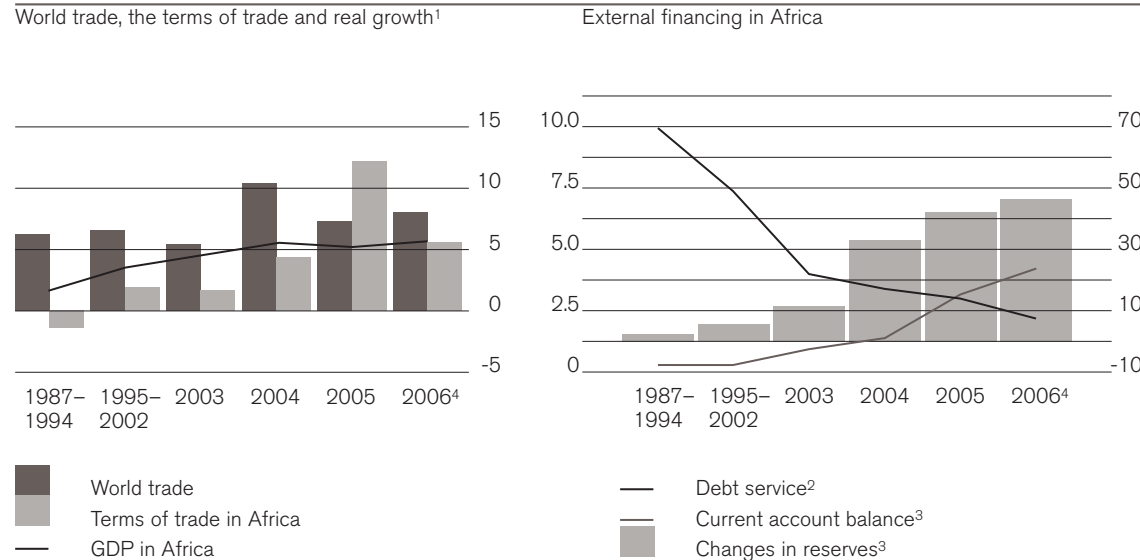


The global economy and Africa: the challenges of increased financial inflows

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Graph 1

Africa and the global economy



¹ Annual changes, in per cent.
² In per cent of exports of goods and services, left-hand scale.
³ USD billions, right-hand scale.
⁴ Projection.

Source: IMF, World Economic Outlook.

Introduction

After years of weakness, economic growth in Africa has strengthened (Graph 1). A significant stimulus has come from large terms-of-trade gains as well as rising official and private inflows. The aggregate current account surplus continues to rise, debt service ratios in the region have fallen dramatically, and the latest IMF projections suggest that foreign exchange reserves will rise by \$46 billion this year. Upward pressure on exchange rates and strong accumulation of reserves could create dilemmas for monetary policy. This note first outlines recent developments and then analyses some of these dilemmas.

Output and the balance of payments

Several African countries have recently achieved growth rates that are quite comparable to, or even higher than, those seen in Asia and Latin America (annex table). Oil exporters have grown faster than oil-importing countries thanks to sizeable improvements to their terms of trade (Table 1). Some metal exporting countries have also had substantial terms-of-trade gains (eg over 18% for Zambia between 2003 and 2005), while a number of oil-importing countries have suffered large losses (eg Kenya, Ghana and Tanzania). Cumulative changes in commodity prices are summarised in Table 2. In South Africa, higher domestic absorption combined with increased oil prices and a sharp deterioration in the net services balance, led to a record current account deficit (above 4.2% of GDP) in 2005.

