

## **Exchange Rate Liberalization in Selected Sub-Saharan African Countries**

Successes, Failures, and Lessons

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#### **IMF Working Paper**

#### African Department

## **Exchange Rate Liberalization in Selected Sub-Saharan African Countries: Successes, Failures, and Lessons**

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#### **Abstract**

Many sub-Saharan African (SSA) countries liberalized their economies in the 1980s and early 1990s. This paper reviews the foreign exchange regime reforms in selected SSA, and their associated macroeconomic policies and economic performance during and after these reforms were undertaken. Before liberalization, most of the reviewed countries were characterized by extensive foreign exchange rationing, sizeable black market premiums, and declining per capita real income. Today, the countries that successfully reformed look markedly different. Rationing and parallel market spreads are a distant memory, and per capita income has increased sharply.

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#### I. BACKGROUND AND OVERVIEW

#### A. Background

1. Many sub-Saharan African (SSA) countries, undertook fundamental reforms to liberalize their economies, including in particular their international trade and foreign exchange rate regimes, in the 1980s and early 1990s. Before liberalization, the foreign exchange regimes of many of these countries were characterized by administrative controls over foreign exchange allocation and current account transactions, extensive rationing of foreign exchange because of

persistently weak external accounts, sizeable black market premiums, sometimes reaching 1,000–4,000 percent (Table 1 and Figures 2, 19, 42, 50, 62), and, importantly, stagnant or declining per capita real income (Figure 1).

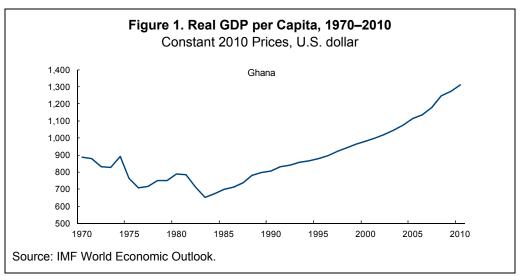
Table 1: Parallel Market Premiums in Selected Countries

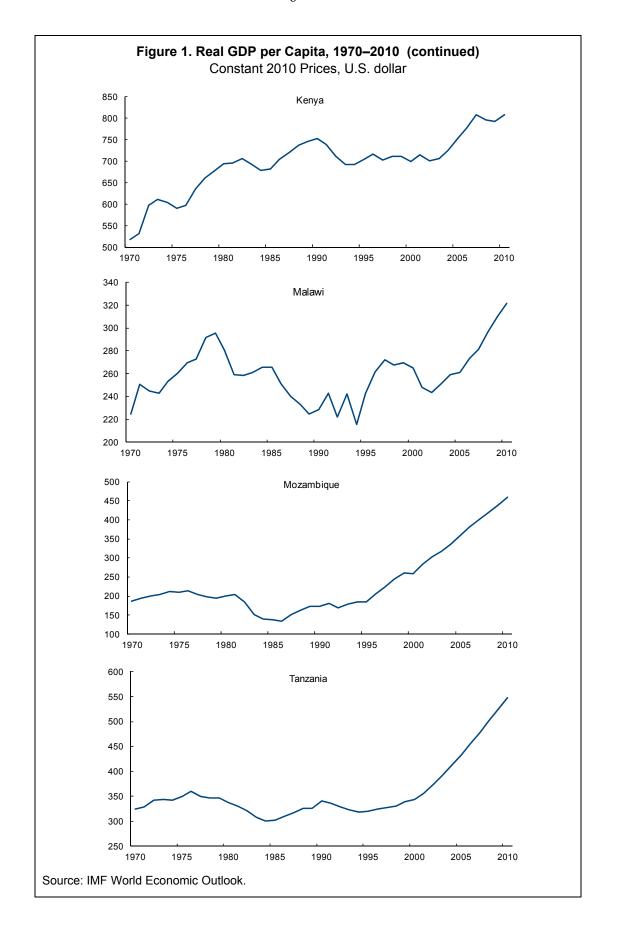
				(Percent)				
	Median Premium				Max Premium			
•	80–84	85–89	90–95	96–98	80–84	85–89	90–95	96–98
Ghana	718	38	4	1	4264	170	16	3
Kenya	19	14	11	5	40	39	110	12
Malawi	75	25	29	6	125	75	59	15
Tanzania	243	169	20	7	363	713	79	9
Uganda	176	229	19	8	2110	1186	75	11
Zambia	45	80	32	19	103	1221	423	37

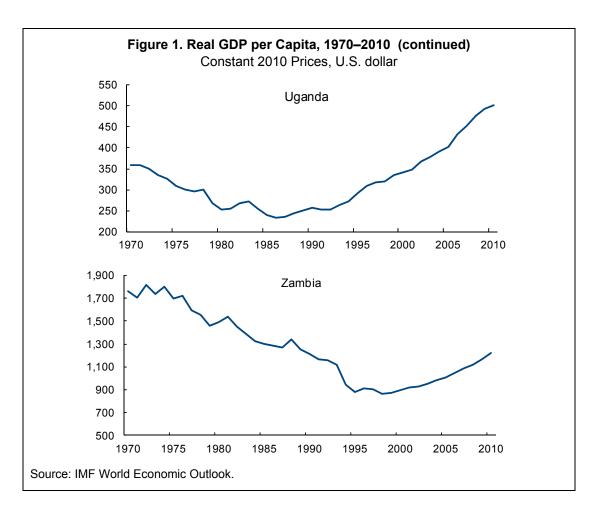
Source: Reinhart, Carmen (2002).

2. Today, the countries that successfully reformed look markedly different.

Rationing and parallel market spreads are a distant memory, and per capita income has increased sharply, for many by as much as 2.5–5 percent a year for several decades. However, a few countries did not succeed in transitioning to a market-determined exchange rate and for a long time have been struggling with foreign exchange shortages, rationing, and parallel foreign exchange market spreads. The failure of the past reform efforts constitutes an important backdrop for the economic policy and exchange rate regime debate in these countries. This paper aims to help inform this debate by providing a review of the foreign exchange regime reforms in selected SSA countries, and the associated macroeconomic policies and economic performance during and after these reforms were undertaken.







#### II. Overview and Main Lessons

3. The case studies tell a similar story—the reforms worked when sustained. The reform period marked the end of prolonged, severe crisis and, in several cases, decades of declines, and, the start of a strong and ongoing economic expansion. The attempts to fix the exchange rate in the face of external shocks and without supporting fiscal and monetary policy resulted in overvalued exchange rates and severe pressure on the balance of payments. Efforts to contain these pressures through price controls, rationing, and import licenses, depressed the economy, reduced fiscal revenues, and caused external trade to shift to the informal sector. Shortages of imported inputs hampered (both recorded and unrecorded) production for the domestic and the export market, and the overvalued exchange discouraged exports. Fiscal revenue declined with reduced output and reduced external trade, and with reduced aid, forced a corresponding reduction in expenditure, and/or a monetizing of the deficit, which in turn worsened the imbalances.

#### **Box 1. Overview of the Case Studies**

#### Ghana

- 1982/1983: A 27 percent decline in per capita income since 1970; fiscal revenue down to only 4–6 percent of GDP; imports compressed from 24 percent of GDP in 1970 to only 3 percent of GDP to preserve foreign exchange; and high and volatile inflation and high parallel market exchange rate spreads, peaking at almost 4300 percent in 1982.
- After 1983: Average annual per capita growth of 2.6 percent resulted in a doubling of real per capita income; strong growth in exports and imports; strong increases in fiscal revenue and expenditure; the parallel market rate appreciated following an 800 percent increase in cedi/US\$ exchange rate in 1983, which also improved the fiscal situation. Underlying inflation subsequently declined markedly as monetary and fiscal policy was tightened and agriculture production recovered.

#### Mozambique

- **Mid-1980s:** Real per capita income declined by 34 percent between 1981 and 1986; high inflation; international reserve coverage down to only 0.4 months of prospective imports; and the exchange rate in the parallel market was at times 40–50 higher than the official exchange rate.
- After 1986/87: U.S. dollar export growth averaged 12.4 percent per year in 1987–2010, allowing a sharp increase in imports and contributing to a rebuilding of reserves. GDP growth averaged 7.4 percent a year during the same period, resulting in a 243 percent increase in per capita income since the decline ended in 1986; and inflation has been moderate. The exchange rate continued to depreciate markedly; and inflation remained relatively high until 1996, driven mainly by excessive monetary expansion, supply shocks, and continued large fiscal deficits. A significantly tighter macroeconomic policy stance with a marked reduction in the fiscal deficit and money growth from 1995 onward helped stabilize the metical and sharply reduce inflation.

#### Tanzania

- First half of the 1980s: Severe economic distress with negative per capita growth, declining exports and imports, widespread shortages and high parallel market spreads, and high inflation. Imports declined from 25 percent of GDP in the 1970s to 12 percent of GDP in 1983 and 1984, and exports declined from 17 percent to 6 percent of GDP in the same period. The parallel market premium increased from around 40 percent in 1970 to about 250 percent in 1980–85, peaking at over 700 percent in March 1986.
- After 1986: Rapid growth pickup initially, followed by further decline as the reform processes waned. However, 4.5 percent per capita annual average growth in 2000–10, and real GDP per capita has almost doubled since the mid-1980s. Exports and imports have increased sharply, as have foreign exchange reserves, and inflation averaged only 6.8 percent a year in 2000–10. There was limited pass-through to inflation from large increases (totaling almost 2,700 percent) in the shilling/U.S. dollar exchange rate because money growth was moderate, and the fiscal consolidation was solid.

#### Uganda

• **Early 1980s:** Severe economic distress with a seriously overvalued exchange rate and negative growth. Per capita income declined on average by 3.4 percent per year between 1970 and 1980, and the parallel foreign exchange market premium averaged 800–900 percent in 1979–80, peaking at 2100 percent in May 1981.

- 1980/81: Short-lived attempt to reform. Partial price liberalization and adoption of a floating exchange rate regime followed an 840 percent increase in the shilling/US\$ exchange rate that succeeded in reducing the parallel market premium to almost zero. With monetary expansion contained and a sharp output expansion, prices and the exchange rate quickly stabilized and the parallel market exchange rate briefly appreciated. The adjustments also triggered a sharp increase in exports.
- After 1987: Average annual GDP growth of 7.5 percent in 1986–2010, resulting in more than a doubling of real per capita income. Export growth and rebuilding of foreign exchange reserves was strong. Monetary policy failing to provide a nominal anchor and fiscal dominance initially caused inflation to continue to rise. Inflation sharply declined once money supply was curtailed—inflation has been below 10 percent for most of the time since 1993.

#### Zambia

- **Before 1989**: Almost 20 years of steadily per capita income decline—on average by around 2 percent a year. Large fiscal deficits averaged almost 13 percent of GDP in the 1970s and 1980s. Exchange rates were consistently overvalued, export volumes declined sharply, savings and capital formation were low and declining, and foreign exchange reserves were low.
- 1985–87: Abandoned attempt to reign in the imbalances that ended in sharply worsening imbalances and capital flight. With sharp increases in the fiscal deficit and in money growth, the already high and rising inflation increased further. Reinsertion of price controls and re-pegging of the exchange rate in 1987 failed to lower inflation.
- After 1989: Non-mining GDP growth has been consistently positive since 1995, and per capita growth, has been positive since 2000, following the privatization of the mining industry—the average annual GDP per capita growth was 2.8 percent in 2000–10. Lacking a nominal anchor, the liberalization of the economy initially was accompanied by a sharp rise in inflation. However, following a tightening of monetary policy and introduction of a new fiscal policy rule designed to commit the government to a balanced domestic budget, inflation declined rapidly and the exchange rate stabilized.

#### Kenya

• Early 1990s: Gradual liberalization of the foreign exchange market contributed to a sharp increase in exports and current account improvement. Excess money supply and increased government spending complicated the move to a floating regime and contributed to a sharp increase in inflation. Policy tightening after the 1992 elections helped stabilize prices and restore credibility and confidence—holders of foreign exchange abroad responded to the liberalized exchange rate regime, increased interest differential, positive exchange rate expectations, and renewed economic stability by bringing their funds back, and the exchange rate appreciated sharply. Initial growth recovery was not sustained, partly reflecting increased economic governance concerns.

#### Malawi

 Stop-reverse-and-go exchange rate policies resulted in larger real exchange rate volatility, lower growth, less economic diversification, higher inflation than the comparator countries in 1990–2010, and repeated periods with foreign exchange shortages and rationing. Exchange rate reforms that were combined with high monetary and fiscal policy succeeded in containing inflation.

#### **Main Lessons**

- 4. Exchange rate liberalization was a fundamental element of the reform effort in all successful cases, but so were structural reforms, reduced fiscal deficits and monetary **expansions, and external assistance**. It is difficult, if not impossible, to identify the relative importance of these reforms. It may also not be that important. As the partial and short-lived reform efforts in Uganda in 1980/81 and Zambia in 1985-87, and in many of the other countries before their ultimate turnaround showed, adjustments relying on only a few instruments were not that successful. Sustained and mutually reinforcing reforms on a broad front, including on the exchange rate regime, were needed to turn the economies around. This is consistent with economic theory. Reduced domestic demand through fiscal and monetary tightening might be sufficient to end a balance of payments crisis; but this would be at the expense of a sharp contraction in domestic output unless it is accommodated by a corresponding adjustment of the nominal exchange rate that results in a sustained adjustment of the real exchange rate, which again requires a sufficiently tight fiscal and monetary stance. Economic theory is clear that a sustained devaluation of the real effective exchange rate should help reduce the costs of the required balance of payments adjustment by shifting demand from imports to domestically produced goods and by encouraging exports. And, although it may take some time to establish new export capacities, the balance of payments improvement could be immediate. For countries that largely are price takers on the world markets, which is the case for most of the countries in this study, a depreciation should improve the current account balance by reducing imports regardless of the size of its trade elasticities as long as imports are not completely inelastic.<sup>2</sup> Moreover, reduced foreign exchange shortages (through reduced imports of consumer goods and/or increased aid) should increase exports by easing existing exporters' access to needed imported inputs. The cases studied seem to confirm this. The regional growth response to trade and foreign exchange reforms has been strong and lasting. Even the less successful countries, like Malawi, had several successful episodes of large reserve improvements. For instance, in Malawi in 1994–98 reserves rose from 0.8 months of imports to 4 months of imports, in response to the depreciation of the real effective exchange rate and large official foreign exchange inflows in 1996–98.
- 5. The cases also showed that nominal devaluations of the official exchange rate caused a real depreciation, but sustained real depreciation required complementary fiscal and monetary measures to contain inflation pass-through to domestic product prices. To achieve the latter, the monetary policy setting has to be forward looking and non-accommodating, and the nominal interest rates must be allowed to increase as needed to keep the real rate high enough to contain inflation pressure. As shown, although accommodating monetary policies, and loose fiscal policies, with pent up demand and adjustments to

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<sup>&</sup>lt;sup>2</sup> See Bughin (1996) for a discussion of why the textbook Marshal Lerner condition does not apply to countries that largely are price takers on the world market.

controlled prices, caused inflation initially to skyrocket in a number of countries, the inflation pressure was successfully reduced once fiscal and monetary discipline were restored and the initial inflation impact of adjustments to controlled prices had panned out. Moreover, Tanzania avoided a period of hyper inflation altogether thanks to much tighter monetary policy.

- 6. The cases also showed that the pass-through of devaluations of the official exchange rate to inflation depends on policy and circumstances. The pass-through can be small, even negative under circumstances sufficiently tight fiscal and monetary policy and a strong output and foreign exchange inflow responses.<sup>3</sup> Then it can result in an appreciation of the parallel exchange rate. And, as the cased of Kenya illustrates, credible exchange rate reforms, increased interest differential, positive exchange rate expectations, and renewed economic stability can result in foreign exchange held abroad or in "the mattresses" being brought back into the local (official) foreign exchange market. Moreover, the effect of a devaluation may be very different under foreign exchange rationing than in non-rationed foreign exchange markets. When parallel market spreads are large, "a devaluation of the official rate may have little direct effect on prices in the domestic economy because prices of most tradable goods depend on the market clearing parallel exchange rate, not the inframarginal official one" (Sahn, Dorosh, and Younger, 1997, p. 53). Monetary policy can serve as a nominal anchor, and real interest rates matter also in Africa. Fiscal discipline is also essential.
- 7. Moreover, the experience of these countries before the reforms, and the Malawi experience both before and after clearly demonstrate the danger of exchange rate based stabilization efforts without supportive fiscal and monetary policy. Attempts to fix the nominal exchange rate through administrative means at levels that were inconsistent with the underlying fundamentals and fiscal and monetary policies resulted in an increasingly overvalued exchange rate and foreign exchange shortages that forced the authorities to either resort to increasingly damaging controls and rationing, or to undertake large ad hoc devaluations, which both can have devastating effects on growth and poverty reduction. As the Malawi case suggest, the unpredictable and large REER volatility caused by such stopand-go policies can be more damaging to growth and development than the high frequency volatility associated with floating exchange rates.<sup>4</sup> Moreover, efforts to stabilize the nominal

<sup>&</sup>lt;sup>3</sup> This was the case in Ghana, where a 67 percent increase in the official cedis/U.S. dollar rate in February 1987 was associated with a 7 percent appreciation of the parallel market exchange rate in February–March 1987.

