adjustment and the curbing of inflation under a relatively liberal capital account regime. However, the surge in capital inflows has raised some concerns regarding their impact on the stability and performance of the economy, especially because high capital inflows cause pressure on the exchange rate, which undermines export performance.

### b. Exchange rate regime

The exchange rate regime in Egypt underwent significant shifts in the early 1990s. Starting in 1969, Egypt instituted a system of multiple exchange rates and maintained an "official" parallel market to attract workers' remittances and encourage tourism. The exchange rate policies pursued in the 1970s and 1980s resulted in a substantial appreciation of the Egyptian pound and undermined export competitiveness. As part of the reform programme, the Government established a free market in foreign exchange for current account transactions in 1991, and eased capital account restrictions further in 1992. The real exchange rate continued to appreciate after 1991, partly as a result of nominal appreciation and partly as a result of the differential in inflation between Egypt and its trading partners (Subramaniam and Handy, 1997; Mongardini, 1998). There is no evidence to suggest that the real appreciation reflected productivity gains. The country did not experience any improvement in trade performance. In fact non-oil exports declined at the end of the decade. The Egyptian pound may continue to appreciate in the future if capital inflows remain at their present levels (keeping reserves high). Debt forgiveness and debt rescheduling may further improve the external reserves position, thus contributing to further real exchange rate appreciation.

### c. The financial system

The Egyptian stock market is one of the oldest in the world. However, the stock exchange was largely dormant for over four decades following the policy shifts of the 1950s with the nationalization of industry and the adoption of central planning (Mecagni and Sourial, 1999). The 1990s saw a marked expansion of the stock market, with an increase in the number of listed companies, market capitalization and liquidity. Much improvement is still needed, however, to provide an environment that allows the capital market to channel and allocate resources efficiently, especially by enforcing information disclosure by firms and by strengthening the legal environment to protect creditor and investor rights.

### 2. Kenya

### a. Symptoms of a crisis in the late 1980s

Towards the end of the 1980s (especially starting in 1987), the Kenyan economy showed signs of a pending crisis: real GDP slowed down from an already weak position, the budget deficit was high (about 6 per cent of GDP in 1987), and inflation rose from 4.8 per cent in 1986 to 7.6 per cent in 1987 and continued to climb in the subsequent years. At the same time, the policy stance was characterized by considerable regulation of foreign exchange markets, trade and the financial system (including differential credit ceilings, interest rate controls and political intrusion in credit allocation). By the end of the decade, it was clear that in the absence of major reforms, economic collapse would be inevitable. Here, only policy reforms in the areas of foreign exchange markets, and current and capital accounts are summarized (see Ariyoshi et al., 2000 and Krichene, 1998 for further details on recent policy reforms in Kenya).

# b. Important policy reforms in exchange rates, the current account and capital account

- In 1989, Kenya began the process of liberalization of the financial system. Interest rate ceilings were gradually removed and interest rates fully liberalized by 1991.
- In 1991, liberalization of the current and capital accounts was initiated with the introduction of "foreign exchange bearer certificates of deposits", which could be used in current and capital account transactions. These certificates, available to residents and non-residents, could be freely traded in the secondary market and redeemed at the central bank at face value.
- Since 1991, some companies have been allowed to hold foreigncurrency-denominated bank accounts abroad and domestically, and banks have been allowed to conduct transactions in foreign exchange directly. Forward foreign exchange contracts have been allowed at market rates, albeit with some restrictions on the amount and the term.
- In the fourth quarter of 1993, the exchange rate regime shifted from a currency composite peg to an independently floating regime.
- In 1994, the Kenyan shilling became fully convertible.
- In 1995, all remaining exchange controls were removed. Also removed were restrictions on the purchase of shares and government securities by non-residents.

### c. Crisis amidst (speedy) liberalization

Despite the liberalization efforts, the crisis that had begun at the end of the 1980s continued throughout the 1990s. Inflation rose from 19.8 per cent in 1991 to 45 per cent in 1993. It started declining in 1994 and dropped to single-digit levels again later in the decade (5.8 per cent in 1998).