Table 1

Output and balance of payments

	Real GDP growth ¹		Balance of payments				Total reserves ⁴	
	2000–02	2003–05	Current account balances ²		Net capital inflows ³		2002	2005 ⁹
	As percentage of GDP							
Oil-exporting countries								
Algeria	3.2	5.8	12.4	15.8	...	...	40.7	55.2
Nigeria	3.3	7.9	1.5	4.8	-12.8	-13.4	15.9	28.5
Oil-importing countries⁵	3.8	4.4	-0.6	-1.0	-0.1	0.9	14.0	15.2
Egypt	4.0	4.1	-0.2	3.2	-1.8	-6.4	15.1	22.1
Kenya	1.9	3.9	-1.1	-3.4	0.7	1.5	8.1	9.4
Morocco	3.5	3.8	2.5	2.2	-3.0	-1.2	28.1	31.1
South Africa	3.5	4.1	0.2	-3.0	0.5	4.3	5.3	7.8
Tanzania	6.2	6.9	-4.6	-2.2	-6.1	0.8	15.6	16.8
Tunisia	3.8	5.3	-4.0	-2.1	4.2	4.8	10.9	14.5
Uganda	5.7	5.2	-5.2	-2.9	5.4	5.3	16.0	14.5
Zambia	3.9	5.2	-17.9	-11.9	...	...	14.2	7.9
Others ^{5, 6}	4.5	5.5	-2.0	-2.3	0.6	1.3	34.6	28.5
BCEAO (WAEMU) ^{5, 7}	2.0	3.5	-5.4	-4.7	...	...	15.0	10.6
BEAC (CEMAC) ^{5, 8}	7.9	6.3	-9.4	-4.9	...	...	5.1	10.6

¹ Average annual growth during the period.

² Including grants.

³ Financial account, n.i.e.

⁴ Excluding gold.

⁵ Weighted average of the countries and regions shown or cited, based on 2000 GDP and PPP exchange rates.

⁶ Botswana, Ethiopia, Ghana and Mauritius.

⁷ Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo.

⁸ Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea and Gabon.

⁹ Latest available figures: for Uganda, as of September; for BCEAO, as of November; for the remaining countries, as of December.

Sources: IMF, *Regional Economic Outlook: Sub-Saharan Africa*; IMF, *International Financial Statistics*.

In many countries, inflows of official development assistance (ODA) remain large. For instance, such assistance accounted for 11-18% of GDP in Ethiopia, Ghana, Tanzania and Uganda during 2000-03, compared to 8-12% during 1996-99. According to a recent conservative estimate, annual incremental ODA inflows to the region are expected to rise from \$14-18 billion during 2006-08 to \$24-28 billion by 2015.¹ Moreover, many countries are expected to save large cash outflows from the recent decision by international creditors (under the so-called Heavily Indebted Poor Countries and Multilateral Debt Relief Initiatives) to partly or fully waive their outstanding loans.

In addition, several African countries have recently witnessed strong private capital inflows. The latest published IMF estimates put private capital inflows into Africa at around \$30 billion in 2005. Net capital inflows to South Africa have remained very strong in recent years (about \$15 billion in 2004 compared to \$9 billion in 2003), led by a surge in portfolio inflows. Egypt and Morocco saw significant increases in both direct and portfolio foreign investments in 2003 and 2004. Inflows of foreign direct investment remained strong in Kenya, Tunisia and Uganda as well.

Foreign inflows and macroeconomic policy

Terms-of-trade gains, stronger private capital inflows, increased foreign official aid – all these represent good news. At the same time, there are major implications for exchange rates and monetary policy. Should the central banks intervene to resist upward pressure on the exchange rate? Should the monetary counterpart of intervention be sterilised or not?

The issue about the exchange rate is not easy to resolve. There may well be agreement *in principle* that the equilibrium real exchange rate needs to rise as the terms-of-trade improve (or capital inflows rise). But policymakers will not know how far the equilibrium real exchange rate has to rise in practice. In addition, the desirable policy response in the short term depends in part on the answers to three questions:

- (a) *Are the shocks temporary or permanent?* If temporary, the authorities may want to intervene or resist changes to the

¹ See Gupta et al (2005). Under the United Nations Millennium Development Goals, required aid inflows into Africa would rise from \$135 billion in 2006 to \$195 billion by 2015.

Table 2

Cumulative changes in commodity prices¹

	1997–99	2000–02	2003–05
Crude oil	6.4	11.5	102.4
Non-oil commodities	-15.4	-3.4	51.4
Agricultural raw materials	-14.6	-0.1	14.4
Cotton	-43.5	24.9	2.3
Coffee	0.5	-57.9	109.6
Cocoa	-37.7	120.5	-25.3
Metals	-6.3	-10.1	118.3
Copper	-22.1	-9.7	187.3
Gold	-23.3	17.3	53.6
Iron ore	-8.0	6.3	121.6

¹ In per cent.

Sources: IMF; HWWA.

exchange rate. But if permanent, attempts to delay adjustment may be counterproductive.