<sup>&</sup>lt;sup>4</sup> Ghosh, Ostry, and Tsangarides (2010) found that floating regimes had lower volatility at long horizons than intermediate regimes.

exchange rate may amplify the impact on exogenous shocks on other parts of the economy, in particular the poor.<sup>5</sup>

8. **Finally, the cases illustrate the importance of sustaining the reforms because it takes time to realize the full benefits of reforms.** Ownership and commitment to the reforms are critical to avoiding damaging stop-and-go policies where policies are reversed after the costs associated with the reforms have been endured but before the benefits can be reaped. Malawi for instance experienced several, albeit short lived, episodes of successful stabilization efforts. These episodes, however, were repeatedly unraveled by monetary and fiscal policy mistakes, as well as exogenous shocks. Malawi's overdependence on one export commodity (tobacco), and insufficient international reserves and low policy credibility, made the country particularly vulnerable to incomplete reform efforts. Sustained commitments to the reforms are also essential to building credibility and reducing market expectations of policy reversals. Other studies have concluded that not only foreign exchange flows, but also output, exports, and private investment (including foreign direct investment) responses to the reforms depend crucially on expectations that the reforms will be sustained.<sup>6</sup>

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<sup>&</sup>lt;sup>5</sup> For a study of the Fridman (1953) proposition that floating exchange rate regimes allow the nominal exchange rate to act as a shock absorber in small, open economies and thus help insulate them against real external shocks, see among others Broda (2004), who found that the short-run real GDP impact of negative terms of trade shocks was smaller in floats than in pegs, and Hoffman (2007), who also found that external shocks were less contractionary under floating than under pegged exchange rates.

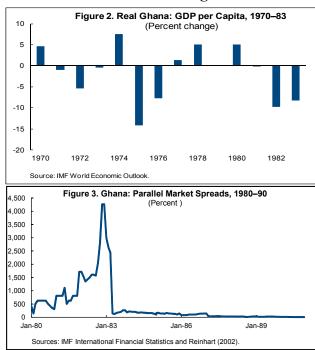
<sup>&</sup>lt;sup>6</sup> See among others Hadjimichael and others (1996) and Goldsbrough and others (1996) on the impact of macroeconomic uncertainty on private sector investment,

### II. GHANA: DECLINE, ADJUSTMENT, AND SUSTAINED RECOVERY WITH MODERATE INFLATION

9. Ghana's recovery since 1983 has been remarkable with a doubling of real

per capita income (Figure 1). The economy was in a poor shape in 1982–83. Real per capita income had declined by 27 percent since 1970 (Figures 1, 2); fiscal revenue had declined to only 4–6 percent of GDP (Figure12); and with foreign aid close to zero, imports through official recorded channels had been compressed from

24 percent of GDP in 1970 to only 3 percent of GDP in 1982 (Figure 6).<sup>7</sup> The foreign exchange reserves had been almost depleted, and large external payments arrears had been incurred. Inflation was running high—at around 123 percent in 1981(Figure 7)—despite a pegged official exchange, and the parallel market spread was rapidly expanding,



peaking at almost 4300 percent at end-1982 (Figure 3). As widely documented, this was the result of widespread policy failures that resulted in highly distorted domestic prices; a massively overvalued exchange rate, trade restrictions, and severe quantitative restrictions on imports; a monopolistic market structure dominated by state-owned enterprises; and a complex and rigid legal and regulatory framework.

10. The 1983 Economic Reform Program (ERP) launched major policy reforms and a fundamental turnaround of Ghana's economy. With the ERP, the government moved away from economic controls and centralized regulation toward a more liberal, market-oriented approach. According to Kapur and others (1991, p. 2), the key elements of the reform strategy were "(i) a realignment of relative prices to encourage more productive activity, promote exports, and strengthen economic incentives; (ii) a progressive shift away from direct controls and intervention and toward greater reliance on market mechanisms; (iii) restoration of fiscal discipline, an increase in public saving, and reduced recourse to government bank financing; (iv) rehabilitation of economic and social infrastructure; and

<sup>7</sup> During the same period, exports declined from 23 percent of GDP to 3.3 percent of GDP, and capital formation declined from 12 percent of GDP to only 3.5 percent of GDP.

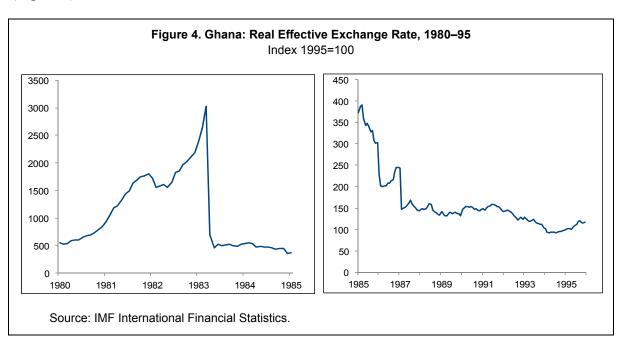
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<sup>&</sup>lt;sup>8</sup> See Kapur and others (1991) and Leite and others (2000) for a detailed discussion of the reforms undertaken under the ERP.

- (v) structural and institutional reforms to enhance efficiency in the economy and encourage private saving and investment."
- Reforming the exchange rate regime and trade system was a key element of the **ERP**. Ghana chose a gradual approach to this with an initial correction of the overvaluation through a series of large, discrete exchange rate adjustments, accompanied by fiscal tightening, before establishing a foreign exchange auction market to allow the exchange rate to be market determined by forces and legalizing foreign exchange bureaus, and finally achieving a unified exchange rate system. Hadjimichael and others (1996, p. 43), argues that these reforms "followed many of the lessons on best practices that have emerged from the experience of developing countries". The reforms were sustained and with substantial coordinated measures taken up front, including "a significant reduction in the level and dispersion of average tariff rates and the elimination of quantitative restrictions accompanied by a major correction in the exchange rate" (ibid p. 43) and removal of the controls on most domestic prices. Some of the key reforms were (Kapur and others, 1991; Leite and others, 2000):
- A sharp, up-front devaluation: The cedi was effectively devalued by 89 percent in April 1983 from 2.75 cedis per U.S. dollar to a weighted average rate of 24.7 cedis per U.S. dollar with the introduction of a transitional multiple exchange rate system. This system was abolished in October 1983, and the exchange rate unified at 30 cedis per U.S. dollar.
- **Tariff reforms**: In 1983, the existing tariff system was replaced by a predominantly uniform tariff structure, with a duty rate of 30 percent.<sup>9</sup>
- Periodic exchange rate adjustments, 1983–86: A constant real exchange rate rule was adopted for 1983–84, with periodic adjustments based on the inflation differential between Ghana and its main trading partners. The exchange rate was devalued by 18 percent in October 1983, 15 percent in March–April 1984, 9 percent in August– September 1984, and 21 percent in December 1984. The exchange rate was devalued by another 45 percent between end-1984 and January/February 1986 to 90 cedis per U.S. dollar to achieve a real effective exchange rate depreciation.
- Foreign deposit accounts for residents and nonresidents: Authorized foreign exchange dealers were permitted to open such accounts in June 1985.
- Gradual streamlining and liberalization of the import licensing schemes: The Special Import Licenses scheme that allowed importers to import using own foreign exchange was liberalized in 1985 and removed in January 1989. As a result, "the Ghanaian trade regime went from one of tight control to one that was open by international standards" (Cook, 2000, p. 6).

<sup>&</sup>lt;sup>9</sup> The uniform tariff rate was, however, replaced by a more discriminatory four-tiered cascading structure in 1986, but the rates in each tier were subsequently lowered during the ERP period.

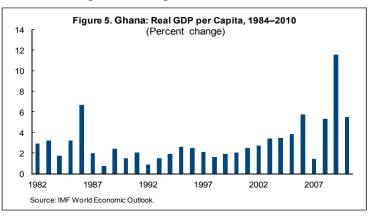
- **Dual exchange rate system introduced, September 1986**: There was one window for official transactions at a fixed rate (90 cedis per U.S. dollar), and one retail auction-based window for all other transactions. The two windows were merged in February 1987, and all foreign exchange transactions were made at the auction-determined rate.
- *Foreign exchange bureaus established, February 1988*: This largely absorbed the parallel foreign exchange market and resulted in two spot foreign exchange markets.
- Wholesale foreign exchange auction system, April 1990: The retail auction was discontinued at the same time. With licensed foreign exchange bureaus eligible to participate, the two spot-market rates were unified.
- *Interbank foreign exchange market, March 1992*: This replaced the weekly wholesale foreign exchange auction.
- *Current and capital account liberalization:* Ghana accepted the obligations of Article VIII, Sections 2, 3, and 4, of the IMF's Articles of Agreement in February 1994.
- 12. The exchange rate adjustments resulted in a significant adjustment of the official real effective exchange rate (REER). The official REER depreciated by almost 83 percent between March and December 1983, and continued to depreciate over the next decade (Figure 4).



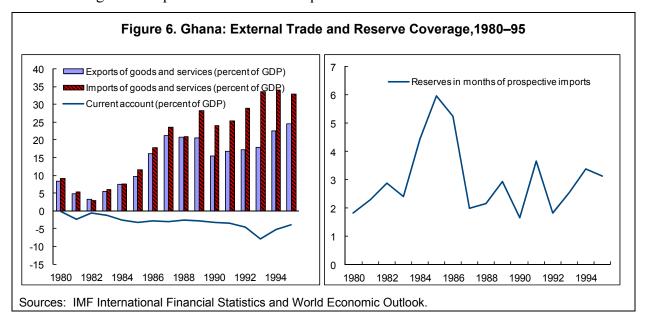
13. The economy responded quickly to the policy adjustments. GDP per capita grew by almost 3 percent in 1984, after contracting by 9 percent and 8 percent in 1982 and 1983 respectively—it has been growing steadily since then at an average rate of around 2.6 percent

a year (Figure 5). Exports and imports also picked up quickly. Exports (in U.S. dollars) grew by almost 29 percent in 1984, and at an annual average rate of 9 percent over the next

decade. As a result, Ghana's export volume grew by more than 240 percent between 1982 and 1995, and the export-to-GDP ratio increased from a low of 3.3 percent of GDP in 1982 to almost 25 percent in 1995, and, as Kapur and others (1991) found, became more diversified. Ghana's export base also broadened. Moreover, the international reserve coverage



increased quickly, from around 2.5 months of prospective imports in 1983 to almost 6 months of prospective imports in 1985, despite a sharp increase in imports during the same period (Figure 6). The improved foreign exchange situation allowed increased imports, including of raw materials, intermediate inputs, and equipment, which was essential for rehabilitating Ghana's productive base and exports.<sup>11</sup>

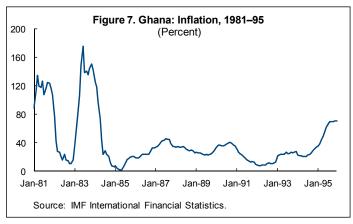


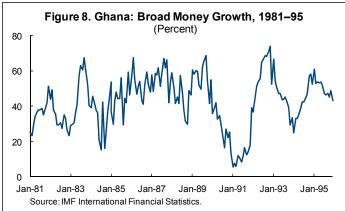
<sup>&</sup>lt;sup>10</sup> Imports (U.S. dollars) grew equally fast, by 23 percent in 1984 and 9.7 percent a year in 1985–95.

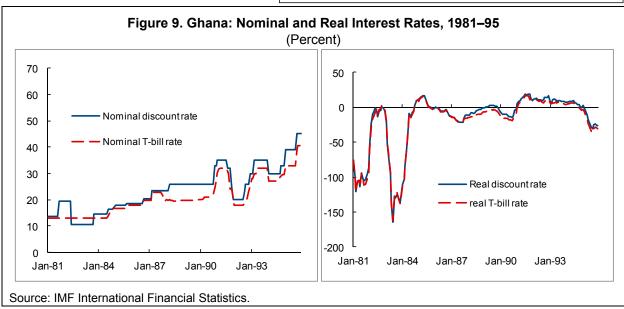
<sup>&</sup>lt;sup>11</sup> Bevan and others (1987) argue that import liberalization is essential to support exports in controlled regimes facing shortages.

#### 14. Inflation increased sharply in 1983, but that might be more due to supply shocks

than the devaluation of the official **exchange rate** (Figure 7). Ghana was hit by a severe drought in 1982–83 that caused a steep increase in food prices in 1983. In addition, in 1983 Nigeria stopped crude oil exports to Ghana and expelled over 1 million illegal Ghanaian migrants (Ocran, 2007). Moreover, broad money growth increased rapidly. peaking at almost 70 percent in September 1983 (Figure 8), and real interest rates were allowed to decline to negative 162 percent in mid-1983 (Figure 9). Following a strong recovery in agriculture and monetary tightening, inflation declined quickly in 1984, to below 6 percent at year-end, and further to only 1.5 percent in May 1985. It subsequently picked up again, however, and remained above target for the following years.

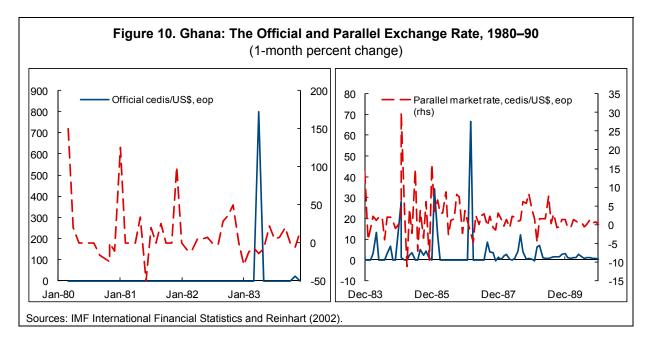


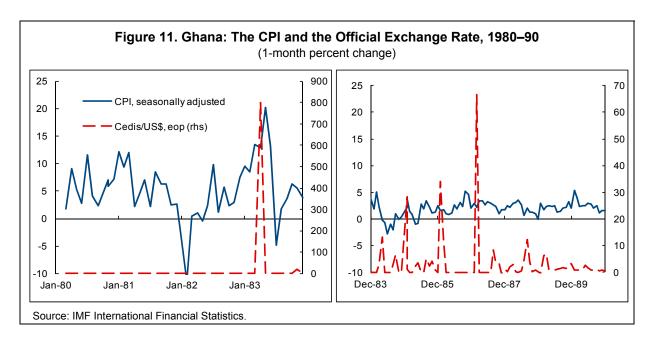




15. The inflation impact of the massive adjustment of the official exchange appears to have been limited. The 800 percent increase in the cedi/U.S. dollar rate in April 1983 was accompanied by a 118 percent appreciation of the parallel market rate between January and May 1983 (Figure 10), and a sharp decline in the one-month inflation rate (seasonally

adjusted) from June 1983 onward (Figure 11).<sup>12</sup> In general, there doesn't seem to be much of a correlation between the official exchange rate and the consumer price index (CPI) (Figure 11). This is not surprising, because most tradables were priced at the parallel market exchange rate during this period, including tradables that were imported by importers that had access to foreign exchange at the official rate (Ocran, 2007; Kapur and others, 1991).

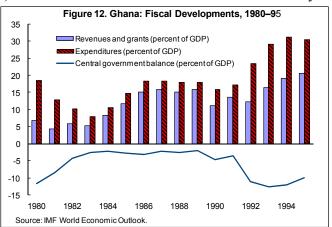




Devaluations of the official exchange rate were also associated with an appreciation of the parallel market rate in November 1985, February–March 1987, and February 1989.

16. Ghana's experience suggests that exchange rate depreciations may facilitate fiscal adjustment. Kapur and others (1991) state that the Ghanaian authorities intentionally

used devaluations to raise government revenue during 1983–86. A depreciation can have a direct positive effect on the budget when monetary policy succeeds in containing the inflation impact, aid and taxes on international trade provide a significant part of government revenue, and foreign exchange expenditure represents a smaller share of total government spending.



17. The Ghana experience also shows the importance of fiscal and monetary policies in facilitating an orderly exchange rate and trade liberalization. Kapur and others (1991) noted that up-front fiscal deficit reduction was a central feature of Ghana's adjustment strategy. They also noted that monetary policy, in contrast, was not fully supportive of the exchange rate adjustments and that monetary expansion remained high and real interest rates too low in 1985–89, and that this resulted in a larger nominal depreciation than what was needed to correct the initial overvaluation. Similarly Hadjimichael and others (1996) argue that while monetary policy might have supported the strong expansion in output after 1983, it caused inflation to remain stubbornly high; and that a more decisive reduction of inflation could have restored the private sector's confidence sooner, benefiting the economy.

#### III. KENYA: GRADUAL LIBERALIZATION BUT GROWTH RECOVERY NOT SUSTAINED

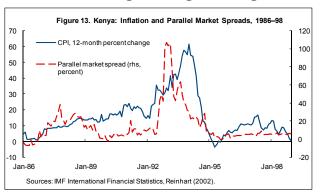
18. The Kenyan foreign exchange market was liberalized in the early 1990s. The exchange rate regime was changed from a crawling peg based on a real exchange rate rule to a duel system in 1990 with an official rate and a market rate based on foreign exchange bearer certificates. A floating exchange rate regime was adopted in October 1993. In 1994 the government removed all restrictions on current account transactions, and Kenya accepted Article VIII of the IMF Articles of Agreement. By the middle of 1995 the government had also removed many of the capital account controls (Ndung'u and Ngugi, 1999; O'Connell and others, 2010).

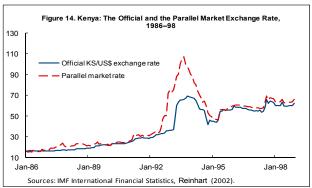
<sup>13</sup> The deficit was reduced from 11.6 percent in 1980 to 2.6 percent in 1983 (Figure 10), primarily through reduced government spending.