Due to the continued deterioration of the economic situation, the Government moved in, tightening both monetary and fiscal policy.

However, the tight policy stance may have contributed to suffocating an already weak economy by undermining domestic demand. Liberalization in Kenya did not achieve the intended objectives of stabilizing the economy and boosting production. An IMF study concluded that "rapid and wide-ranging liberalization in the context of continued major macroeconomic imbalances may have increased the country's vulnerability to capital flows by providing legal channels for capital flight (the latter reflecting both a deterioration in private sector confidence and corruption)" (Ariyoshi et al., 2000: 67).

### 3. Malawi

### a. Exchange rate and capital account regimes

Until May 2000, Malawi had actively managed its foreign exchange markets, which resulted in a large depreciation of the kwacha as well as severe distortions of economic incentives (IMF, 2001). The country data indicate large depreciations of the kwacha, especially in 1994, 1998 (by 40 per cent), and 2000 (by another 40 per cent). Even during periods of relative stability of the exchange rate (between 1994 and 1998), high inflation rates led to substantial real depreciation of the currency. May 2000 marked a major policy shift, when the central bank stopped quoting an explicit exchange rate and reduced substantially its intervention for determining the exchange rate, thus making the exchange rate fully flexible. Since 1995, Malawi has moved towards liberalization of capital account transactions. For example, non-residents are allowed to repatriate investment proceeds without restriction (registration is required only for statistical purposes).

### b. Implications of membership in regional arrangements

Malawi is a member of various regional bodies, including SADC, the Common Market for Eastern and Southern Africa (COMESA), and the Cross-Border Initiative in Eastern and Southern Africa (CBI) (Fajgenbaum et al., 1999). It is one of the best performing participants in CBI and COMESA with respect to trade liberalization. One important concern is that its membership in various regional bodies could produce distorted economic incentives and create administrative problems when obligations under the various bodies are inconsistent. A structural constraint for Malawi is its weak productive capacity, which limits the gains from multilateral arrangements. Another important constraint is the poor development of its financial system. The banking sector is heavily concentrated, with the two largest banks accounting for 90 per cent of deposits. These banks lend to a limited number of companies, many of which own large shares of the banks' capital. This promotes insider lending, which results in inefficient allocation of credit.

### 4. Nigeria

### a. Exchange rate regime

Over the years, Nigeria has applied a variety of foreign exchange arrangements, including fixed official exchange rates, market-determined exchange rates, dual systems of fixed official rates, and rates based on inter-bank exchange (IMF, 1998). Before 1986 (the beginning of structural adjustment), the official rate was fixed without any link to the market rate or inflation, resulting in a high premium. After 1986, the Government pursued a *de facto* indexation of the official exchange rate by adjusting the official exchange rate in response to changes in the parallel market to prevent the premium from being too large. The evidence shows that the official and parallel exchange rates moved together after 1986 (Azam, 1999).

With the "abandonment" of the adjustment programme in 1994, the Nigerian Government reinstated – among other controls – foreign exchange controls with an artificially fixed exchange rate. However, by the end of 1994 it was clear that attempts to stabilize the naira by administrative means had failed. In 1995, the Government did a turnaround by resuming the economic liberalization programme. Since then, it has pursued policies aimed at allowing the exchange rates to reflect market conditions, while using monetary policy to contain pressures on foreign exchange rate (fixed at 22 naira per dollar since 1993), and the Central Bank of Nigeria (CBN)

gradually shifted its intervention from weekly allocation of foreign exchange through the Autonomous Foreign Exchange Market (AFEM) to exclusive reliance on continuous buying and selling in the Interbank Foreign Exchange Market (IFEM). This has eliminated the multiple exchange rates arising from the spread between the rates in the two markets.