- (b) *What is the country's initial position?* If foreign exchange reserves are dangerously low, for instance, then some rebuilding is desirable; but if foreign exchange reserves are already very high, further accumulation could have adverse monetary consequences. Equally, if inflation is high or rising, corrective monetary policy might be required; but if not, the central bank could acquiesce at least for a time in rapid monetary expansion.
- (c) *Are disruption costs lower when the exchange rate moves only gradually to a new equilibrium level?*

Question (a) has much concerned policymakers in commodity-exporting countries.² The expansion of government spending programmes when the *terms-of-trade* are unusually favourable has so often created problems in the past. For this reason, many countries have established commodity resource funds. In such schemes, “excess” oil revenues are deposited in a special fund and invested in foreign assets. This not only preserves medium-term fiscal equilibrium, but also reduces pressure on the exchange rate. Algeria has successfully operated such a fund since 2000. With oil prices remaining consistently higher than the benchmark price over the past three years, the accumulated balance in the fund has risen sharply, inflation has remained well contained, and the real exchange rate has depreciated (Table 3). The authorities have also used part of the fund to repay large amounts of outstanding government debt. Nigeria has used a similar arrangement since 2004, depositing the excess oil revenues with the central bank and repaying government debt. At the same time, the real exchange rate has appreciated significantly. This has helped the monetary authority to counter rising inflation pressures. Similarly, in Zambia the authorities appeared to have used both intervention and exchange rate appreciation to various degrees while balancing the domestic and external objectives in the face of rising copper revenues.

Capital inflow shocks – particularly portfolio inflows – are probably seen as less permanent and predictable than terms-of-trade shocks. Yet improvements in the local policy environment and a medium-term

² For instance, Cashin and Pattillo (2000) show that terms-of-trade shocks tend to be temporary in half of sub-Saharan African countries (half the effects dissipate in less than four years).

Table 3

Macroeconomic indicators

	CPI inflation ¹			Fiscal balances ²			Real exchange rates ^{1, 3}		
	2003	2004	2005	2003	2004	2005	2003	2004	2005
Oil-exporting countries									
Algeria	2.6	3.6	1.6	3.5	5.9	11.4	-10.1	0.7	-2.9
Nigeria	14.0	15.0	17.9	-1.3	7.7	10.0	-6.1	2.3	11.7
Oil-importing countries⁴									
6.0	5.0	6.1	-3.8	-3.3	-4.4	6.9	3.2	...	...
Egypt	3.2	10.3	11.4	-6.1	-5.9	-9.3	-21.5	...	...
Kenya	9.8	11.6	10.3	-1.7	0.0	-1.7	-0.6	-3.0	...
Morocco	1.2	1.5	1.0	-5.4	-5.4	-6.8	-1.3	-0.7	-1.7
South Africa	5.8	1.4	3.4	-2.0	-1.7	-1.9	29.0	9.1	0.5
Tanzania	4.5	4.3	4.6	-1.4	-3.0	-4.5	-16.6	-9.8	...
Tunisia	2.8	3.6	2.0	-3.2	-2.6	-3.6	-3.7	-3.2	-4.7
Uganda	5.7	5.0	8.0	-4.3	-1.8	-0.7	-12.4	2.5	5.0
Zambia	21.4	18.0	18.3	-6.0	-3.0	-2.5	-1.7	8.1	12.2
Others ^{4, 5}	17.5	9.4	9.8	-5.8	-3.8	-4.0	7.6	-1.7	...
BCEAO (WAEMU) ^{4, 6}	1.0	0.3	4.7	-2.3	-2.4	-2.3	3.8	0.0	...
BEAC (CEMAC) ^{4, 7}	1.8	0.1	3.1	2.0	2.6	7.0	3.2	-1.1	...

¹ Annual changes; in per cent.

² As a percentage of GDP; including grants.

³ An increase indicates an appreciation.

⁴ Weighted average of the countries and regions shown or cited, based on 2000 GDP and PPP exchange rates.

⁵ Botswana, Ethiopia, Ghana and Mauritius.

⁶ Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo.

⁷ Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea and Gabon.

Sources: IMF, *Regional Economic Outlook: Sub-Saharan Africa*; Economist Intelligence Unit.

rise in the real price of some of Africa's commodity exports (oil?) could create the basis for a sustained rise in private capital inflows.

As for *aid flows*, political commitments might suggest that aid flows rise and remain strong for several years. Yet past experience suggests that aid inflows have been highly volatile: in several countries they fluctuated by 10-30% of GDP in a single year in the 1990s.