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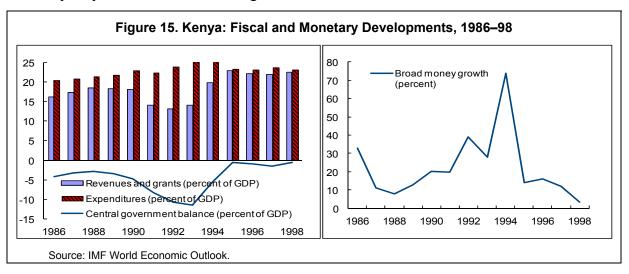
#### 19. Excess liquidity complicated the 1993 move to a floating exchange rate regime.

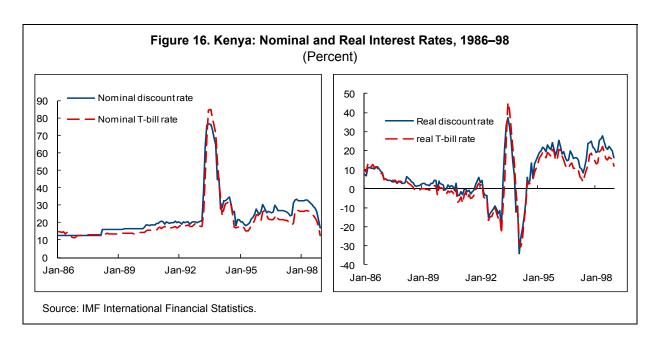
Inflation and parallel market spreads increased sharply in the months before October 1993 (Figure 13, 14). Both Ndung'u and Ngugi (1999) and Were and others (2001) argue that the temporary jump in the inflation rate was driven by excess money supply; a severe shortage of foreign exchange; the removal of price controls in the presence of inadequate supply of essential commodities; and increased government spending in the run-up to the 1992 elections (Figure 15). Notably, inflation pressure receded, and the exchange rate appreciated through 1994 as the excess liquidity dried up and nominal interest rates increased (Figure 16). With reduced inflation, nominal interest rates subsequently declined. The developments in this period led Ndung'u (2000, p. 29) to





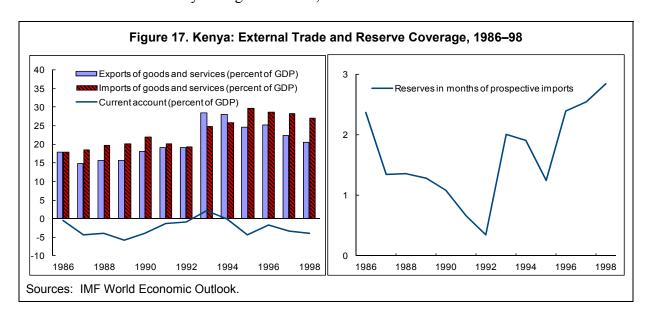
conclude that "monetary policy in Kenya is key to the determination of the path of the exchange rate, inflation, and the rate of interest." Similarly, Were and others (2001, p. 7) argue that the "experience in the 1990s seems to suggest that monetary policy played a key role in filling the gap for a nominal anchor, and when this was relaxed because of electoral greasing and cutback on foreign aid, inflation exploded...." Ndung'u (2000, p. 29, 31) also stressed the challenges for monetary policy posed by fiscal deficits and central bank credit to government, and the importance of expectations. He finds that "part of the exchange rate depreciation and accelerating inflation ... could be traced to expectations ... driven by either fear of policy reversal of ... a backlog of demand...."





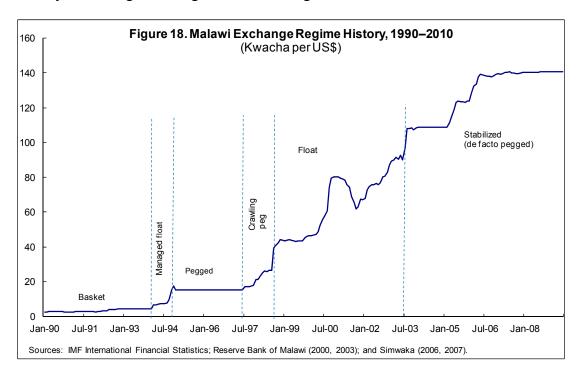
#### 20. The Kenyan economy responded quickly and favorably to the economic reforms.

Exports increased sharply and the current account improved markedly (Figure 15). By mid-1994 prices had stabilized and credibility and confidence returned (Ndung'u, 2000). Holders of foreign exchange abroad responded to the liberalized exchange rate regime, increased interest differential, positive exchange rate expectations, and renewed economic stability by bringing their funds back (Were and others, 2001). Partly as a result, the exchange rate appreciated strongly in 1994 (Figure 14), and the international reserve coverage improved sharply (Figure 17). Growth also recovered, averaging 1.2 percent in per capita terms during 1994–96 compared to -2.8 percent in 1991–93. This growth recovery was not sustained, however. Growth stalled in the latter part of the 1990s and early 2000s, partly reflecting increased economic governance concerns in the wake of the "Goldenberg scandal." Growth has been relatively strong since 2003, however.



#### IV. MALAWI: REVERTING BACK TO A CONTROLLED EXCHANGE RATE REGIME

21. Malawi has tried a number of different exchange rate regimes during the last 20 years, most lasting only a short period. It has had a basket peg (1984–94), a managed float (1994–95), a *de facto* peg (1995–97), a crawling peg (1997–98), a float (1998–2003), and another *de facto* adjustable peg or "stabilized" (2003 onward) (Figure 18). Despite having a less overvalued official exchange rate at the onset of the reforms (Table 1), Malawi reverted back to a heavily controlled exchange rate regime with periodic rationing and persistently low foreign exchange reserve coverage.



- 22. **This stop-and-go exchange rate policy has not served Malawi well**. Between 1990 and 2010, relative to most of the comparator countries, Malawi experienced (Table 2)
- *Higher inflation*. Between end-1990 and end-2010, consumer prices in Malawi increased by almost 23 percent on average each year. In the same period, the annual average increase in consumer prices was 13 percent in Uganda and 10 percent in Tanzania.
- *Higher nominal exchange rate depreciation.* Between end-1990 and end-2010, the Malawian kwacha (MK) depreciated by 98 percent while the Ugandan shilling depreciated by 87 percent, the Tanzanian shilling by 77 percent, and the Zambian kwacha (ZK) by 99 percent.<sup>14</sup>

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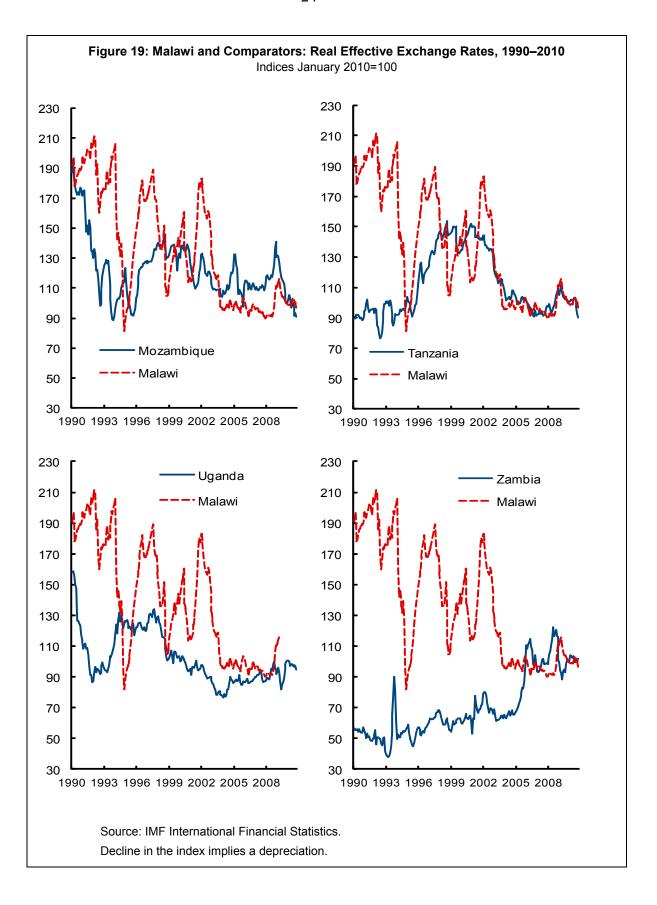
<sup>&</sup>lt;sup>14</sup> That is, the cumulative decline in the U.S. dollar/local currency exchange rate between end-1990 and end-2010.

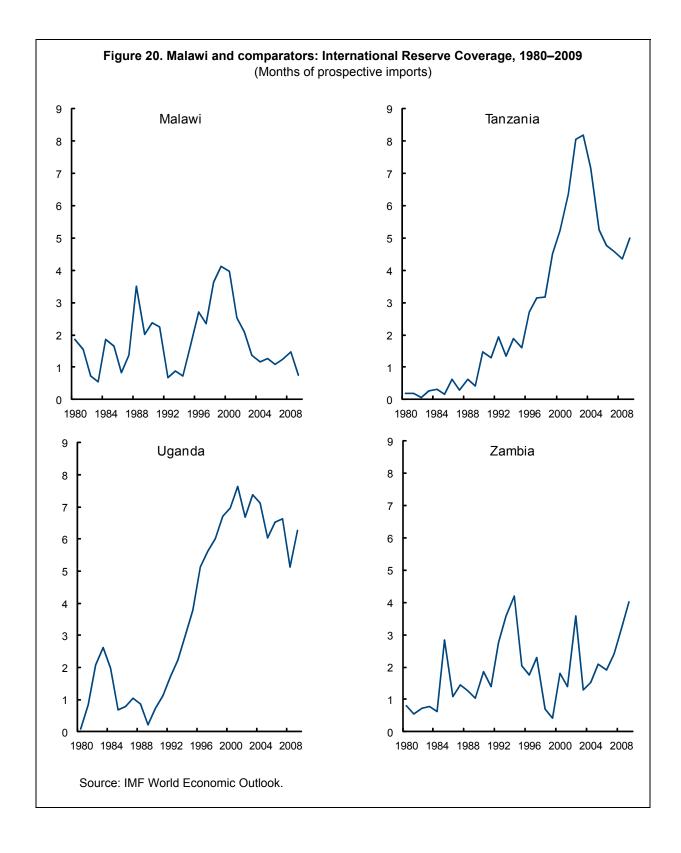
- *Higher real effective exchange rate volatility* (Table 2 and Figure 19).
- Lower growth.
- *Less economic diversification.* The non-primary sector's share of total value added increased sharply from 1995 to 2010 in Uganda, Tanzania, and Zambia (by 24 percentage points, 15 percentage points, and 10 percentage points, respectively). In contrast, it declined by almost 1 percentage point in Malawi.
- Lower foreign reserves. Because Malawi's official foreign exchange reserves at times have been extremely low (Figure 20), Malawi has experienced repeated periods with foreign exchange shortages and rationing, and large parallel market premiums.

Table 2. Regional Comparision Selected Indicators

	1991–2000	2001–10	1991–10	1991–2000	2001–10	1991–2010	
	CPI		Exchange Rate Depreciation				
(Average annual percent change)				(Average annual percent change)			
Ghana	26.3	17.0	21.6	23.5	8.8	16.1	
Kenya	16.6	7.9	12.2	10.1	0.3	5.2	
Malawi	32.3	12.7	22.5	24.5	8.6	16.6	
Mozambique	30.4	10.6	20.5	23.0	7.1	15.1	
Tanzania	19.7	6.5	13.1	12.7	5.4	9.1	
Uganda	13.3	6.5	9.9	10.9	2.5	6.7	
Zambia	68.1	15.5	41.8	34.4	3.3	18.8	
Annu	al Real Exchan	ge Rate Vola	GDP Per Capita Growth				
(Standard deviation)				(Average annual percent change)			
Ghana	20.5	5.5	21.1	1.9	3.2	2.5	
Kenya	9.1	10.8	16.6	-0.7	1.5	0.4	
Malawi	29.7	23.2	34.7	1.8	1.9	1.8	
Mozambique	13.0	6.4	10.7	4.2	5.9	5.1	
Tanzania	23.7	17.0	20.3	0.1	4.8	2.4	
Uganda	14.6	6.1	16.2	2.9	3.9	3.4	
Zambia	6.6	22.4	25.3	-2.8	3.2	0.2	

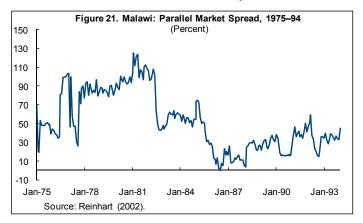
Sources: IMF World Economic Outlook and Information Notice System.





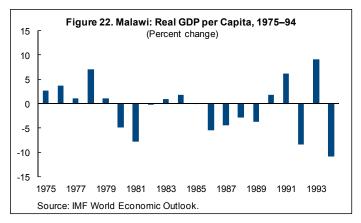
## 23. The MK was pegged to the SDR between 1975 and 1984 and to a basket of the currencies of the seven major trading partners between 1984 and February 1994

(RBM 2003). The kwacha was overvalued with large parallel market spreads during most of this period (Figure 21). The basket peg was frequently adjusted to reverse losses of competitiveness caused by a persistent inflation differential against the main trading partners (RMB, 2000). On average, the MK was devalued against the U.S. dollar by around 11 percent a year between January 1984 and end-



January 1994. Despite these large and frequent adjustments, the parallel market premium remained high, and periodic import payment arrears occurred. Throughout most of the 1970s and 1980s, Malawi maintained an exchange rate policy based on tight administrative controls, designed primarily to limit the use of foreign exchange and defend the exchange rate. In times of foreign exchange shortage and external payments arrears, quantitative restrictions were imposed, particularly on private sector imports. All foreign exchange receipts were required to be surrendered to the Reserve Bank of Malawi (RBM), and all

foreign exchange payments were subject to approval by the RBM. Most foreign exchange was allocated on a case-by-case basis, and both exports and imports were subject to licensing. Exports of a large number of goods, including maize, beans, groundnuts, and petroleum products, were prohibited. Import licenses were granted only after approval of a foreign exchange allocation and were subject to a fee. As



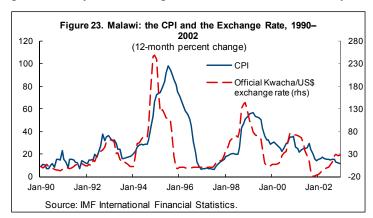
a result, economic growth suffered (Figure 22), with on average negative per capita growth—in total, GDP per capita declined by almost 15 percent between 1975 and 1994.

24. A gradual liberalization of the exchange and trade system and reorientation of exchange rate policy began in 1988 (RBM, 2000). The reliance on administrative controls had driven much economic activity outside the formal channels without stemming the inflationary pressure; it had depressed exports, and it contributed to an inefficient domestic production structure. Simwaka (2006) reports that the exchange rate had become heavily politicized with intense speculation before each devaluation, which weakened confidence in the system and resulted in a market slowdown in repatriation of export proceeds. To reverse this, the authorities initiated a process of liberalization that culminated with the adoption of a

floating, market-determined exchange rate regime in February 1994. Controls on current account payments were removed, except for a temporary list of services for which prior approval was retained for a relatively short period. To encourage exports, exporters on nontraditional exports were allowed to retain a major portion of their foreign exchange earnings; and exporters of traditional exports (tobacco, tea, d sugar) were allowed to open interestearning foreign currency deposit accounts with local banks (RBM, 2000, Lukonga, 2000). All restrictions on external current account transactions were removed, and on December 7, 1995, Malawi accepted the obligations under Article VIII of the IMF's Articles of Agreement (RBM, 2000). Authorized dealer banks were also allowed to trade foreign exchange at freely determined market exchange rates, foreign exchange bureaus were licensed and authorized to engage in spot transactions with the general public, and foreign exchange brokers<sup>15</sup> were authorized to match orders from buyers and sellers of foreign exchange on an agency basis (RBM, 2000).

#### 25 The move to a floating regime in February 1994 was accompanied by a sharp depreciation of the MK. The MK depreciated by almost 75 percent between end-January

and end-November 1994.16 It depreciated by 32.6 percent in February 1994 alone and, after a more gradual slide during the subsequent months, by another 55 percent in September– November 1994. At the same time, inflation skyrocketed—increasing from just below 20 percent in late 1993 to around 100 percent in mid-1995 (Figure 23). A number



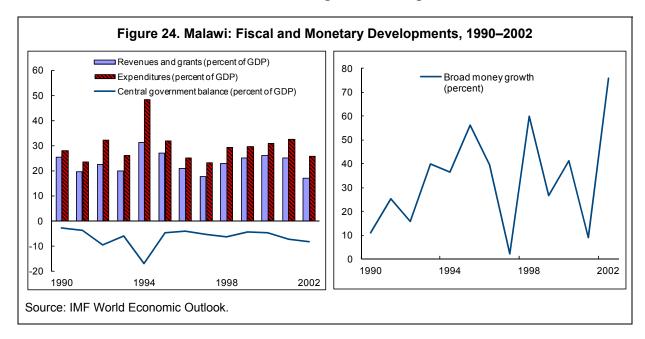
of factors contributed to this outcome.

- A substantially overvalued exchange rate at the onset of the move to a floating regime: the parallel market premium was 45 percent in January 1994—it declined rapidly to -35 percent in November 1994.
- An extraordinarily loose fiscal policy: the deficit exploded to more than 17 percent of GDP in 1994, up from 6 percent in 1993, as a result of a massive expansion of government expenditure, which increased from 26 percent of GDP in 1993 to more than 48 percent of GDP in 1994 (Figure 24).