### b. Liberalization of the capital account

Since 1995, Nigeria has embarked on a process of liberalization of controls of capital movements. The following are some of the recent measures intended to encourage foreign capital inflows:

- The Foreign Exchange Monitoring and Miscellaneous Provisions Decree of July 1995 (retroactively effective as of January 1995) permits individuals and businesses to invest in any firm through an accredited dealer in the AFEM.
- There is guaranteed transferability in convertible currency for dividends, profits, debt service and proceeds from whole or partial sale or liquidation of an initial investment.
- Nationals are allowed to invest in securities abroad, provided proper documentation is used. However, nationals are not permitted to simply make deposits abroad, as officials are concerned that this may be a conduit for capital flight.
- Earlier "indigenization" measures that required majority Nigerian ownership of foreign enterprises have been abolished. There are no limits to foreigners' participation in any sector of the economy, except for crude oil and gas.

The authorities still face two interrelated and serious issues, namely a high debt burden and capital flight. There is evidence of progress in economic reforms, which will contribute to improving the overall macroeconomic environment. In particular, the country has embarked on a comprehensive programme of reform of the financial system aimed at strengthening the regulatory and supervisory framework (e.g. more independence for the CBN) and improving the stability of the banking sector (through enforcement of capital adequacy rules and systematic monitoring of banks). These measures, coupled with improvements in political stability, are likely to improve investor confidence, which could attract more capital into the country.

### 5. South Africa

### a. Turbulence in financial markets and foreign exchange markets

The South African foreign exchange market and the financial system suffered the effects of the Asian financial crisis in mid-1998. Deterioration in investor sentiment caused substantial capital outflows and a depreciation of the rand. The authorities responded by tightening monetary policy and by intervening in the foreign exchange market (IMF, 2000b). The financial turbulence receded at the end of 1998, and the South African Reserve Bank (SARB) allowed interest rates to decline. Low inflation expectations and prudent fiscal policy contributed to rejuvenating market confidence, resulting in a substantial return of international capital.

### b. Liberalization of the capital account

Since 1994, the South African Government has been committed to progressively abolishing controls on capital account transactions. Liberalization has covered transactions by non-residents and residents, banks and non-financial firms, private and public enterprises, as well as private individuals. Some of the important changes since 1995 are the following:

- Dismantling of restrictions on capital account and foreign exchange transactions by residents and non-residents. Non-residents are now allowed to purchase shares, bonds and other assets, and to repatriate dividends, interest receipts, profits as well as initial investment capital with little or no restrictions.
- Restrictions on exchange transactions by residents have been substantially relaxed. While capital and current account transactions by

residents are subject to quantitative restrictions, the quantitative caps have been progressively raised, and some have been abolished.

- However, the authorities maintain prudential regulation on foreign exchange by authorized dealers, with no quantitative limits.
- Investment abroad by residents is allowed within some limits. For corporations, the limit is 250 million rand for investments within the SADC region (no limits for Namibia, Lesotho and Swaziland, which are members of the Common Monetary Area) and 50 million rand elsewhere. Institutional investors are allowed to invest up to 15 per cent of their assets abroad. Private individuals can invest up to 750,000 rand abroad.

### c. Foreign exchange policy: the "forward book"

The SARB has intervened in the foreign exchange market since the 1960s. The Bank has often maintained a large net open forward position (NOFP) whereby the Bank's forward US dollar liabilities exceed its forward dollar assets. The official objective of this policy is to absorb speculative pressures on the rand, preventing sharp depreciations and mitigating increases in the interest rate. The objective is not to defend a predetermined value of the rand but to ease (market-driven) adjustment of the exchange rate.

The experience of the 1990s suggests that the effectiveness of the SARB's intervention in the foreign exchange market in dampening pressures on the exchange rate was minimal and short-lived at best. In contrast, the evidence tends to support the view that high NOFPs lead to higher risk-premiums on investments in South Africa, as the market is doubtful about the ability of the SARB to sustain a large uncovered forward book.

### 6. Uganda

### a. Exchange rate regime

The Ugandan Government is committed to moving towards liberal foreign exchange and trade regimes. In particular, it is committed to not resisting fluctuations in the exchange rate due to changes in economic fundamentals, and to supporting liberalization of the foreign exchange regime with appropriate fiscal and monetary policies. Recently the Ugandan shilling has been relatively more stable than it was in the 1980s and early 1990s, and compared to neighbouring countries (Krichene, 1998).