Aid inflows: absorption and spending

How macroeconomic policy should respond to an increase in aid inflows has been much debated by economists for over 80 years.³ As adjusting to private capital inflows and terms-of-trade shocks raises similar issues, the analysis of this issue is of wider interest.

Two concepts are central to the analysis of this problem:

(a) *Spending* – the impact of aid on aggregate demand depends on how the government spends the aid it receives. This is basically fiscal policy.

(b) *Absorption* – aid achieves a real resource transfer, ie is “absorbed” only to the extent that the current account deficit (at present or in the future) increases. Fiscal policy also affects this, but monetary policy and the exchange rate exert a decisive influence.

Typically, the central bank gives the government the local currency equivalent of the foreign aid received. What the central bank then does with this foreign exchange influences the exchange rate (and also local interest rates) and thus absorption. For instance, if the central bank uses foreign exchange received from aid to bolster the reserves in order to prevent the exchange rate from appreciating, then absorption is impeded.

A simplified description of four options for possible fiscal and monetary policy responses to aid inflows is set out in Table 4. Although this should illuminate some key choices, an important limitation is the absence of dynamics. In reality, as discussed in the previous section, actual policy choices are more complex. In particular, the policy stance

³ This issue is related to the famous “transfer problem” that Keynes and others analysed in the 1920s. The effective transfer of resources by Germany to pay for reparations imposed after World War I required not only fiscal surpluses to raise local funds but also current account surpluses to effect the real transfer. Aid transfers are just reparations in reverse. The analysis presented here is based on IMF (2005).

Table 4

Absorption and spending of aid: textbook implications

Policy choices	Implications for:			
	Current account deficit ¹	Fiscal deficit ¹	Forex reserves	Reserve money
1. Spend and absorb	↑	↑	0	0
2. Spend but not absorb	0	↑	↑	↑
3. Absorb but not spend	↑	0	0	↓
4. Neither spend nor absorb	0	0	↑	0

¹ Excluding aid.

Note: This table is based on IMF (2005) and especially Box 1.

could evolve as new information about the permanence (or otherwise) of the shock or about actual inflation pressures emerges. A policy stance (eg holding the exchange rate constant) that is feasible or desirable in the short run often becomes harder to maintain the longer it lasts. Hence, central banks may have initially resisted nominal exchange rate appreciation but over time allowed a real appreciation.

Option (1) is to *absorb and spend* – that is, to increase government spending (or lower taxes) and allow net imports to rise. The extent to which imports rise is determined by the resulting pattern of the incremental domestic spending and the relevant marginal propensities to import.⁴ If inflows are used to finance expenditure on tradables (eg imported capital equipment), then the marginal propensity to import will be high. Conversely, spending on non-tradable goods and services will cause a much smaller rise in imports. These factors therefore determine how much real exchange rate appreciation will be needed to close this gap between the rise in imports and aid inflows.

Option (1) is usually seen as the appropriate long-run equilibrium response as neither foreign exchange reserves nor reserve money rise. But very few countries in Africa have followed this textbook prescription. One reason is that the danger of exchange rate overshooting and an associated risk of recession may be particularly great in the African context (see below). This consideration is anyway decisive when aid inflows are expected to be temporary – why risk damaging the tradables sector by accepting a large real appreciation that will have to be reversed?

Option (2) is to *spend but not absorb*. Larger fiscal deficits increase aggregate demand and must be financed by monetary expansion or increased government borrowing from the domestic private sector. But the central bank saves the foreign exchange because of fears that currency appreciation would undermine competitiveness. In the long term, of course, such a policy choice would either be inflationary or would entail shifting scarce investment funds from the private to the public sector.

Option (3) is to *absorb but not spend*. In this case, aid can be used to reduce the fiscal deficit and the central bank sells foreign exchange, reducing the monetary base and appreciating the real exchange rate.

⁴ And in some circumstances the propensity to divert potential export goods to the home market. It should be noted that this analysis of spending takes potential output as constant. Increased aid, however, also raises potential output. This affects not only future income but also the future output of tradables and non-tradables – and thus the equilibrium real exchange rate in the medium term.