<sup>&</sup>lt;sup>15</sup> The brokers were suspended in November 1994.

<sup>&</sup>lt;sup>16</sup> Equivalent to a 293 percent increase in the MK/U.S. dollar exchange rate.

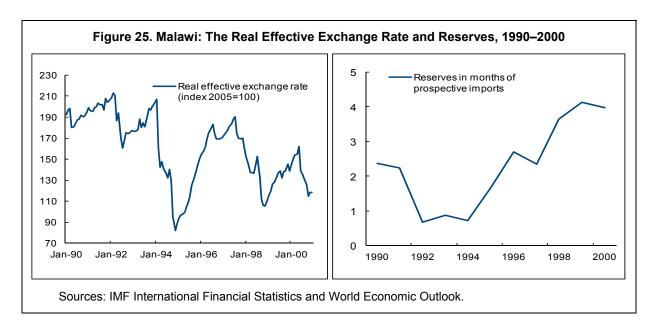
- An equally loose monetary policy: broad money grew by almost 66 percent in the 12 months to December 1994, up from below 18 percent in the 12 months to December 1993. With nominal interest rates kept fixed from mid-1993 to late 1994/early 1995, 17 real interest rates dropped fast as inflation picked up, becoming sharply negative by mid-1995, bottoming out at around -50 percent in July 1995 (Figure 26).
- A severe drought during the 1993/94 crop season: agriculture production dropped by almost 30 percent and GDP by almost 12 percent (RBM, 2000; IMF, 1997b).
- Uncertainties associated with the new government's policies. 18



26. The move in 1994 to a floating exchange rate regime also led to a sharp depreciation of the real effective exchange rate (REER), which with a lag contributed to a rebuilding of international reserves. The REER depreciated by 60 percent between January and November 1994. International reserves that were only 0.8 months of imports at end 1994 more than doubled to 1.8 months of imports at end 1995 (Figure 25).

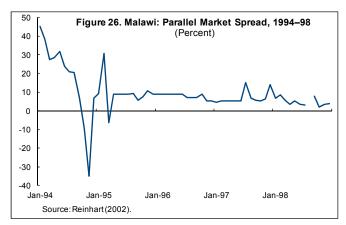
<sup>&</sup>lt;sup>17</sup> Treasury bill rates and the RBM discount rate were unchanged until September 1994, and commercial bank lending and deposit rates remained unchanged until January and March 1995 respectively (Figure 26).

<sup>&</sup>lt;sup>18</sup> Malawi's first democratically elected president, Elson Muluzi, assumed power in May 1994.



27. **The floating exchange rate regime was short lived.** By late 1994 the exchange rate had again became *de facto* pegged to the U.S. dollar. In an effort to lower the inflation rate, the exchange rate remained virtually unchanged between December 1994 and July 1997. The effort succeeded, helped by a bumper harvest in 1996: by end-1996 the inflation rate had

been brought down to below 10 percent. However, the re-pegging of the exchange rate also resulted in a sharp appreciation of the REER and a return to positive, although more moderate, parallel market premiums (Figure 26). The REER appreciated by almost 130 percent between November 1994 and July 1997, essentially reversing all of the improvements in price competitiveness achieved during the floating exchange



rate regime. Despite this, a sharp recovery in agriculture combined with substantial fiscal and monetary policy tightening (Figure 24), trade liberalization, and balance of payments support in association with a new IMF financial arrangement under the Enhanced Structural Adjustment Facility (ESAF), allowed reserves to accumulate further. The reserve coverage increased further to 3 months of prospective imports at end 1996.

Agriculture production grew by almost 40 percent in 1995 and 25 percent in 1996, reflecting favorable weather and a liberalization of agriculture production, marketing, and prices (IMF, 1997a); the fiscal deficit was brought back down to around 5 percent in 1995–96; and real money growth was -15 percent in 1995 and 1.8 percent in 1996, with the RBM real discount rate becoming positive by mid-1996, increasing further to 20 percent by end-1996 despite a sharp decline in nominal rates in the second half of 1996.

28. The overvalued, re-pegged exchange rate came under significant pressure in early 1997, partly reflecting concerns caused by the announcement of a 47 percent increase in civil service wages (IMF, 1997a). The authorities' initial response was to step up intervention in the foreign exchange market to maintain the nominal exchange rate. Because pressures did not abate, in August 1997 the authorities allowed the kwacha to gradually depreciate to regain external competitiveness and facilitate a recovery of international reserves. At the same time, they lowered the RBM discount rate by 500 basis points, adding to the pressure on the exchange rate (Figure 27). Making things worse, the ESAF-supported program went seriously off track, mainly because of fiscal slippages—the overall budget deficit for 1997/98 reached 11½ percent of GDP, exceeding the program target by more than 4 percentage points. On top of that, driven by the fiscal expansion, broad money increased by a staggering 54 percent in January 1998 alone. 20, 21 In total, the nominal exchange rate depreciated by almost 42 percent between end-June 1997 and end-July 1998, and the REER by 19 percent. As a result of the depreciation, monetary loosening, and the small maize harvest in 1997, inflation picked up again.<sup>22</sup> The 12-month headline inflation rate increased from around 7 percent in mid-1997 to 20 percent by March-1998, and peaked above 56 percent in March 1999 (Figure 23).<sup>23</sup>

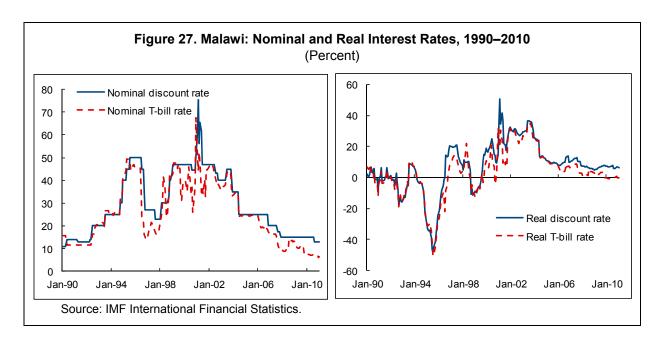
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<sup>&</sup>lt;sup>20</sup> In seasonally adjusted terms. The increase in the unadjusted series was 46 percent. Broad money growth continued to be high during the first part of 1998, growing at a pace of around 40 percent a year on average between January and July 1998 (average one-month growth at annual rate in seasonally adjusted series).

<sup>&</sup>lt;sup>21</sup> The RBM did raise the discount rate by 7 percentage points and allowed the T-bill rate to increase by more than 20 percent from late 1997 to April 1998, which helped to temporarily reverse the decline in the real rates (Figure 26).

<sup>&</sup>lt;sup>22</sup> Agriculture production grew by only 0.1 percent in 1997, and solely because of the large estates. However, smallholder production declined by 3.5 percent.

<sup>&</sup>lt;sup>23</sup> At the same time, inflation was low in neighboring countries: in Mozambique averaging 3 percent and in Zambia declining from 16 percent to 5 percent from mid-1997 to end-2000.



- 29. The exchange rate regime was changed again in August 1998, when the MK was devalued 32 percent and allowed to float. The devaluation was triggered in part by a decline in tobacco prices and the depreciation of the South African rand and Zimbabwe dollar that contributed to an 11 percent appreciation of the Malawi REER in June–July 1998 (RBM 2000, 2003). The exchange rate regime change in August 1998 resulted in a 28 percent depreciation of the REER between end-July and November 1998. Partly as a result, international reserves rose rapidly. Following the devaluation, the MK was allowed to be market determined (RBM, 2000, 2003; Simwaka, 2006, 2007), and exchange market participants were free to quote their own rates (IMF, 1998). From May 2000 onward, the RBM stopped quoting an exchange rate and further restricted its interventions (Fanizza, 2000).
- 30. To stabilize the currency after the decision to let it float, the RBM tightened monetary policy. Following a 23 percent decline in broad money (seasonally adjusted) in July 1998, between August 1998 and January 1999 the RBM increased the discount rate by 17 percentage points and allowed the T-bill rate to increase by 24 percent to almost 48 percent in August 1998. The effort succeeded, helped by a solid tobacco season, the stabilization of the currencies of major trading partners (Simwaka, 2006), and the aggressive devaluation in August 1998. The MK stabilized and fluctuated within a narrow band for most

<sup>24</sup> Reserves rose to 4 months of imports by end-1998 and further to 4.5 months of imports at end-1999, up from 2.6 months at the end of 1997.

<sup>&</sup>lt;sup>25</sup> Until August 1998, an informal understanding had been in place between the RBM and the commercial banks that the latter were to quote their rates within 2 percent of the reference rate quoted by the RBM.

of 1999. This helped reduce inflation somewhat. Nonfood inflation was reduced to around 40 percent in late 1999 and early 2000, from almost 67 percent at end-1998. <sup>26</sup> However, because the inflation differential remained large, the REER again started to appreciate fast—it appreciated by 48 percent between November 1998 and May 2000.

- 31. The MK came under increased pressure again in the first part of 2000. It depreciated by 70 percent against the U.S. dollar between March and November 2000, reflecting foreign exchange hoarding by some exporters, a collapse of tobacco prices, delays in donor support (Simwaka, 2006), the effect on exports and imports of the sharp REER appreciation between November 1998 and May 2000, an appreciation of the U.S. dollar against other currencies, and a monetary policy loosening.<sup>27</sup> As a result, inflation again picked up, peaking at more than 35 percent in December 2000, despite moderate food prices.<sup>28</sup>
- 32. Subsequently, following discussions with IMF staff, the authorities again embarked on an effort to stabilize the exchange rate by tightening monetary policy. The RBM started mopping up excess liquidity and allowed interest rates to rise: the yield on Treasury bill rates was allowed to rise by almost 42 percentage points between September and December 2000 to 67 percent,<sup>29</sup> and the RBM discount rate was increased to more than 75 percent in February 2001,<sup>30</sup> up from 44.5 percent in November 2000. The effort succeeded. The nominal exchange rate stabilized around October–November 2000 and started to appreciate in February 2001. The foreign exchange situation in the market improved substantially in early 2001 with the receipt of some donor inflows coupled with (i) higher tobacco prices that helped dampen any speculative pressure on the MK (Simwaka, 2006); (ii) the monetary tightening in late 2000–early 2001; (iii) increased RBM sale of foreign exchange; <sup>31</sup> and (iv) a sharp decline in world oil prices.<sup>32</sup> The MK appreciated by almost 30 percent against the U.S. dollar and 51 percent in real effective terms between January and September 2001, which helped reduce inflation to 14 percent by end-2001.

<sup>26</sup> Overall inflation declined to around 30 percent by end-1999 and further to below 25 percent by mid-2000 as the solid 1999 harvest helped contain food price inflation.

<sup>&</sup>lt;sup>27</sup> Broad money grew by 52 percent between April and November 2000, the RBM discount rate was lowered by 300 basis points in July–August 2000, and T-bill rates were allowed to decline by almost 20 percentage points between May and September 2000.

<sup>&</sup>lt;sup>28</sup> Nonfood inflation rose sharply, peaking at almost 62 percent in April 2001, up from below 40 percent in late 1999, possibly also reflecting the sharp increase in world oil prices in 2000.

<sup>&</sup>lt;sup>29</sup> 32 percent in real terms.

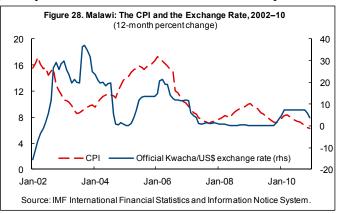
<sup>&</sup>lt;sup>30</sup> 40 percent in real terms.

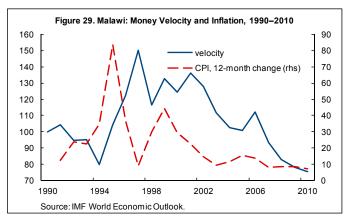
<sup>&</sup>lt;sup>31</sup> International reserves declined by US\$40 million, or from 4.3 months of imports to 2.8 months of imports during 2001, reflecting in part the December 2000 approved PRGF-supported program going off track: the first and only review was delayed to October 2003.

<sup>&</sup>lt;sup>32</sup> Oil prices declined by 42 percent in the 12 months to November 2001.

#### 33. The appreciation in 2001 was quickly reversed. The kwacha came under pressure

again in October 2001 when the government had to embark on a large emergency maize operation (IMF, 2002). A suspension of balance of payment support by most donors toward the end of 2001(IMF, 2002), the effect on exports and imports of the sharp REER appreciation earlier in 2001, and terms of trade deterioration reflecting increases in the prices of food and oil imports exacerbated the problem.<sup>33</sup> In total, the MK depreciated by 36 percent against the U.S. dollar between end-September 2001 and end-July 2003.34 Monetary policy remained tight, however, with moderate money growth and high real interest rates.<sup>35</sup> As a result, overall inflation continued to decline, bottoming out at below 9 percent in June 2003





(Figure 28). The effort to contain inflation pressure was helped by a continued increased demand for real kwacha balances, as indicated by a persistent slowdown in velocity from 1998 onward, reflecting in part lagged responses to the sharp decline in inflation from 1999 to late 2001 (Figure 29).

# 34. The exchange rate regime was changed again in August 2003, when the authorities decided to stabilize the exchange rate at MK108 to the U.S. dollar (Simwaka, 2006). Following an 11.6 percent increase in the kwacha/U.S. dollar rate in August 2003 on top of a 7.7 percent increase in July 2003, the kwacha/U.S. dollar exchange rate remained largely unchanged until March 2005. The July–August 2003 devaluation contributed to a sharp increase in nonfood prices, which jumped almost 8 percent between June and September 2003, causing the 12-month growth rate to stay high for the next 12 months. However, besides this first round effect, there are no indications that the 20 percent

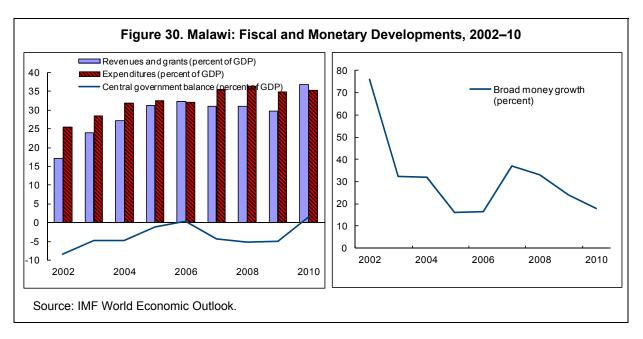
<sup>33</sup> International reserves declined further to 1.5 months of imports at end-2003 from 2.8 months at end-2001.

<sup>&</sup>lt;sup>34</sup> The REER depreciated by 35 percent during the same period, and by a further 20 percent before bottoming out in February 2004.

<sup>&</sup>lt;sup>35</sup> Although T-bill rates were allowed to decline by more than 10 percentage points between May and December 2002, and the RBM discount rate was lowered by 6.8 percentage points between June and October 2002, the real T-bill and discount rates averaged more than 25 percent between end-2001 and June 2003.

July-August increase or the pegging of the exchange rate after August 2003 had much impact on underlying inflation—average monthly growth in nonfood prices for December 2002-June 2003 and for October 2003-March 2005 were almost identical at around 1 percent.<sup>36</sup> From the data it seems that sharply reduced money growth, fiscal consolidation,<sup>37</sup> continued high real interest rates,<sup>38</sup> and gradually better anchored inflation expectations prevented another inflation spiral. While interest rates were allowed to decline sharply from late 2003 to 2005, they remained high by most standards (Figure 27).

34



With precariously low reserves, the RBM increasingly had to use informal 35. administrative procedures, including moral suasion to fix the exchange rate. The surrender requirement on smallholders' proceeds from the tobacco auctions was increased to 100 percent in 2004 (IMF, 2004),<sup>39</sup> and access to foreign exchange was rationed selectively under the RBM Guidelines for Foreign Exchange Trading Activities issued in April 2005 (IMF, 2006). By early 2005 a backlog of foreign exchange invoices at commercial banks had emerged. The foreign exchange shortage was exacerbated by the 2005 food crisis, higherthan-envisaged oil prices, lower tobacco prices, and a reluctance of exporters to repatriate

<sup>&</sup>lt;sup>36</sup> 13–14 percent at annual rate.

<sup>&</sup>lt;sup>37</sup> Broad money growth was reduced from more than 75 percent in 2002 to slightly above 30 percent in 2003 and to 16 percent in 2005. In the same period, the fiscal deficit was reduced from more than 8 percent in 2002 to around 1 percent in 2005.

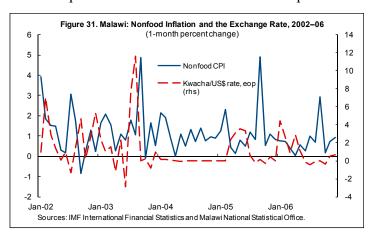
<sup>&</sup>lt;sup>38</sup> The nominal discount rate was increased further from 40 percent to 45 percent in June 2003—the real discount rate averaged almost 30 percent in 2003.

<sup>&</sup>lt;sup>39</sup> In addition, 60 percent of the foreign exchange proceeds from non-smallholder tobacco, sugar, and tea exports had to be surrendered to the commercial banks. The exporters were allowed to keep 40 percent in foreign currency deposit accounts.

earnings (IMF, 2006). In response to the shortages, the RBM allowed the kwacha to increase by 12 percent between February and July 2005, and by a further 11 percent in between November 2005 and January 2006. The strategy succeeded, and the backlogs were cleared by mid-2006 (IMF, 2007).