### b. Promoting a capital-friendly environment

The Ugandan Government has been noted for its commitment to pursuing macroeconomic policy reforms (especially fiscal and monetary policies). This will allow it to establish policy credibility and to achieve macroeconomic stability, which will help to attract new private foreign capital. The Government has also pursued policies aimed at strengthening the financial system, including privatization of State-owned banks, enhancing banking supervision and regulation (including granting increased autonomy to the central bank), restructuring and recapitalization of weak banks, and the establishment of a capital market infrastructure. Evidence of credible commitment to economic reform and improvements in the macroeconomic environment will increase investor confidence and stimulate capital inflows.

### 7. The CFA zone

### a. Origins

The CFA zone is the outcome of the political and economic relations between France and its former West and Central African colonies. In the 1930s and 1940s, France established currencies in its colonies that were pegged to the French franc (FF). At the end of the second world war, these currencies were consolidated into the *Franc des Colonies Françaises*  d'Afrique (or CFA franc). Until the end of colonization, the currency was issued by the *Caisse Centrale de la France d'Outre Mer*. After independence, the two regional central banks of the CFA zone, the *Banque Centrale des Etats de l'Afrique de l'Ouest* (BCEAO) and the *Banque des Etats de l'Afrique Centrale* (BEAC), took over issuance of the CFA franc.

The CFA zone comprises 14 countries, including 12 former French colonies and 2 new member: Equatorial Guinea (since 1985) and Guinea-Bissau (since 1997). The zone comprises two regions: eight West African States (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo) and six Central African States (Cameroon, the Central African Republic, Chad, Congo, Equatorial Guinea, and Gabon). The first group of countries belongs to the West African Monetary Union (WAMU) and the second belongs to the Central African Monetary Area (CAMA).

### b. Exchange rate and monetary arrangements

The two regional central banks operate independently and issue two separate CFA currencies: the *franc de la Communauté Financière de l'Afrique* and the *franc de la Coopération Financière Africaine*. But since the two currencies have the same parity to the FF, they are equivalent, for all practical purposes, and the zone is in fact a common currency area. Any decision to change the parity of the currencies requires the unanimous support of all member States of the entire zone.

The parity of the CFA franc to the FF was established in October 1948 at 0.5 CFA francs per FF. However, in 1968 the parity was adjusted following the introduction of a new FF equivalent to 100 of the old FF. The value of the CFA franc relative to the FF did not change, but its absolute value was raised to 50 CFA francs per FF. Following the continued deterioration of economic conditions in the 1980s and early 1990s, the CFA franc, which had been overvalued for years, was finally devaluated by 50 per cent in February 1994.

Today, the CFA franc is fully convertible and there is free capital mobility between the two regions and France. Full convertibility of the CFA franc is guaranteed by the French Treasury, rather than the central bank of France. Therefore the arrangement is of a budgetary rather than monetary nature. This feature facilitated the shift of the parity from the FF to the euro when the EMU was established, as it did not require the approval of other members of the EMU. This shift has left the operating structures of the CFA zone and the relationships between the group and France fundamentally unchanged. The current fixed rate is 100 CFAF per 0.8385 euro. (For further details on the CFA zone and the implications of the EMU see, among others, Hadjimichael and Galy, 1997, and Honohan and Lane, 2000).

Under the fixed exchange regime, zone member countries have been able to maintain inflation rates that are lower than those of other comparable sub-Saharan African countries. However price stability has been achieved at significant costs. The inability to adjust the exchange rate has resulted in higher sensitivity of economic growth to real shocks, especially termsof-trade fluctuations. Most observers conclude that CFA zone countries would have been better off having flexibility to use exchange rate adjustments in the presence of external shocks (Savvides, 1996).