Table 5

Estimates of absorption and spending: five examples

	Incremental aid absorbed?	Incremental aid spent?	REER¹
Ethiopia	Partly absorbed 20%	Not spent 0%	-2.1
Ghana	Not absorbed 0%	Not spent 7%	0.5
Mozambique	Mostly absorbed 66%	Spent 100%	-6.4
Tanzania	Not absorbed 0%	Spent 91%	-9.8
Uganda	Partly absorbed 27%	Mostly spent 74%	-6.3

¹ The real effective exchange rate during the period when foreign aid rose strongly.

Note: Non-aid account and fiscal balance deterioration both truncated at 0 and 100. In Ghana and Tanzania, the non-aid current account actually improved despite aid inflows; Mozambique's fiscal balance before aid deteriorated by an amount greater than the fiscal aid inflow.

Source: IMF (2005).

This can be an effective short-term stabilisation strategy when the fiscal deficit is too large, inflation pressures are accumulating or there is a lack of confidence in the domestic currency. However, the feasibility of this option depends on whether donors are prepared to support a strategy of not spending aid on its purported objectives.

Option (4) is to *neither spend nor absorb*. The net result is that aid increases foreign exchange reserves with the central bank and the fiscal position remains unchanged as the government uses aid inflows to repay debt. Like Option (3), this may be the preferred strategy when foreign exchange reserves are low. And if aid flows are volatile, such a policy applied in years when aid flows are particularly heavy may be stabilising. Some have argued that some combination of spending and reserve accumulation is perhaps desirable when donors do not distribute aid according to an optimal time path (Prati et al (2003)).

Table 5 presents a summary of a recent IMF case study of the impact of a surge in aid inflows on five African countries. In no case did increased aid lead to a real exchange rate appreciation, and subsequent export growth was generally strong. With the exception of Mozambique, aid inflows were generally not absorbed: the deterioration in the non-aid current account was much less than the incremental aid inflows.⁵ Aid inflows were mostly spent in Mozambique, Tanzania and Uganda. But Ethiopia and Ghana spent very little of the incremental aid – largely because of macroeconomic instability as well as rather high domestic debt and low international reserves.

The monetary implications of these different choices are of considerable interest. Ethiopia and Ghana essentially chose Option (4). Reserves rose and the fiscal deficit was reduced. On balance, then, aid inflows did not increase the liquidity of the domestic banking system. Mozambique, Tanzania and Uganda, however, chose Option (2). The implication of this choice was an incipient rise in the monetary base. How to respond to this became an important element of the policy debate between the IMF and the central banks. The central banks – at least initially – chose to resist nominal appreciation and did not sell reserves.⁶

⁵ In some cases, this was due to a simultaneous reduction in capital inflows. A general caveat for such exercises is that the counterfactual (ie what would have happened in the absence of aid inflows) is not of course known.

⁶ The divergent views of the IMF and the central banks on the issue of how far large aid inflows should be sterilised are analysed in Buffie et al (2004) and Chapter 5 of Masson and Pattillo (2005). Both conclude that, on balance, the central banks were right.

Table 6

Bond sterilisation episodes in Uganda, Tanzania and Mozambique

In per cent			
	Before	Active OMO	After
Tanzania			
91-day yield	7.3	13.9	4.6
Ex post real yield	-1.1	6.9	-0.5
Uganda			
91-day yield	7.1	13.8	6.7
Ex post real yield	-2.2	9.6	4.1
Mozambique			
91-day yield	12.6	22.9	...
Ex post real yield	1.8	10.4	...

Note: "Active OMO" denotes periods of aggressive open market operations by the central bank. These periods are: Tanzania, July 1999-April 2000; Uganda, December 1999-July 2001; Mozambique, July 2000 onward. "Before" refers to the six months prior to the Active OMO period and "After" to the full period since.

Source: Buffie et al (2004).

Scope for sterilised intervention and instrument choice

Intervention in the foreign exchange market, nevertheless, raises two major questions: should it be sterilised, and, if so, how sustainable might such a strategy prove in the African context? When the central bank buys foreign exchange to resist appreciation pressures, the monetary base tends to rise. It can counter this by selling government bills (or its own paper). Such sterilisation of domestic liquidity may be necessary to preserve a monetary stance consistent with inflation goals. Conversely, it is possible that in some circumstances the central bank may want both to resist appreciation and to ease monetary policy. If so, intervention would not create obvious dilemmas for monetary policy.