## 36. **Despite the sizable 2005–06 depreciation, underlying inflation continued to decline.**<sup>40</sup> The average one-month nonfood price inflation rate declined from 1 percent in

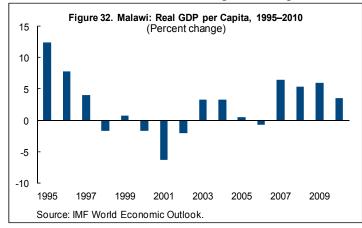
October 2003–August 2004, to 0.9 percent in October 2004–August 2005, and to 0.6 percent during the same period in 2005–06 (Figure 31).<sup>41</sup> As in 2003–04, it seems the continued moderate money growth, fiscal consolidation,<sup>42</sup> high real interest rates, and better-anchored inflation expectations helped prevent the exchange rate adjustments from resulting in a renewed inflation spiral.



#### Growth suffered during this period of stop-and-go exchange rate policies

(Figure 32). After a brief growth rebound in 1995–97, largely because of booming agriculture production from favorable weather and a liberalization of agriculture production,

marketing, and prices, per capita growth again turned largely negative—real per capita GDP declined by almost 5 percent between 1997 and 2006, or on average by 0.5 percent annually. Improved macroeconomic management, and the success of Malawi's fertilizer support program, has succeeded in restoring positive per capita growth in recent years (Figure 32).



 $<sup>^{40}</sup>$  The 12-month headline inflation rate increased during 2005, though, as the 2004/05 food crises pushed up food prices.

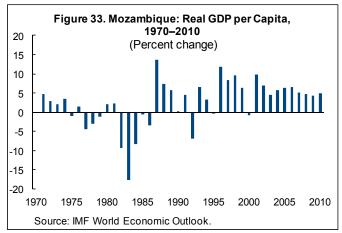
<sup>&</sup>lt;sup>41</sup> 13 percent, 11 percent, and 8 percent at an annual rate, respectively.

<sup>&</sup>lt;sup>42</sup> Broad money growth was around 20 percent, and the fiscal deficit was reduced only 0.4 percent in 2006.

#### V. MOZAMBIQUE: FROM CIVIL WAR TO SUSTAINED HIGH GROWTH

38. In the mid-1980s, Mozambique's economy was in collapse as a result of civil war, weak economic policies, and excessive government intervention. During the first 10 years

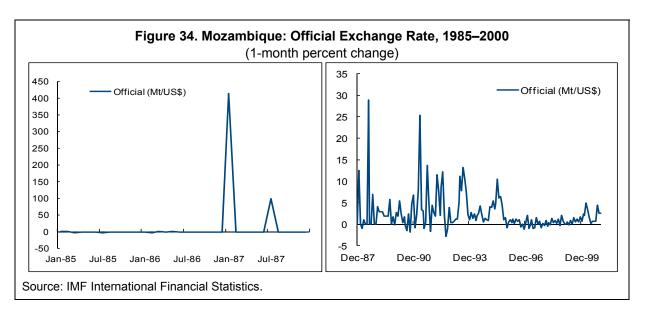
after independence in 1975, Mozambique had a centrally planned economy with extensive price controls, nationalization of all land and banks, government appointed administrators of more than 2,000 commercial farmers, and industrial companies abandoned by the many Portuguese settlers who had left the country (Arndt, 1999). The exchange rate was fixed by the government and rarely adjusted, despite deteriorating economic conditions and



increasing internal and external imbalances. As a result of this, the price controls, inconsistent fiscal and monetary policies, and the civil war, by 1986 Mozambique's macroeconomic imbalances had become severe: real per capita income had fallen by 34 percent since 1981 (Figure 33); industrial capacity utilization was low (just 20–30 percent according to Arndt, 1999); inflation was high (around 41 percent in 1986), despite the fact that products subject to price controls constituted around 70 percent of GDP (Arndt,1999); the fiscal deficit was large (12 percent of GDP in 1986); the international reserve coverage was down to only 0.4 months of prospective imports; and the exchange rate in the parallel market was about 40–50 times higher than the official exchange rate (Fabrizio, 1998 and 2001; Tarp and others, 2002). Today, Mozambique looks quite different: GDP growth averaged 7.4 percent a year in 1987–2010; per capita income has increased 243 percent since the decline ended in 1986 (Figures 1, 33); and inflation has been moderate.

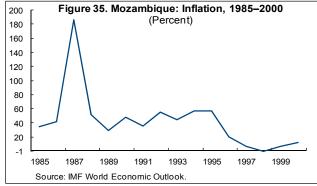
- 39. In 1987, Mozambique embarked on a fundamental shift toward market-based economic policies under the IMF/World Bank supported Economic Rehabilitation Program (ERP). Major economic reforms undertaken include unification of the exchange rate; liberalization of external trade; reform of the import tariff structure and of the regime of exemptions; privatization of a large number of public enterprises; elimination of most price controls; tripartite wages negotiations; and reforms in the financial sector, including the liberalization of interest rates. As documented by Fabrizio (1998 and 2001), the adjustment toward a marked determined official exchange rate was gradual:
- The metical was devalued by 80.5 percent, from Mt 39 per U.S. dollar to Mt 202 per U.S. dollar in January 1987, and the exchange rate peg was changed from a basket of six currencies to the U.S. dollar. The metical was devalued by another 50 percent in July 1987, to Mt 404 per U.S. dollar. Devaluations continued at irregular intervals until April 1989, when a system of monthly devaluations was instituted (Figure 34).

- The exchange rate peg was changed again to a basket of 10 currencies in December 1989.
- A market for foreign exchange was introduced, where commercial banks were authorized to transact with the public in October 1990. After another substantial devaluation in mid-1991, foreign exchange transactions were increasingly shifted to this official market.
- The official central bank rate and the market rate vis-à-vis the public were unified in April 1992, but a special more appreciated rate was introduced for tied aid. This rate was abolished in June 1993, and the official exchange rate became fully market determined. However, a significant spread between the official and parallel rate temporarily reappeared in early 2000, peaking at 10 percent in March 2000, in the wake of severe floods that affected the country in the beginning of that year.
- The banking system was partially privatized after 1995, exchange bureaus were legalized, and measures were taken to liberalize the current account of the balance of payments.

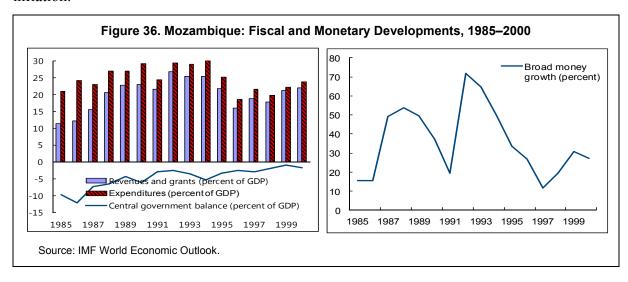


40. Inflation sharply increased in 1987 as a result of the removal of most price

controls, the large fiscal deficit of 1986, a sharp increase in money supply, and the large devaluation of the currency (Figure 35). The official exchange rate continued to depreciate markedly; and inflation remained relatively high until 1996, driven mainly by excessive monetary expansion, supply shocks, and continued large fiscal deficits. A

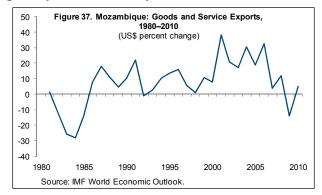


significantly tighter macroeconomic policy stance with a marked reduction in the fiscal deficit and, from 1995 onward, money growth helped stabilize the metical and sharply reduce inflation.

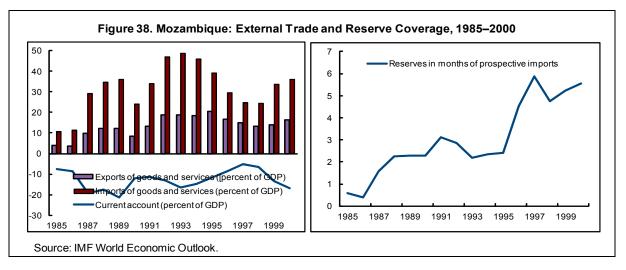


### 41. Mozambique's economy responded quickly and favorably to the economic

reforms. Growth picked up sharply, to almost 15 percent in 1987, and remained high for most of the subsequent years, averaging more than 7 percent a year (5.4 percent in per capita terms) over the last 24 years (Figure 33). Exports also picked up sharply. The U.S. dollar value of exports and services grew by 18 percent in 1987; and export growth remained high for most of the subsequent years, averaging 12.4 percent



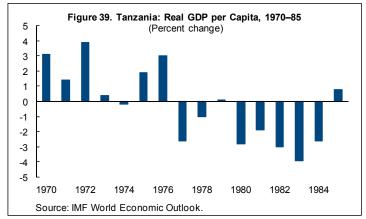
in 1987 and 2010 (Figure 37). This, together with a sharp increase in aid, facilitated an even sharper increase in imports and a substantial rebuilding of international reserves (Figure 38).



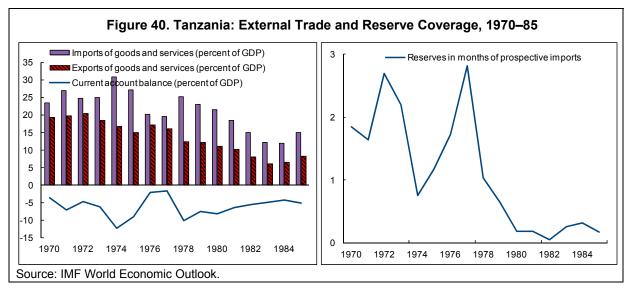
### VI. TANZANIA: FUNDAMENTAL REFORMS LEADING TO HIGH GROWTH AND LOW INFLATION

#### 42. Tanzania was in severe economic distress in the first half of the 1980s, with

negative per capita growth, declining exports and imports, widespread shortages and high parallel market spreads, and high **inflation** (Figures 39, 40, 43, 44). "Agricultural production, the mainstay of the economy, had been declining steadily since the 1970s. and exports of cash crops, which traditionally accounted for the bulk of foreign exchange earnings, had



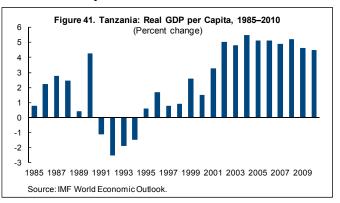
fallen by half between 1970 and 1985. A foreign exchange shortage led to a precipitous drop in imports, which in turn caused a crisis in the manufacturing sector, which lacked raw materials and spare parts" (Nord and others, 2009, p.1). 43 As a result, imports through official recorded channels declined from around 25 percent of GDP in the 1970s to only 12 percent of GDP in 1983 and 1984; and exports declined from around 17 percent in the 1970s to only around 6 percent in 1983 and 1984. During the same period, capital formation declined from an average of around 35 percent of GDP in the 1970s to around 20 percent of GDP in the mid-1980s, government revenue and expenditure declined, and GDP per capita growth turned negative. By 1996 Tanzania "had gone beyond the crisis sphere; it had long entered a destruction phase, where normal economic relations within the "official sector" had all but disappeared" (Edwards, 2012, p. 30).



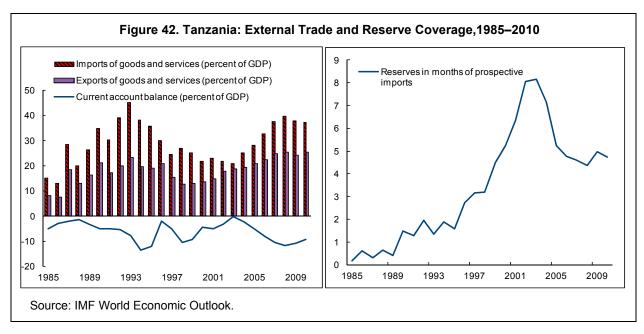
<sup>&</sup>lt;sup>43</sup> International reserves averaged less than one week of prospective imports in the first half of the 1980s.

### 43. Today, Tanzania's economic situation is radically different. Inflation has been in the

single digits for most of the last 12 to 13 years, averaging only 6.8 percent in 2000–10. Economic growth has been strong, averaging 4.5 percent per capita since 2000—real GDP per capita has almost doubled since the mid-1980s (Figure 41). Exports and imports (as a percent of GDP) have increased sharply, as have foreign exchange reserves (Figure 42). Exports have also become

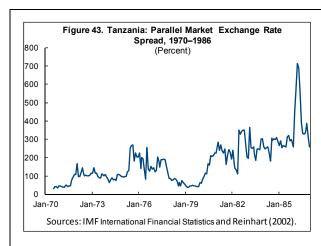


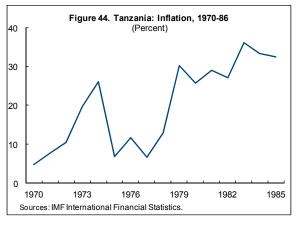
more diversified, with particularly rapid growth in exports of gold and manufacturing goods. During the same period, Tanzania's Human Development Index ranking improved from only 89 percent of the SSA average in 1995 to equal the SSA average in 2010 (UNDP, 2012).



44. Throughout the 1970s and the early 1980s, the exchange rate was kept virtually unchanged, with a growing parallel market premium. The premium increased from around 40 percent in 1970 to about 250 percent in 1980–85, peaking at over 700 percent in March 1986 (Figure 43). "The authorities devalued the official exchange rate several times in the first half of the 1980s, but because the effect of these devaluations was more than offset by high inflation, the parallel market thrived" (Nord and others, 2009, p. 10). "Loss-making public enterprises and large budget deficits were financed by the printing press, causing annual inflation to rise above 30 percent in the first half of the 1980s" (Nord and others, 2009, p. 3; Figure 44). Foreign exchange became increasingly scarce; and payment arrears mounted, leading to extensive licensing and rationing. "Producers of export cash crops had to sell their products to marketing parastatals that offered prices that did not give them enough incentives to produce more. Exporters of other goods had to surrender their

foreign exchange earnings and were subjected to a cumbersome and opaque system of export permits that required them to obtain a license for each consignment. Similarly, all imports were regulated through administrative allocations of foreign exchange and an import licensing system" (Nord and others, 2009, p.8).





45. In 1986, Tanzania embarked on a comprehensive Economic Recovery Program (ERP) aimed restoring economic stability and accelerating structural reforms "The center piece of the program was a large devaluation of the shilling" (Edwards, p. 29). Measures were also undertaken "to address the incentive structure in order to stimulate growth by gradually increasing producer prices, reorganize public enterprises and removing subsidies" (Mwase and Ndulu, 2008, p. 428). Between 1986 and mid-1993, "Tanzania gradually eliminated market and policy distortions in the external sector by removing import restrictions, adjusting the exchange rate regularly, progressively reducing the foreign exchange surrender requirements, and reforming export marketing" (Nord and others, 2009, p. 8). Mwase and Ndulu (2008) characterized this period as one of "softening of controls" in contrast to the 1967–85 strong control regime and the 1995-to-date market-oriented regime. A broad goal of the first round of reforms, according to Edwards (2012), was to get prices right.

# The exchange rate regime was gradually transformed between 1986 and 1993 from a peg with a large parallel market premium to a unified managed float:

• A crawling peg was adopted in 1986. "The objective was to depreciate the real exchange rate of the shilling gradually and thus gradually reduce the parallel market premium to give protected sectors time to adjust to market forces" (Nord and others, 2009, p. 10). The nominal exchange rate was devalued by 60 percent between March and June 1986, resulting in a depreciation of the REER by 50 percent. A

number of large adjustments were made over the next several years.<sup>44</sup> In total, between March 1986 and mid-1992 the nominal exchange rate was devalued by around 95 percent,<sup>45</sup> resulting in a REER depreciation of almost 87 percent. During the same period, the parallel market premium was reduced from 700 percent to below 30 percent.

- Foreign exchange bureaus and foreign currency deposit accounts in domestic banks were introduced in 1992 (IMF, 1994b; Rutasitara, 2004; Nord and others, 2009). The bureaus were authorized to buy and sell foreign exchange at freely negotiated rates, which effectively legalized the parallel market. Nord and others (2009, p. 11) report that "the volume of transactions carried out by bureaus quadrupled within a year—from about US\$100 million in 1992 to about US\$400 million in 1993—financing nearly 20 percent of total commodity imports."
- The official and parallel market rate was unified in mid-1993, and current account transactions were fully liberalized. A weekly foreign exchange auction system was introduced, and the official exchange rate was guided by the average rate from these auctions (IMF, 1994b). Since then, the Bank of Tanzania's "participation in the foreign exchange market has been mainly to mop up aid-related liquidity injections and to smooth out temporary fluctuations in the exchange rate" (Nord and others, 2009, p. 11).
- An interbank foreign exchange market (IFEM) replaced the auction system in 1994 (Rutasitara, 2004).
- The surrender requirement on export proceeds and other export restrictions were gradual removed. Exporters were allowed to retain an increasing share of their export proceeds to finance their import requirements from 1985/86 onwards, and by 1993/94, the foreign exchange surrender requirement had been dropped altogether. By that time, the export licensing system and exporting company registration requirement also had been eliminated. The remaining export restrictions had been eliminated by the end of 1999 (Kanaan, 2000).

In total, from the start of the reforms in March 1986 to the unification of the official and parallel market rate in mid-1993, the official Tanzania shilling/U.S. dollar rate was increased by almost 2,700 percent (equivalent to a depreciation of almost 97 percent).