		IN SOME	AFRICAN COUNT	<b>FRIES AS OF 1999</b>		
	Controls (	on FDI	Barkshowma	Limits on open foreign evolution	Resident ac	counts
Country	Inward FDI	Outward FDI	abroad abroad	position	Held domestically	Held abroad
Angola	Effective May 1999: - minimum of \$60,000 for FDI - up to \$25,000: central bank clearance required - above \$25,000: government approval required	Citizens allowed to invest abroad	Allowed	Daily open position up to \$500,000 for banks; \$150,000 for foreign exchange bureaus.	Deposits allowed without declaring source of funds	Clearance needed for enterprises; no approval needed for individuals
Benin	Reporting required only for statistical purposes	Subject to approval; maximum of 75% may be financed by foreign loans.	Authorized intermediaries may borrow freely abroad	No prudential ratios	Subject to prior authorization by MOF	Allowed with prior authorization by MOF and approval of the BCEAO
Botswana	n.a.	No limits	n.a.	Overall limit of 30% of unimpaired bank's capital	No limits on amounts	No restrictions
Comoros	Controlled	Subject to approval on underlying trans- actions	Controlled	п.а.	Allowed, approval required	Allowed, approval required
Congo, Dem. Rep.	Subject to license from central bank	Subject to license from central bank	Controlled	Ceiling for each bank authorized by central bank	In authorized banks, no approval by central bank	Allowed for public and semi-public enterprises, subject to central bank's approval

Table A.1

CONTROLS ON FOREIGN EXCHANGE AND CAPITAL ACCOUNT TRANSACTIONS

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		counts	Held abroad	Allowed	Not allowed	Allowed with prior approval	Permitted with prior approval	
Table A.1 (continued) N EXCHANGE AND CAPITAL ACCOUNT TRANSACTION ME AFRICAN COUNTRIES AS OF 1999	TTRANSACTIONS	Resident acc	Held domestically	Allowed	Allowed for exporters with central bank's approval	Not allowed	Allowed	
	CAPITAL ACCOUN <sup>-</sup> FRIES AS OF 1999	Limits on open	roreign excnange position	Total foreign assets to total foreign liabilities not to exceed 105%	Maximum 15% of a bank's capital at end of business day on each Friday	л.а.	Allowed based on volume of foreign exchange transactions by banks, subject to periodic review	
	EXCHANGE AND ( E AFRICAN COUN'		banks borrowing abroad	п.а.	Subject to central bank's authorization	n.a.	Allowed with prior notification of the central bank	
	LS ON FOREIGN IN SOM	n FDI	Outward FDI	n.a.	n.a.	Must be declared at MOFBP	Approval on the basis of merit t	
CONTROL	CONTRO	Controls c	Inward FDI	Non-bank foreign exchange dealers must be entirely Egyptian-owned	Foreigners can hold up to 100% of shares in any ventures, exclud. banking, insurance, and transport: Investment restricted in some sectors; tax incentives for FDI	Minimum national shareholding of 10% of capital	Minimum amounts of: - \$10,000 if joint venture is with a Ghanaian partner 550,000 when wholly foreign-owned - \$300,000 if employs a least 10 Ghanaians and wholly or partly foreign-owned	
			Country	Egypt	Ethiopia	Gabon	Ghana	

Table A.1 (continued)

ICN EVCHANCE AND CAPITAL ACCOUNT TRANSACTIONS

.../...

Table A.1 (continued)

# CONTROLS ON FOREIGN EXCHANGE AND CAPITAL ACCOUNT TRANSACTIONS IN SOME AFRICAN COUNTRIES AS OF 1999

	Controls o	n FDI		Limits on open	Resident ac	counts
Country	Inward FDI	Outward FDI	banks borrowing abroad	roreign excnange position	Held domestically	Held abroad
South Africa	ਲ. ਦ	Limits for companies: R250 million within SADC (no limit for CAM countries), R50 million elsewhere; R750,000 for individuals	Prior approval for medium- and long- term borrowing	Maximum of 15% of net qualifying capital and reserves	Limited to R50,000 for individuals; the max. allowed FDI of R750,000 may be held in domestic accounts	Merit-based approval; max. R750,000; individuals may retain foreign-earned income abroad
Tanzania, United Rep. of	Approval required; some areas restricted to public sectors, some to Tanzanian citizens	Subject to approval by central bank	Borrowing regulated, but banks permitted to operate credit lines with correspondents	Maximum 20% of core capital	Allowed	For individuals no restrictions on money acquired abroad; for banks, no restrictions on operations with correspondents
Tunisia	Free in most sectors; approval required in some service sectors	Central bank's approval required for transfers of capital: "free" (within limits transfer of funds by ex- porters to cover installation maintenance and operatin costs of subsidiaries	Free up to D10 million ;) n, 1g	Global limit of 20% of bank's net equity capital in all currencies (maximum of 10% in each currency)	Allowed; subject to regulations	Subject to approval for individuals; free for resident banks
Uganda	No controls	No controls	n.a.	Maximum 20% of core capital	Allowed	Allowed
						/