The scope for sterilising any excess liquidity in the banking system is generally greater when financial markets are well developed, helping the absorption of new debt issuance. But if financial markets are thin, such sterilisation could imply significant increases in interest rates.

The experience of Mozambique, Uganda and Tanzania during the periods of intensive sterilisation illustrates this challenge in the African context quite well (Table 6). The absence of a well developed bond market led the monetary authorities to rely heavily on short-term instruments (largely 91-day treasury bills). Because these markets were thin, interest rates rose sharply, raising debt service payments in the economy.

Higher interest rates resulting from treasury bill sales have the further drawback of attracting additional capital inflows – exacerbating upward pressure on the exchange rate and reversing part of the liquidity effects from the initial sterilisation operations.⁷ The fact that residents typically hold bank deposits in both domestic and foreign currency, and switch in and out of domestic currency, reinforced this effect. Macroeconomic stabilisation in effect led residents to reduce their desired foreign currency deposits – effectively reversing private capital outflows.

Experience and model simulations suggest that such inflows (coming on top of aid inflows) are large – and can well lead to an overshooting of the nominal exchange rate in the short run (greater than the required real appreciation). With prices in the non-tradables sector sticky, this

⁷ This is the argument of Calvo et al (1993) based on Latin American experience, namely that sterilisation could become self-defeating.

can lead to a severe recession. Buffie et al (2004) argue that this “dramatically undermines the case for a floating exchange rate”.⁸

According to Buffie et al (2004), the mounting fiscal costs of debt service undermined the central banks' willingness to continue bond sterilisation and led to a policy reversal: they instead sold foreign exchange more aggressively (Uganda) and/or tolerated more rapid reserve money growth (Tanzania and Mozambique). Subsequent policy evolved as conditions changed. For instance, Tanzania started to sell foreign exchange as inflation rose and began to reduce liquidity in the banking system. In effect, over time the central bank moved to Option (1), in what the IMF called a delayed spend-and-absorb strategy.

The question of exactly which instruments to use to withdraw liquidity raises many issues.⁹ One issue is the choice between *market and non-market instruments*. When capital markets are thin, the tendency is to use non-market instruments. Non-market instruments may also be used when only two or three local banks dominate the local money market – partly to counter the risk of oligopolistic gaming of the markets by these banks. Many countries in Africa have indeed used several non-market instruments for sterilisation. For instance, increasing compulsory reserve requirements on banks – particularly in countries where the initial level is low – could be one such instrument. But reserve requirements are a tax on banks, which reduces financial intermediation. In the past, many developing economies have used other non-market instruments, such as transferring government and public financial institutions' deposits from the banking system to the central bank. When such deposits are not remunerated at market interest rates, these public institutions are forced in a rather opaque way to bear part of the sterilisation costs.

A second issue is the *nature of the market instrument*. Market instruments include long-term bonds, shorter-term instruments such as swaps and repurchase operations, and direct borrowing from banks at market rates. Issuing long-term bonds to non-banks is the most effective and durable way of draining back liquidity; but few African countries have long-term bond markets.¹⁰ In countries where foreign exchange and money markets are well developed, central banks might prefer to sterilise through foreign exchange swaps (typically through an agreement to buy forward) and repurchase operations (“repos”, where

⁸ On plausible assumptions, they show that the original exchange rate would have to appreciate by 24-55% to forestall incipient capital inflows.

⁹ The question of the choice of sterilisation instruments is discussed more fully in Mohanty and Turner (2005): see pp 69-73, Table A4 “Main instruments for sterilisation” and the references for many central bank papers on this subject.

¹⁰ A desirable reform in the medium term would be to develop long-term bond markets. On this, see Kahn (2005) and Christensen (2004).

the central bank sells securities to buy back at a later date). Swaps and repos are particularly suitable for temporary interventions.

A third issue is the choice between *government and central bank securities*. From the perspective of the consolidated budget of the public sector, the distinction between government and central bank securities matters little. But good governance considerations might indicate that the cost of forex interventions directed by the government should be borne in a transparent way by the government. This would facilitate public and parliamentary scrutiny.¹¹

Whatever method is chosen, the costs of sterilisation tend to rise the longer it is continued. Prolonged intervention in the same direction, over several years, therefore suggests a need to re-examine macroeconomic policies more generally.

¹¹ On this, see Reserve Bank of India (2004).