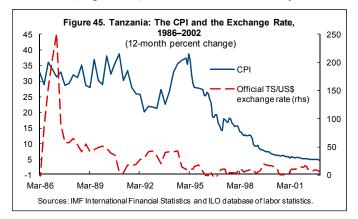
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<sup>&</sup>lt;sup>44</sup> Including devaluations of 8.5 percent in December 1987 and January 1988, 18.9 percent in November 1988, 19.1 percent in December 1989, 8.2 percent in May 1991, 14.8 percent in March 1992, and 7.7 percent in July1992.

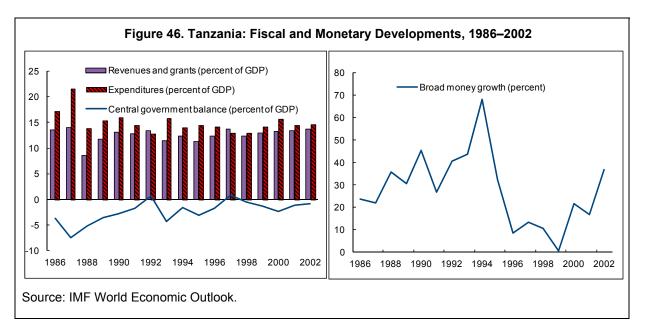
<sup>&</sup>lt;sup>45</sup> Equal to almost a 2,000 percent increase in the TSh/U.S. dollar exchange rate.

## 47. This massive depreciation of the official nominal exchange rate appears, however, to have had limited impact on inflation (Figure 45). With moderate money

growth (Figure 46) and solid fiscal consolidation (Figure 46), 46 the headline inflation rate declined from around 30 percent in early 1986 to around 22 percent in mid-1992, despite a 1700 percent increase in the official shilling/U.S. dollar rate. During the same period, the parallel market shilling/U.S. dollar rate increased only 340 percent, thanks to tight monetary and fiscal policies—at times large

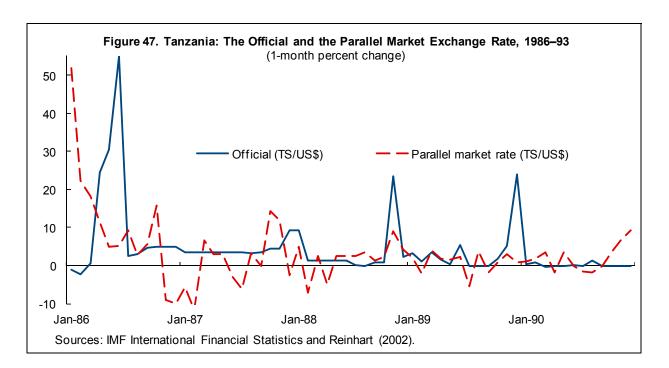


devaluations of the official exchange rate were followed by a slowdown in the depreciation of the parallel market exchange rate (Figure 47).<sup>47</sup>



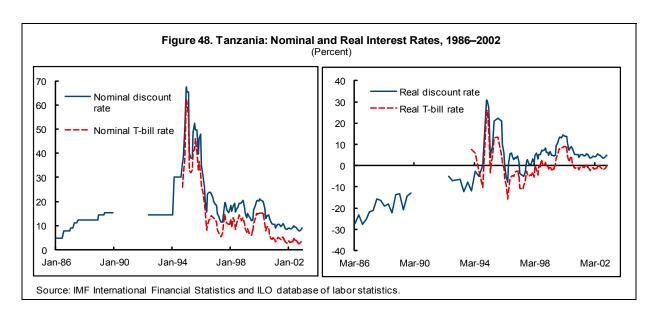
<sup>&</sup>lt;sup>46</sup> Broad money growth averaged around 30 percent a year during this period, while the fiscal deficit was reduced from 8.3 percent of GDP in 1987 to 1.6 percent of GDP in 1992.

<sup>&</sup>lt;sup>47</sup> E.g., in June 1986, December 1987–January 1988, June 1989, and December 1989.



- 48. **Inflation subsequently picked up, however, peaking at around 38 percent in early 1995.** The inflation pickup appears to have been caused by a severe drought in 1994<sup>48</sup> and by a temporary fiscal and monetary loosening: the fiscal deficit increased from 1.6 percent of GDP in 1992 to 8.2 percent in 1993, and stayed around 5 percent in 1994 and 1995; and broad money growth increased sharply, peaking at almost 70 percent in 1994 (Figure 46).
- 49. Headline inflation declined rapidly from early-1995, reaching single-digit levels in early 1999. This largely was due to improved control over money supply brought about by interest rate liberalization, improved fiscal management, reforms of the state-owned enterprise system, and the cleanup of the banking system (IMF, 1996c; Nord and others, 2009). Interest rates were liberalized in 1991, and T-bill auctions were introduced in August 1993 as an instrument to manage liquidity, provide a market-determined reference rate, and provide a less inflationary way of financing the budget (Nord and others, 2009). Real interest rates, which had been heavily negative in the 1980s and early 1990s, subsequently rose sharply, peaking at around 30 percent in December 1994 and early 1995 and remaining high until January 1996 (Figure 48). At the same time, broad money growth was sharply reduced—from almost 70 percent in 1994 to 32 percent in 1995 and further to only 8.7 percent in 1996 (Figure 46).

<sup>&</sup>lt;sup>48</sup> While food prices increased by almost 40 percent from 1993 to 1994, nonfood prices increased by 25 percent.



- 50. Consistent with the above, Mwase (2006) found the exchange rate pass-through to consumer inflation in Tanzania to be low during 1990–2005. She found that on average a 10 percent devaluation was associated with a 0.05 percent increase in inflation after a two-quarter lag. Mwase also found that the pass-through had decreased from a low level in the early 1990s to essentially zero from mid-1990s onward when the Tanzania shilling was floating. Supporting this, she found no evidence of Granger causality from the exchange rate to inflation. This decline in the pass-through was attributed to improvements in monetary policy implementation, higher productivity, increased competition, and a decrease in import tariffs following the liberalization of the economy in the context of the structural adjustment programs. This is consistent with the findings by others that the extent of exchange rate pass-through, and speed of adjustment of domestic prices, depends to a large extent on the prevailing macroeconomic environment, <sup>49</sup> including because the pricing power of firms declines in a low inflation environment (Taylor, 2000).
- 51. Per capita growth responded strongly to the initial reforms and has been increasingly positive since 1995 (Figure 41). Following the initial sharp recovery, growth turned negative in 1991–94, as the "adherence to the reform process waned" (Mwase and Ndulu, 2008, p. 434; see also Edwards, 2012) and key bottlenecks that prevented the realization of gains from other reforms were not addressed (Mwase and Ndulu, 2008, see also Robinson, Gaertner, and Papageorgiou, 2011, p. 23). The pace of reforms picked up in the mid-1990s. Starting in 1994, "the authorities gradually lowered and rationalized tariff rates, liberalized foreign direct investments, and kept the exchange rate flexible" (Nord and others, 2009, p. 9). These reforms paid off with the liberalization of the exchange and trade regimes, having a dramatic impact on Tanzania's export performance (Nord and others 2009,

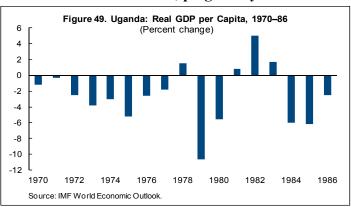
<sup>49</sup> See among other Yonger (1992), Goldfajn and Werlang (2000), Choudhri and Hakura (2001), and Baqueiro and others (2002).

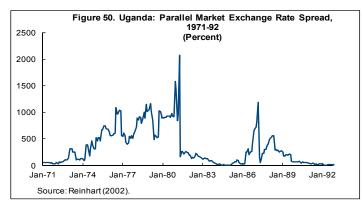
p. 3). "Unifying the exchange rate and liberalizing external trade allowed the private sector to trade freely, fueling an export boom that restored Tanzania's foreign exchange reserves. Wholesale restructuring of the financial sector, including the licensing of numerous foreign banks provided financing for private investment, while bankrupt public enterprises no longer had access to credit. Public finances were subjected to stricter discipline. As a result, inflation came down. These successes unleashed a virtuous cycle. Private investment, domestic and foreign, fueled economic growth, which in turn boosted tax revenues" (Nord and others 2009, p. 3). Echoing this, Robinson, Gaertner, and Papageorgiou, (2011, p. 22) argued that "Tanzania's growth take-off was spurred by several key factors, including the significant structural changes that occurred as the basic institutions of a market economy—a private banking system, the unified exchange rate, and price liberalization—were introduced."

#### VII. UGANDA: FROM ECONOMIC DISTRESS TO HIGH GROWTH AND LOW INFLATION

52. In the early 1980s Uganda was in severe economic distress, plagued by a

seriously overvalued exchange rate, and negative growth. Per capita income declined on average by around 3.4 percent a year between 1970 and 1980 (Figure 49). Barungi (1997, p. 1) commented that "prior to 1981, Uganda's economy went through a period of decay." Agricultural producer prices and the official exchange rate and were kept practically fixed throughout the 1970s despite high inflation (Sharer, De Zoysa, and McDonald, 1995), and the official exchange rate was consistently overvalued (Figure 50). The parallel foreign exchange market premium averaged 800–900 percent in 1979–80, peaking at a whopping 2100 percent in May 1981. As a result, "significant damage was done to the competitiveness of the economy" (Sharer, De Zoysa, and McDonald, 1995, p. 1). According to



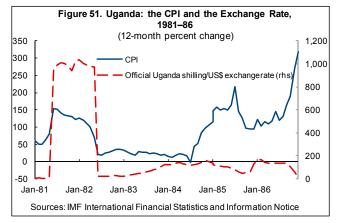


Sharer, De Zoysa, and McDonald (1995, p.1), "by 1980, Uganda had become dependent on one crop—coffee—for 98 percent of its exports" and "the volume of coffee exports in 1980 amounted to barely half the shipments achieved in the early 1970s."

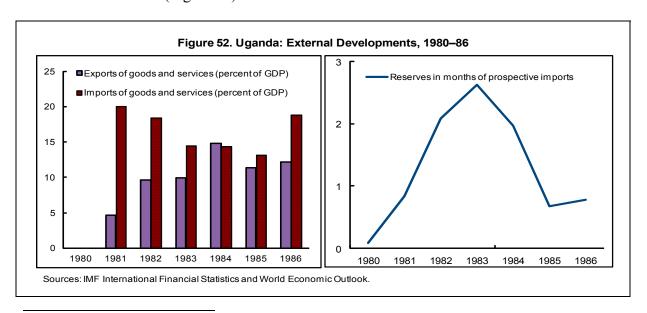
53. An attempt was made in 1980/81, following the deposing of Idi Amin in 1979 and the 1980 elections, to restore prudent macroeconomic management. "Most ex-

factory prices were freed from administrative controls, and the remaining administered prices for export crops, petroleum products, and utility tariffs were increased significantly in real

terms" (IMF 1987, p.4). A managed floating exchange rate regime was adopted in June 1981 (Atingi-Ego and Sebudde, 2000), and the official Uganda shilling/U.S. dollar exchange rate was increased by 840 percent<sup>50</sup> (Figure 59). As a result, the REER depreciated by 84 percent, the parallel market premium dropped sharply, to below 200 percent in June 1981 and further to 3 percent in late 1984 (Figure 50). The June 1981



devaluation caused consumer prices to immediately jump 60 percent,<sup>51</sup> causing the 12-month inflation rate to increase to more than 150, up from 80 percent in May 1981 and around 50 percent in the first part of 1981 (Figure 51). Interestingly, with monetary expansion contained and a sharp output expansion,<sup>52</sup> prices and the exchange rate quickly stabilized, prices increasing by only 20 percent over the following 12 months (Figure 51), and the parallel market exchange rate appreciated. The exchange rate adjustments and price liberalization also triggered a sharp increase in exports from less than 5 percent of GDP in 1981 to almost 15 percent of GDP in 1984, while imports declined from 20 percent of GDP in 1981 to less than 15 percent of GDP in 1984, contributing to a recovery of international reserves (Figure 52).

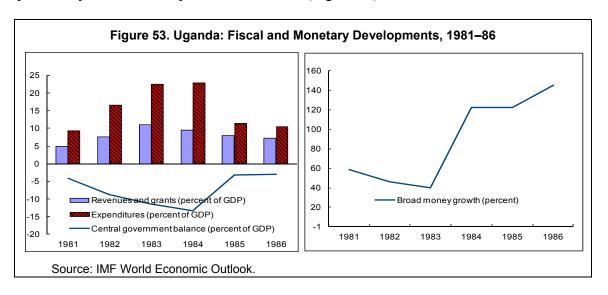


<sup>&</sup>lt;sup>50</sup> Equal to a devaluation of the U.S. dollar/Uganda shilling exchange rate of almost 90 percent.

<sup>52</sup> Real GDP growth was 3.9 percent in 1981, 8.2 percent in 1982, and 4.9 percent in 1983.

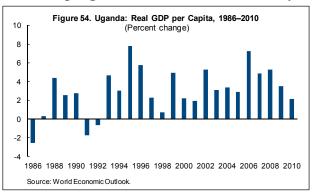
<sup>&</sup>lt;sup>51</sup> In seasonally adjusted terms.

54. The IMF supported program went off track in March 1984, however, largely because of fiscal slippages (Atingi-Ego and Sebudde, 2000; IMF, 1987).<sup>53</sup> Subsequently, from mid-1984 onward, fueled by a massive monetary expansion (Figure 53),<sup>54</sup> the exchange rate started to depreciate quickly; and the inflation rate rose sharply, to almost 240 percent in mid-1985. In an effort to control inflation, in May 1985 the Uganda shilling was again pegged to the U.S. dollar: the official exchange rate was kept constant at 6 shillings to the dollar until October 1985. Between October and December 1985 the exchange rate was increased by 133 percent and re-pegged at 14 shillings to the dollar (IMF International Financial Statistics). As a result, the parallel market premium again started to rise sharply to almost 1200 percent in April 1986 (Figure 50). The attempt to stem inflation without fiscal and monetary tightening failed, however, and inflation continued to increase to over 300 percent by mid-1986 (Figure 51), while the nascent growth recovery stalled—GDP per capita fell by more than 14 percent in 1984–86 (Figure 49).



## 55. A new IMF-World Bank supported reform program was launched in 1987 by

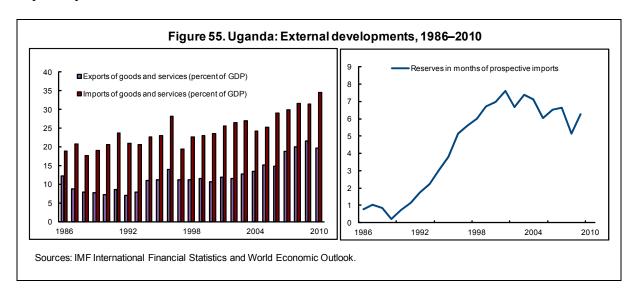
the new government led by President Museveni. Foreign exchange and trade arrangements were liberalized, as was the financial sector and agriculture marketing activities, and public enterprises were privatized (Barungi, 1997; IMF, 2005). Today, Uganda looks radically different. Economic growth has been strong, averaging 7.5 percent between 1986



<sup>53</sup> The overall fiscal deficit increased from 4.2 percent of GDP in 1981 to 8.8 percent of GDP in 1983 and 13.4 percent of GDP in 1984.

<sup>&</sup>lt;sup>54</sup> Broad money grew by 122 percent in 1984 and 1985, by 145 percent in 1986, and 183 percent in 1987.

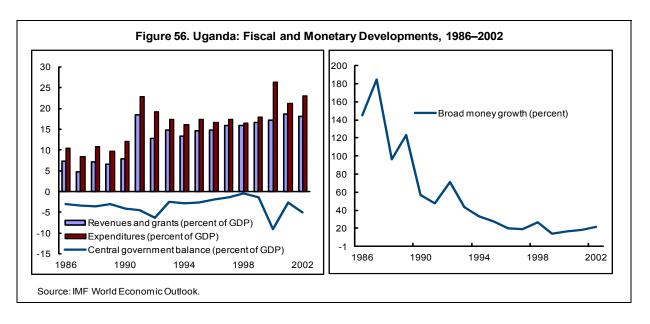
and 2010 (Figure 54); and as a result, real per capita income has risen by 114 percent in the same period (Figure 1) and inflation has been moderate (below 10 percent for most of the time since 1993 except for 2008–09 and 2011–12). Export growth has also been strong, with exports increasing to more than 20 percent of GDP, and the foreign exchange reserve coverage has been above six months of prospective imports since 1998 (Figure 55). Henstridge and Kasekende (2001, p.49) argues that besides and macroeconomic stability, the exchange rate liberalization was key to Uganda's strong macroeconomic performance in the 1990s, including because it "paved the way for a broader liberalization of exports, especially coffee."



- In the 1987 reform program, Uganda chose a gradual approach to liberalizing the foreign exchange market. Between 1987 and 1992, the exchange rate regime was gradually transformed from a peg with a large parallel market premium to a unified managed float:
- A crawling peg with a series of discrete adjustments was adopted in 1987 (Atingi-Ego and Sebudde, 2000). The official shilling/U.S. dollar exchange rate was increased by almost 330 percent in May 1987,<sup>55</sup> triggering a sharp, but short lived, appreciation of the parallel rate (Figure 59) and a drop in the parallel market premium from almost 1200 percent to 50 percent between May and June 1987 (Figure 50). However, because of the continued large inflation differential the parallel market premium again increased sharply, peaking at almost 570 percent in July 1988 when the official exchange rate was increased by another 150 percent (and by another 10 percent in December 1988 and 21 percent in March 1989), which helped reduce the parallel market premium to around 200 percent.