	CONTRO	LS ON FOREIGN I IN SOME	EXCHANGE AND C E AFRICAN COUNT	APITAL ACCOUNI RIES AS OF 1999	F TRANSACTIONS	
	Controls (	on FDI		Limits on open	Resident ac	scounts
Country	Inward FDI	Outward FDI	Banks borrowing abroad	roreign excnange position	Held domestically	Held abroad
Zambia	No controls	No controls	No controls (reporting for statistical purposes)	n.a.	Allowed	Allowed
Zimbabwe	Approval by ZIC; max. foreign-ownership; up to100% in "priority sectors" (manufacturing, mining, hotels), 70% in specialized services; 35% in partnership with nationals in "reserve sectors"	ë L	Subject to exchange controls	For authorized dealers, maximum of US\$2 million or 10% of capital	Allowed	Allowed, subject to prior approval

Table A.1 (concluded)

Source: IMF (2000b). Note: MOF = Ministry of Finance; BCEAO = Banque Centrale des Etats de l'Afrique de l'Ouest (Central Bank of West African States); CMA = Common Monetary Area (comprising Lesotho, Namibia, South Africa, Swaziland); SADC = Southern African Development Community; ZIC = Zimbabwe Investment Centre.

### Table A.2

### EXCHANGE RATE REGIMES IN 1991 AND 1999

(Grouped by the exchange rate regimes in 1991)

Country	Regime 1991	Category 1991	Regime 1999	Category 1999	Currency peg 1999
Benin	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Burkina Faso	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Cameroon	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Central African					
Republic	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Chad	NS/CBA	Hard neg	NS/CBA	Hard neg	French franc
Congo	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Côte d'Ivoire	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Diibouti		Hard pog		Hard pog	French franc
Equatorial Cuinco	NG/CDA	Lard peg		Llard peg	French frenc
Equatorial Guiriea	NS/CBA	Hard peg	NS/CBA	Hard peg	
Gabon	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Guinea-Bissau	CP	Soft peg	NS/CBA	Hard peg	French franc
Mali	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Niger	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Senegal	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Тодо	NS/CBA	Hard peg	NS/CBA	Hard peg	French franc
Botswana	FP	Soft neg	FP	Soft neg	Basket <sup>a</sup>
Cane Verde	FD	Soft peg	FD	Soft peg	Escudo
Cape verue	ED	Soft pog	ED	Soft peg	Eronch franc
Comoros		Soft peg		Soft peg	
Egypt		Solt peg		Solt peg	US\$ Dend
Lesotno	FP	Soft peg	FP	Soft peg	Rand
Libyan Arab		o <i>"</i>		o <i>"</i>	
Jamahiriya	нв	Soft peg	нв	Soft peg	SDR
Morocco	FP	Soft peg	FP	Soft peg	Basket"
Namibia	NS/CBA	Hard peg	FP	Soft peg	Rand
Seychelles	FP	Soft peg	FP	Soft peg	Basket <sup>c</sup>
Swaziland	FP	Soft peg	FP	Soft peg	Rand
Tunisia	CP	Soft peg	CP	Soft peg	CP
Zimbabwe	FP	Soft peg	FP	Soft peg	US\$
Algeria	FP	Soft peg	MF	Independent float	MF
Angola	FP	Soft peg	IF	Independent float	IF
Burundi	FP	Soft peg	MF	Independent float	MF
Congo, Dem, Rep. of	IF	Independent float	IF	Independent float	IF
Eritrea			IF	Independent float	IF
Ethiopia	FP	Soft peg	MF	Independent float	MF
Gambia			IF	Independent float	IF