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Annex

Actual and expected developments in output growth, consumer price inflation and current account balances

	Real GDP growth (%) ¹			Consumer price inflation (%) ^{1,2}			Current account balances (US\$ bn) ³		
	2004	2005	2006	2004	2005	2006	2004	2005	2006
World	5.3	4.8	4.9	3.7	3.8	3.8	...	...	...
Industrial countries	3.0	2.6	2.8	2.0	2.3	2.3	-284	-511	-603
United States	4.2	3.5	3.4	2.7	3.4	3.2	-668	-805	-898
Japan	2.3	2.6	3.0	-0.0	-0.3	0.4	171	168	170
Euro area	1.8	1.4	2.1	2.1	2.2	2.1	74	-16	-24
France	2.1	1.4	2.0	2.1	1.7	1.7	-8	-42	-36
Germany	1.6	0.9	1.8	1.7	2.0	1.7	102	115	111
Italy	0.9	0.1	1.2	2.2	2.0	2.1	-15	-27	-29
Emerging economies	7.6	7.2	6.9	5.7	5.4	5.4	220	423	487
Africa	5.5	5.2	5.7	8.1	8.5	9.1	0.9	15.2	23.5
Algeria	5.2	5.3	4.9	3.6	1.6	5.0	11.1	21.7	22.2
Botswana	4.9	3.8	3.5	6.9	8.6	8.9	0.9	0.8	0.5
Egypt	4.1	5.0	5.2	10.3	11.4	4.4	3.4	2.6	1.4
Ethiopia	12.3	8.7	5.3	8.6	6.8	10.8	-0.5	-1.0	-1.0
Ghana	5.8	5.8	6.0	12.6	15.1	8.8	-0.2	-0.7	-0.9
Kenya	4.3	4.7	3.3	11.6	10.3	11.5	-0.4	-1.5	-0.9
Mauritius	4.2	3.5	2.7	4.1	5.6	7.1	0.1	-0.2	-0.2
Morocco	4.2	1.8	5.4	1.5	1.0	2.0	1.1	0.5	-0.4
Nigeria	6.0	6.9	6.2	15.0	17.9	9.4	3.3	12.5	16.5
South Africa	4.5	4.9	4.3	1.4	3.4	3.9	-7.4	-10.0	-10.0
Tanzania	6.7	6.9	5.8	4.3	4.6	5.2	-0.2	-0.3	-1.0
Tunisia	6.0	4.2	5.8	3.6	2.0	3.0	-0.6	-0.4	-0.5
Uganda	5.6	5.6	6.2	5.0	8.0	6.5	-0.1	-0.1	-0.4
Zambia	5.4	5.1	6.0	18.0	18.3	13.3	-0.6	-0.7	-0.8
BCEAO (WAEMU) ⁴	3.2	3.9	3.8	0.3	4.7	2.0	-1.5	-2.3	-2.3
BEAC (CEMAC) ⁵	9.8	3.8	3.2	0.1	3.1	2.8	-1.2	1.1	2.4
Asia	8.0	8.0	7.7	4.4	3.4	3.8	184	252	220
China	10.1	9.9	9.6	3.9	1.9	2.2	69	161	137
India ⁶	6.5	8.3	7.5	6.6	4.8	4.9	1	-16	-19
Other emerging Asia	5.6	4.7	5.0	4.1	5.6	5.9	114	107	102
Latin America ⁷	5.9	4.3	4.6	6.1	5.7	5.2	22	39	31
Central Europe ⁸	5.0	4.0	4.8	4.0	2.3	1.6	-25	-16	-17

¹ Annual changes; for the aggregates, weighted average of the countries and regions shown or cited, based on 2000 GDP and PPP exchange rates, as of May 2006.

² For India, wholesale prices.

³ For the aggregates, sum of the countries and regions shown or cited; world figures do not sum to zero due to incomplete country coverage and statistical discrepancies.

⁴ Benin, Burkina Faso, Côte d'Ivoire, Guinea Bissau, Mali, Niger, Senegal and Togo.

⁵ Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea and Gabon.

⁶ Fiscal years starting in April.

⁷ Argentina, Brazil, Chile, Colombia, Mexico, Peru and Venezuela.

⁸ Czech Republic, Hungary and Poland.

Sources: Consensus Economics; IMF, *World Economic Outlook*; national data; BIS estimates.