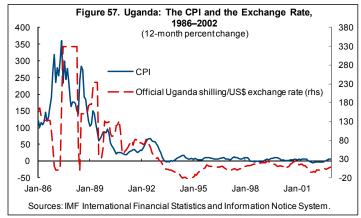
<sup>55</sup> Equal to a devaluation of the U.S. dollar/shilling rate of almost 77 percent.

- A crawling peg with multiple foreign exchange markets and discrete adjustments was adopted in 1989 (Atingi-Ego and Sebudde, 2000). A separate foreign exchange window, the Special Import Program, was launched in July 1989 with an exchange rate of Sh400/\$, twice the official rate. The official shilling/US\$ exchange rate was increased by 70 percent in October 1989, another 8 percent in November 1989, by 14.6 percent in June 1990, by on average 4 percent a month between June 1990 and July 199, by 14.3 percent in July 1991, 6.3 percent in September 1991, and 7.6 percent in October 1991.
- Foreign exchange bureaus were established in July 1990 (IMF 1991c, 1992a; Sharer, De Zoysa, and McDonald, 1995; Atingi-Ego and Sebudde, 2000). Licensed traders were permitted to freely buy and sell foreign exchange at market-determined rates, with the bureau rate becoming another officially recognized exchange rate.
- A floating exchange rate regime was adopted in 1992 (Sharer, De Zoysa, and McDonald, 1995; Atingi-Ego and Sebudde, 2000). Weekly Dutch type auctions for donor funds were adopted in January 1992, accompanied by a significant relaxation of import procedures. The average bureau rate for travelers' checks was adopted as the official rate in March 1992 (Sharer, De Zoysa, and McDonald, 1995), and the parallel premium subsequently dropped below 20 percent.
- An interbank foreign exchange market was introduced in November 1993, and the Bank of Uganda (BoU) ceased the foreign exchange auction of donor support funds (Sharer, De Zoysa, and McDonald, 1995; Atingi-Ego and Sebudde, 2000). The implementation of the interbank market involved a number of reforms, including delegation of most exchange controls to authorized banks and foreign exchange bureaus; unification of the regulations for exchange transactions applied to commercial banks and bureaus; abolishment of the surrender requirement on coffee export proceeds; and transfer of oil and coffee transactions from the BoU to the interbank market. Uganda accepted the obligations of Article VIII, Sections 2, 3, and 4, of the IMF's Articles of Agreement in April 1994.
- 57. A gradually removal of the surrender requirement accompanied the reforms of the exchange rate regime (IMF 1991c, 1992a; Sharer, De Zoysa, and McDonald, 1995). Exporters of non-traditional agricultural products were permitted to retain 100 percent of their export proceeds in retention accounts for use in payments for goods on the "positive import list" in November 1988. This scheme was extended to cover all non-coffee export proceeds in March 1989. In 1990, the requirement to deposit non-coffee export proceeds in retention accounts was removed and exporters could open foreign exchange accounts. The surrender requirement on coffee export proceeds was removed in 1993. Before the relaxation of the surrender requirement, a large portion of export proceeds found their way into the "no-forex" parallel market.



## 58. With monetary policy failing to provide a nominal anchor, the pre-reform rise in

inflation continued. The headline inflation rate peaked at around 360 percent in May 1987 (Figure 57). Although the fiscal deficit was brought under control around 1986, the rapid broad money expansion continued (Figure 56). In total, broad money increased by almost 12000 percent (or 100 percent a year on average) between 1985, when the parallel market exchange rate

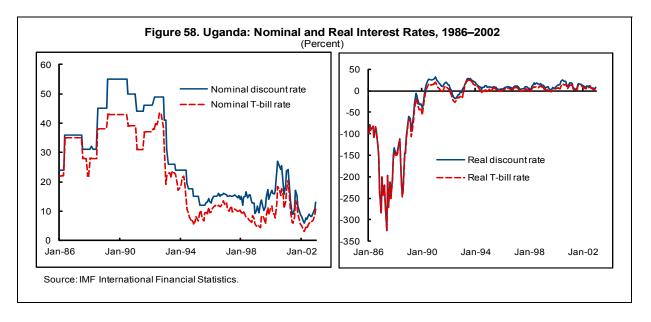


premium was reduced to around 25 percent, and 1992 when the premium again was reduced to below 25 percent; and the floating exchange rate regime was adopted. During approximately the same period, the official and parallel market Uganda shilling/U.S. dollar exchange rate increased by more than 7000 percent.<sup>56</sup>

59. Interest controls weakened the efficiency of monetary policy in this period. The level and structure of interest rates were administered by the Bank of Uganda until 1992. In consultations with the Ministry of Finance and Economic Planning, the BoU made periodic rate adjustments (Hadjimichael and others, 1996). Following a 7–14 percentage point increase in interest rates in March 1986, nominal interest rates were kept constant until July 1987 when they were lowered by 5–10 percentage points, while inflation was souring. As a result, real interest rates became sharply negative, declining to -330 percent in

<sup>&</sup>lt;sup>56</sup> Equivalent to a depreciation of almost 99 percent.

May 1987.<sup>57</sup> Real interest rates didn't turn positive until mid-1990, following several nominal interest rate hikes and importantly a sharp decline in the inflation rate.

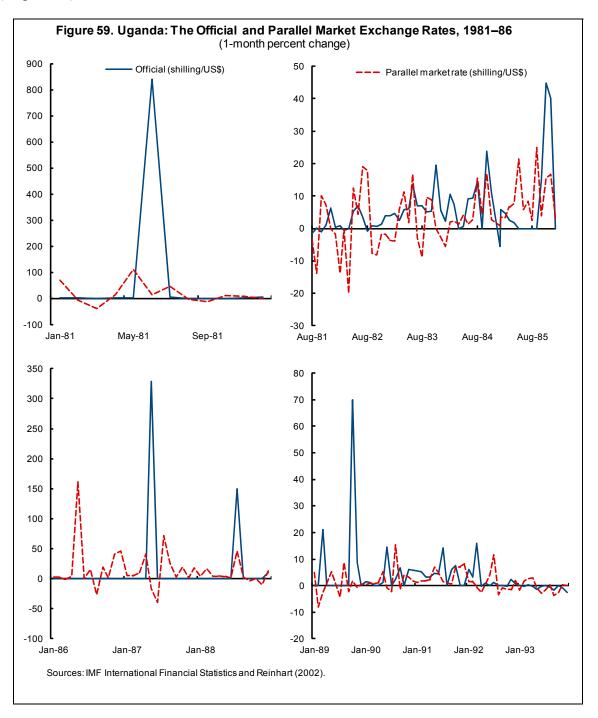


- 60. **Inflation was sharply reduced once the rapid growth in money supply was curtailed.** The headline 12-month inflation rate was reduced to below 30 percent in mid-1990. It has been below 10 percent for most of the time since early 1993 (Figure 57).
- 61. Consistent with the above, Barungi (1997) found that "inflation in Uganda is persistently a monetary phenomenon" (ibid., abstract). She found that the fiscal deficit and crop financing requirement were driving the money supply and increased the domestic demand for foreign exchange and weakened the parallel market exchange rate. She also found that "a devaluation of the official exchange rate, by reducing excess demand for foreign exchange in the economy, has tended to cause the parallel exchange rate to appreciate and consequently to reduce any upward pressure on the general price level" (ibid., p. 16). Moreover, she found that a devaluation of the official exchange had a positive impact on the budget in Uganda during this period, 58 and through that, helped reduce money supply.
- 62. A close inspection of the Ugandan data appears to confirm Barungi's finding that a devaluation of a seriously overvalued official exchange rate can reduce inflation pressure. The 330 percent increase in the official shilling/U.S. dollar exchange rate in May 1987, triggering a sharp, but short lived, appreciation of the parallel exchange rate, and a slowdown in underlying inflation pressure. Following an almost 25 percent jump in prices

<sup>57</sup> Measured as nominal interest rates less the observed 12-month headline inflation rate.

<sup>&</sup>lt;sup>58</sup> Kiguel and O'Connell (1994) similarly found that the existence of a parallel market exchange rate generated fiscal losses in the countries examined because the governments were net sellers at the official rate, and thus unification had some "pleasant fiscal arithmetic" (ibid. Summary findings).

in May 1987, the rate of inflation declined. Prices grew by more than 300 percent in the 12 months to April 1987, but by "only" 140 percent in the 12 months between May 1987 and May 1988. Similarly, following the 150 percent increase in the official exchange rate and another 25 percent jump in the price level in July 1988, the rate of inflation declined with prices growing by only 60 percent in the 12 months between July 1988 and July 1989, despite further sharp devaluations in December 1988 (10 percent) and March 1989 (21 percent).



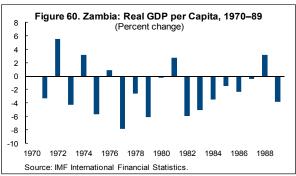
## VIII. ZAMBIA: RAPID LIBERALIZATION BUT WITH HIGH INFLATION AND HIGH FISCAL DEFICITS

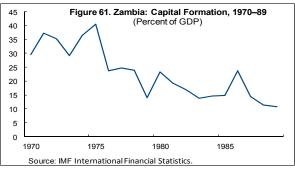
## 63. Between 1989 and 1992 Zambia moved from a highly regulated foreign exchange

regime with a seriously overvalued exchange rate to a unified floating exchange rate. Today the Bank of Zambia (BoZ) operates a managed float of the kwacha with no predetermined path for the exchange rate. The official exchange rate is determined on the interbank market with the BoZ's interventions aimed primarily at reducing short-term volatility.

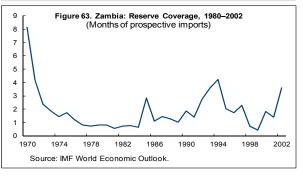
64 Zambia had experienced almost 20 years of steady per capita income decline when the reform process started in the late 1980s (Figure 1). Per capita income declined on average by around 2 percent a year between 1970 and 1989 (Figures 60), largely as a result of the distortions caused by a heavy reliance on quantitative rationing and price controls, instead of fiscal and monetary policies, to contain inflation and defend the exchange rate. The fiscal deficit averaged almost 13 percent of GDP during the 1970s and 1980s; the controlled exchange rate was consistently overvalued (Figure 64), and export volumes declined sharply (Figure 61).<sup>59</sup> Savings and capital formation was low and declining (Figure 62); international

reserves were low (Figure 63); and nominal domestic interest rates were kept low and heavily negative in real terms (Figure 65). Foreign exchange transactions were highly regulated to conserve foreign exchange and contain inflation; foreign exchange receipts were required to be surrendered to the BoZ, foreign exchange was allocated to priority transactions on a case-by-



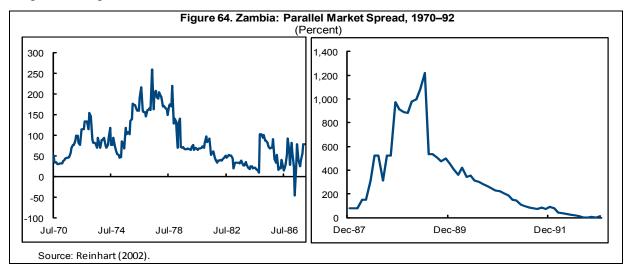


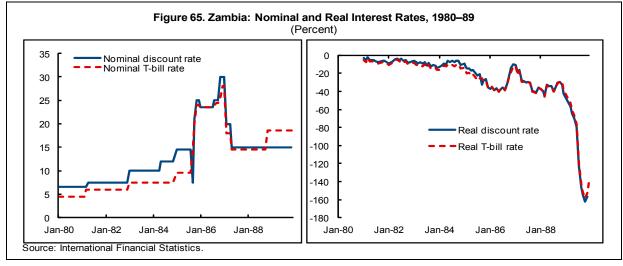


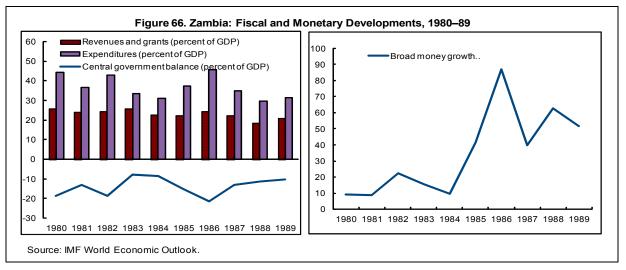


<sup>&</sup>lt;sup>59</sup> The kwacha was pegged to the U.S. dollar between 1971 and 76, to the SDR between 1976 and 83, to a basket of trading partner currencies between1983 and 85, to the U.S. dollar between May 1987 and November 1988, and again to the SDR in November 1988. It was determined through a foreign exchange auction between October 1985 and May 1987.

case basis, and exports and imports were subject to licensing. The controls and seriously overvalued official exchange rate pushed economic activity into the informal sector and depressed exports.



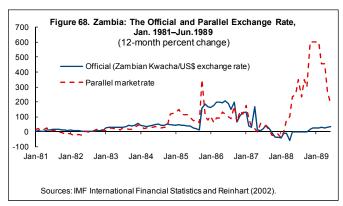




## 65. The economic imbalances worsened sharply in the late 1980s following an

abandoned attempt in 1985–87 to reign in the imbalances. The kwacha/U.S. dollar exchange rate was allowed to increase by more than 215 percent in October 1985 when a foreign exchange rate auction was put in place. At the same time, between August and November 1985 the nominal central bank discount rate and the T-bill rate were raised by 10.5 and 14.5 percentage points respectively they remained highly negative in real terms, though (Figure 65). However, with a sharp increase in the fiscal deficit and money growth (Figure 66), the already high and rising inflation increased further (Figure 67).60 The reform efforts were abandoned in May 1987, however, and price controls were re-imposed and the exchange rate





fixed at ZK 8 to the dollar (IMF 1989c), a 75 percent appreciation relative to the final auction rate of ZK 21. At the same time, interest rates were sharply reduced (IMF 1989c). With continued high fiscal deficits and broad money growth (Figure 66), parallel market premiums exploded: between May 1987 and November 1988, when the ZK fixed to the U.S. dollar, the premium increased from around 25 percent to 920 percent. In November 1988 the kwacha was devalued by 20 percent and pegged to the SDR. Subsequently, the premium increased further, peaking at more than 1200 percent in June 1989 (Figure 64). The price controls and re-pegging of the exchange rate also failed to lower inflation—the headline inflation rate was persistently around 50–60 percent in May 1987–October 1988 when the exchange rate was pegged to the dollar, gradually rising to almost 100 percent in mid-1989 while the ZK was pegged to the SDR.

66. Against this background, and in the face of large capital flight (Adams, 1999), in 1989, Zambia started to fully liberalize the foreign exchange and trade system. All price controls, except those on maize and fertilizers, were removed in June 1989

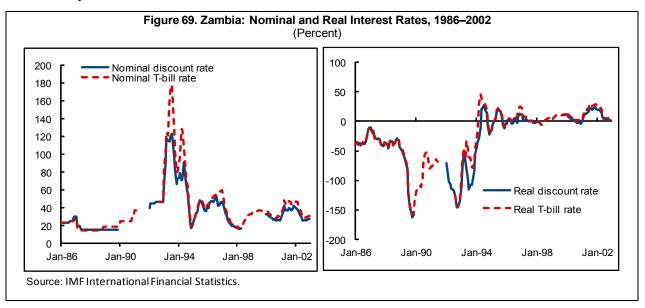
<sup>&</sup>lt;sup>60</sup> The increase in the inflation rate was relatively moderate, however, compared to the large increase in the exchange rate. The inflation rate had risen to almost 40 percent in September 1985, up from around 20 percent in most of 1983 and 1984. It increased further to around 60 percent in the first half of 1986 before declining back to around 40 percent in late 1986 and early 1987.

<sup>&</sup>lt;sup>61</sup> The maximum lending rate was reduced from 31 percent to 20 percent.

(IMF, 1991b), the kwacha/U.S. dollar exchange rate was increased by 50 percent, and the exchange rate regime was changed from a fixed peg against the SDR to a frequently adjusted, or crawling, peg (IMF, 1991b, 1993e). The exchange rate regime was further changed to a dual exchange rate system in February 1990 (IMF, 1991b, 1993e; Mkende, 2001). By late 1992, the BoZ had established a market-determined official exchange rate, eliminated most restrictions on payments for current international transactions, and reduced the parallel market premium to essentially zero (Figure 64). In all, the official kwacha/U.S. dollar exchange rate increased by more than 3000 percent between June 1989 and December 1992. There are a number of interesting features of the Zambia reform effort during this period:

57

• Sharply negative real interest rates in the initial phase: With the commercial bank lending rate, T-bill rates, and the discount rate kept low and fixed between 1987 and early 1990, real rates became increasingly negative, reaching -120 percent at the start of the liberalization process in mid-1989 and bottoming out at more than -160 percent in late 1989 (Figure 65). Controls on commercial banks' deposit and lending rates were removed in September 1992; and auctions of treasury bills were introduced in January 1993, laying the foundation for a transition toward a system of indirect—or price based—monetary controls (Adams, 1999). The liberalization of interest rates resulted in a rapid increase in nominal interest rates, peaking at around 180 percent in July 1993. Real interest rates remained negative though, first turning positive in early 1994.