# Table A.2 (concluded)EXCHANGE RATE REGIMES IN 1991 AND 1999

(Grouped by the exchange rate regimes in 1991)

Country	Regime 1991	Category 1991	Regime 1999	Category 1999	Currency peg 1999
Ghana	IF	Independent float	IF	Independent float	IF
Guinea	MF	Independent float	IF	Independent float	IF
Kenya	FP	Soft peg	MF	Independent	MF
Liberia	FP	Soft peg	IF	Independent	IF
Madagascar	FP	Soft peg	IF	Independent	IF
Malawi	FP	Soft peg	MF	Independent	MF
Mauritania	MF	Independent float	MF	Independent	MF
Mauritius	FP	Soft peg	IF	Independent	IF
Mozambique	MF	Independent float	IF	Independent	IF
Nigeria	MF	Independent	MF	Independent	MF
Rwanda	FP	Soft peg	IF	Independent	IF
Sao Tome and Principe	СР	Soft peg	IF	Independent float	IF
Sierra Leone	IF	Independent float	IF	Independent	IF
Somalia	СР	Soft peg	IF	Independent float	IF
South Africa	MF	Independent float	IF	Independent	IF
Sudan	FP	Soft peg	IF	Independent	IF
Tanzania, United Rep. of	FP	Soft peg	IF	Independent	IF
Uganda	FP	Soft peg	IF	Independent	IF
Zambia	MF	Independent float	IF	Independent float	IF

Source: Fischer (2001); IMF (2000a).

Note: Abbreviations: CP = Crawling pegs; FP = other conventional fixed pegs; HB = pegged rate in horizontal band; IF = independently floating; MF = managed float with no pre-announced exchange rate path; CB = rates within crawling bands; NS = arrangements with no separate legal tender; CBA = currency board; SDR = special drawing rights.

a SDR, rand.

**b** US\$, SDR, £.

c Euro, yen, £, US\$, Singapore \$, rand.

### NOTES

- 1 For further discussion of financial development in Africa, see Ndikumana (2001), Gelbard and Leite (1999), Nissanke and Aryeetey (1998), and Mehran et al. (1998).
- 2 Commitment of monetary policy to price stability does not necessarily amount to surrender by the national authoritiies of the right to use monetary policy to respond to exogenous shocks. The idea is to foster *disciplined discretion* in monetary policy, especially by shielding monetary policy from fiscal pressures.
- 3 The "hard pegs" category includes regimes with a currency board, or arrangements with no special legal tender; the "soft pegs" category includes other conventional fixed pegs, pegged rates in horizontal bands, crawling pegs, and pegged rates with crawling bands. The "independent floats" category includes independently floating and managed float with no pre-announced exchange rate path (Fischer, 2001).
- 4 For a brief history of the CFA zone and its operational structure, see the text in the appendix. Also see Honohan and Lane (2000), and Guillaumont, Guillaumont and Plane (1988) for quantitative analyses of economic performance in the CFA zone. The finding of low inflation in countries with fixed-peg regimes is consistent with the results from existing cross-country studies (see Ghosh et al., 1997).
- 5 The choice of the year 1994 to split the 1990s decade for the SADC group is primarily for comparison purposes with CFA zone countries. For South Africa, 1994 is historically important as it marks the end of the apartheid era, and the year is therefore a natural break point for that country.
- 6 Instrument independence of the central bank refers to the freedom to choose the monetary policy instruments needed to meet given macroeconomic objectives. Goal independence means the central bank's freedom to set the ultimate goals of monetary policy. In practice, the independence of the central bank is generally limited to instrument independence.
- 7 Note that the arguments in favour of or against dollarization discussed here apply also to "euroization".
- 8 The average for the 1994–2000 period is computed from data in IMF, *Direction of Trade Statistics 2001*. See Yeats (1999); Aryeetey et al. (1996); and Asante (1997) for in-depth discussions of trade and regionalism in Africa.

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