<sup>&</sup>lt;sup>62</sup> Equal to a devaluation of the U.S. dollar/kwacha exchange rate of 97 percent. The parallel market kwacha/U.S. dollar rate increased by 150 percent (equal to a depreciation of the U.S. dollar/kwacha rate of 60 percent) during the same period.

- Deliberate use of a dual official exchange rate structure during a transition period:

  In February 1990, a second, more depreciated<sup>63</sup> official exchange rate was introduced to strengthen the incentives for nontraditional exports and provide a means for channeling balance of payments assistance from external donors to financing private sector imports (IMF, 1991b). This "second window" rate was applicable for all non-copper export proceeds and imports under the Open General License (OGL) system. The list of OGL-eligible goods was progressively expanded as donor flows picked up. In 1990, virtually all authorized service and capital payments were transferred to the second window. The only transactions remaining at the official rate were those of the copper company, oil, and fertilizer. The authorities subsequently gradually depreciated both official exchange rates and narrowed the differential between them. The two official exchange rates were unified in April 1991 (IMF, 1992c, 1992d, 1993e). The unified official exchange rate was subsequently adjusted at weekly intervals to narrow the gap between the official rate and the market determined export retention rate (IMF, 1992c).
- *Export retention foreign exchange market*: Under the export retention scheme established in February 1990, exporters of non-traditional exports had the right to use 50 percent of their earnings for imports and certain other transactions. These export retention rights could then be sold to third parties at mutually agreed rates, creating an additional foreign exchange market (IMF, 1991b, 1992d).<sup>64</sup>
- **Establishment of a bureau market:** Foreign exchange bureaus were licensed to operate in mid-1992 and allowed to determine their exchange rate freely (IMF, 1992f). The supply of foreign exchange to the export retention and bureau markets was increased significantly by raising the non-traditional export retention entitlement to 100 percent and by permitting others to sell foreign exchange to the bureaus (IMF 1993e).

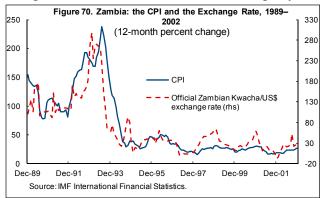
In December 1992, the authorities adopted the previous day exchange rate in the bureau market as the official exchange rate (IMF 1993e; Adams, 1999). The capital account was liberalized in January 1994, and the ZK became fully convertible. By March 1994 commercial banks were providing full foreign exchange retail and corporate banking services to the private sector (Adams, 1999).

 $<sup>^{63}</sup>$  The difference between these two official rates was about 40 percent.

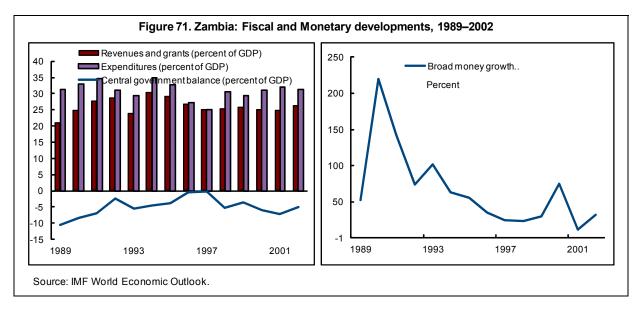
<sup>&</sup>lt;sup>64</sup> As a result, in 1990 no less than four exchange market existed: the parallel market, the retention market, and the two official markets.

67. Lacking a nominal anchor, the liberalization of the economy initially was accompanied by a sharp rise in inflation (Figure 70). Driven by a sharp increase in broad money and domestic credit, predominantly to the government, inflation accelerated rapidly,

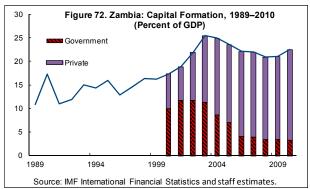
peaking at around 240 percent in July 1993. Following a (i) tightening of monetary policy that reduced broad money growth from more than 200 percent in 1990 to around 70 percent in 1992 and sharply increased nominal interest rates (see above); and (ii) the introduction of a new fiscal policy rule designed to commit the government to a balanced domestic budget—the "cash budget" that helped



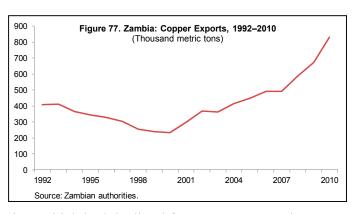
reduce the deficit from 8–10 percent in 1989–90 to below 3 percent in 1992—inflation subsequently declined rapidly to below 50 percent by mid-1994. The tightening of fiscal and monetary policy, and adoption of an orthodox reserve-money-based stabilization program, also helped stabilize the exchange rate (Figure 71).



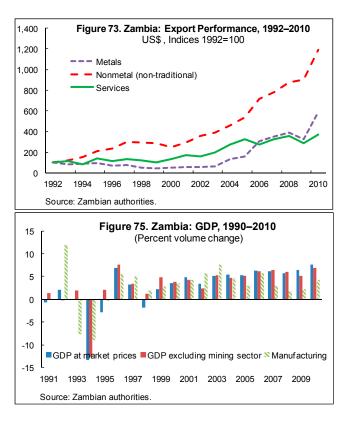
68. The economy reacted favorably to the reforms once macroeconomic stability had been restored. Capital formation has increased substantially (as a percent of GDP, Figure 72) since 1991, and non-traditional exports and services have been growing fast since the early 1990s (Figure 73), albeit from low levels and with copper reaming the dominant export commodity (Figure 74).

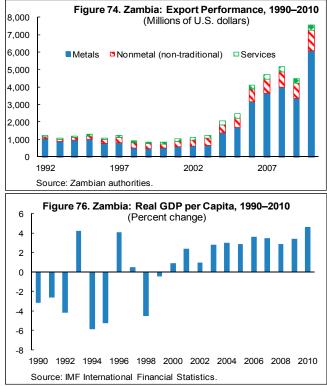


As a result, non-mining GDP growth has been consistently positive since 1995 (Figure 75), and with the revitalization of the copper industry following the division and sale to private investors of the state-owned Zambia Consolidated Copper Mines (ZCCM) between 1997 and 2000 (Fraser and Lungu, 2007), total GDP growth has been consistently positive since 1999 (Figure 75)—in per capita



terms since 2000 (Figure 76). Copper production, which had declined from 700,000 metric tons a year in the early 1970's to only 228,000 tons in 1998 has more than tripled since to above 800,000 metric tons (Figure 77).





#### IX. CONCLUSION

69. The case studies tell a similar story—the reforms worked. The reform periods marked the end of prolonged severe crisis and, in several cases, decades of declines, and, when sustained, the start of a strong and ongoing economic expansion. Exchange rate liberalization was a fundamental element of the reform effort in all successful cases, but so were structural reforms, reduced fiscal deficits and monetary expansions, and external assistance. The attempts to fix the exchange rate in the face of external shocks and without

supporting fiscal and monetary policy resulted in overvalued exchange rates and severe pressure on the balance of payments. Efforts to contain these pressures through price control, rationing, and import licenses depressed the economy, reduced fiscal revenue, and caused external trade to shift to the informal sector. The case studies also clearly show the danger of exchange rate based stabilization efforts without supportive fiscal and monetary policy. Attempts to fix the nominal exchange rate through administrative means at levels that were inconsistent with the underlying fundamentals and fiscal and monetary policies resulted in an increasingly overvalued exchange rate and foreign exchange shortages that forced the authorities to either resort to increasingly damaging controls and rationing, or to undertake large ad hoc devaluations, which can have devastating effects on growth and poverty reduction. Finally, the cases illustrate the importance of sustaining the reforms because it takes time for the full benefits of reforms to be realized.

#### References

- Adams, Christopher, 1999, Financial Liberalisation and Currency Demand in Zambia. Journal of African Economies, Volume 8, Number 3, pp. 268–306.
- Anderson, P., and M. Ndulo, 1994, Hyperinflation, stabilization, and the new Economic Recovery Program in Zambia. Macroeconomic Studies 51/94. Swedish International Development Authority.
- Arndt, C., 1999, Stabilization and structural Adjustment in Mozambique: an Appraisal. Staff paper 99-1. Purdue University.
- Atingi-Ego, M., and R. K. Sebudde, 2000, Uganda's equilibrium real exchange rate and its implication for non-traditional export performance. The Bank of Uganda Staff Papers Journal Volume 2, Number 1, 2000.
- Atingi-Ego, M., and R. K. Sebudde, 2007, Measuring efficiency of a market in transition: the Ugandan foreign exchange market. The Bank of Uganda Staff Papers Journal Volume 1, Number 1, 2007.
- Aron, J. and I. Elbadawi, 1992, "Parallel markets, the foreign exchange auction, and exchange rate unification in Zambia," World Bank Policy Research Working Papers WPS909.
- Azam, J. P., 1999, Dollars for Sale: Exchange Rate Policy and Inflation in Africa. World Development. Vol. 27, No 10, pp. 1843–1859.
- Barungi, B. M., 1997, Exchange Rate Policy and Inflation in Uganda, African Economic Research Consortium Research Paper 59.
- Bevan, D.L., A. Bigsten, P. Collier and J.W. Gunning, 1987, East African Lessons on Economic Liberalization, Aldershot: Gower, Policy Research Centre, Thames Essay No. 48.
- Broda, C., 2004, Terms of trade and exchange rate regimes in developing countries. Journal of International Economics 63, pp. 31–58.
- Bughin, J. R.J., 1996, Exchange Rates, Pricing-to-Market Strategies, and the Marshall-Lerner Condition, Review of International Economics 4(2), 211–217.
- Cook, L., 2000, Assessing Export Plattforms: the Case of Ghana, CAER II Discussion Paper No. 76.
- Degefa, Derrese, 2001,"The parallel foreign exchange market and macroeconomic performance in Ethiopia" African Economic Research Consortium Research Paper 107.

- Edwards, S., 2012, Is Tanzania a Success Story? A Long Term Analysis. National Bureau of Economic Research Working Paper Series No. 17764.
- Fabrizio, F., 1998, "Exchange Rates and External Competitiveness in Mozambique Determinants", in IMF, 1998, Republic of Mozambique—Selected Issues and Statistical Appendix" SM/98/78 (Washington: International Monetary).
- Fabrizio, F., 2001, "Equilibrium Exchange Rate and Its Determinants", in IMF, 2001, Mozambique—Selected Issues and Statistical Appendix" IMF Country Report no. 01/25 (Washington: International Monetary).
- Fanizza, Domenico, 2000, *Growth and macroeconomic Policies*, in IMF, 2000, "Malawi—Selected Issues and Statistical Appendix" SM/00/281 (Washington: International Monetary Fund).
- Fraser, A., and J. Lungu, 2007, For whom the windfalls? Winners & losers in the privatisation of Zambia's copper mines. (Lusaka: Civil Society Trade Network of Zambia, Catholic Centre for Justice, Development and Peace).
- Friedman, M., 1953, The case for flexible exchange rates. Essays in Positive Economics. University of Chicago Press, Chigago, pp. 157–203.
- Ghosh, A., J. Ostry, and C. Tsangarides, 2010, *Exchange Rate Regimes and the Stability of the International Monetary System* Occasional Paper No. 270 (Washington: International Monetary Fund).
- Gylfason, T., 2002, The Real Exchange Rate Always Floats, Australian Economic Papers, 25, April 2002.
- Hadjimichael, M. T., M. Nowak, R. Sharer, and A. Tahari, 1996, *Adjustment for Growth: The African Experience* Occasional Paper No. 143 (Washington: International Monetary Fund).
- Harmsen, Richard, 1997, *Trade Liberalization*, in IMF, 1997, "Zambia—Selected Issues and Statistical Appendix" SM/97/243 (Washington: International Monetary Fund).
- Henstridge, M. and L. Kasekende, 2001, "Exchange Reforms, Stabilization, and Fiscal Management" in *Uganda's Recovery*, ed. By Reinikka, R. and P. Collier. World Bank Regional and Sectoral Studies.
- Hoffman, M., 2007, Fixed versus Flexible Exchange Rates: Evidence From Developing Countries. Economica 74, pp. 425–449.
- Goldsbrough, D., S. Coorey, L. Dicks-Mireaux, B. Horvath, K. Kochhar, M. Mecagni, E. Offerdal, and J. Zhou, 1996, *Reinvigorating Growth in Developing Countries*Occasional Paper No. 139 (Washington: International Monetary Fund).

- International Monetary Fund, 1987, "Uganda—Staff Report for the 1987 Article IV Consultation and Request for Arrangements Under the Enhanced Structural Adjustment Facility" EBS/87/110 (Washington: International Monetary Fund).
- International Monetary Fund, 1989a, "Malawi—Staff Report for the 1989 Article IV Consultation and Request for the Second Annual Arrangement Under the Enhanced Structural Adjustment Facility" EBS/89/156 (Washington: International Monetary Fund).
- International Monetary Fund, 1989b, "Uganda—Staff Report for the 1987 Article IV Consultation and Midterm Review of the First Annual Arrangement Under the Enhanced Structural Adjustment Facility" EBS/89/241 (Washington: International Monetary Fund).
- International Monetary Fund, 1989c, "Zambia—Staff Report for the 1987 Article IV Consultation" SM/89/186 (Washington: International Monetary Fund).
- International Monetary Fund, 1991a, "Malawi—Staff Report for the 1990 Article IV Consultation; Midterm Review of the Third Annual Arrangement Under the Enhanced Structural Adjustment Facility" EBS/91/10 (Washington: International Monetary Fund).
- International Monetary Fund, 1991b, "Zambia—Staff Report for the 1991 Article IV Consultation and request for Accumulation of Rights" EBS/91/59 (Washington: International Monetary Fund).
- International Monetary Fund, 1991c, "Uganda—Background Paper and Statistical Appendix" SM/91/72 (Washington: International Monetary Fund).
- International Monetary Fund, 1992a, "Uganda—Background Paper and Statistical Appendix" SM/92/94 (Washington: International Monetary Fund).
- International Monetary Fund, 1992b, "Uganda—Staff Report for the 1992 Article IV Consultation and Midterm Review of the Third Annual Arrangement Under the Enhanced Structural Adjustment Facility" EBS/92/73 (Washington: International Monetary Fund).
- International Monetary Fund, 1992c, "Zambia—Staff Report for the 1992 Article IV Consultation and Request for Accumulation of Rights." EBS/92/114 (Washington: International Monetary Fund).
- International Monetary Fund, 1992d, "Zambia—Economic and Financial Policy Framework." EBD/92/32 (Washington: International Monetary Fund).
- International Monetary Fund, 1992e, "Tanzania—Staff Report for the 1992 Article IV Consultation and Request for the Second Annual Arrangement under the Enhanced Structural Adjustment Facility." EBS/92/170 (Washington: International Monetary Fund).

- International Monetary Fund, 1992f, "Zambia—Midterm Review of the 1992 Rights Accumulation Program." EBS/92/199 (Washington: International Monetary Fund).
- International Monetary Fund, 1993a, "Malawi—Staff Report for the 1992 Article IV Consultation and policy framework" EBS/93/2 (Washington: International Monetary Fund).
- International Monetary Fund, 1993b, "Uganda—Staff Report for the 1993 Article IV Consultation and Midterm Review of the Additional Annual Arrangement Under the Enhanced Structural Adjustment Facility and Financial Program for 1993/94" EBS/93/172 (Washington: International Monetary Fund).
- International Monetary Fund, 1993c, "Uganda—Background Paper and Statistical Appendix" SM/93/234 (Washington: International Monetary Fund).
- International Monetary Fund, 1993d, "Zambia—Staff Report for the 1993 Article IV Consultation and Midterm Review of Rights Accumulation Program" EBS/93/120 (Washington: International Monetary Fund).
- International Monetary Fund, 1993e, "Zambia—Recent Economic Developments." SM/93/174 (Washington: International Monetary Fund).
- International Monetary Fund, 1994a, "Malawi—Staff Report for the 1993 Article IV Consultation" SM/94/33 (Washington: International Monetary Fund).
- International Monetary Fund, 1994b, "Tanzania—Staff Report for the 1994 Article IV Consultation" EBS/94/82 (Washington: International Monetary Fund).
- International Monetary Fund, 1995a, "Uganda—Background Paper on the Response of Output and Investment to Adjustment Programs" SM/95/72 (Washington: International Monetary Fund).
- International Monetary Fund, 1995b, "Malawi—Staff Report for the 1995 Article IV Consultation" SM/95/80 (Washington: International Monetary Fund).
- International Monetary Fund, 1996a, "Malawi—Staff Report for the 1996 Article IV Consultation" EBS/96/86 (Washington: International Monetary Fund).
- International Monetary Fund, 1996b, "Zambia—Staff Report for the 1996 Article IV Consultation" EBS/96/104 (Washington—International Monetary Fund).
- International Monetary Fund, 1996c, "Tanzania—Staff Report for the 1996 Article IV Consultation and Request for a Three-year Arrangement under the Enhanced Structural Adjustment Facility." EBS/96/165 (Washington: International Monetary Fund).
- International Monetary Fund, 1996d, "Tanzania—Selected Issues and Statistical Appendix" SM/96/267 (Washington: International Monetary Fund).

- International Monetary Fund, 1997a, "Malawi—Staff Report for the 1997 Article IV Consultation; Midterm Review Under the Second Annual Arrangement Under the Enhanced Structural Adjustment Facility; and Request for Waiver of Performance Criteria" EBS/97/166 (Washington: International Monetary Fund).
- International Monetary Fund, 1997b, "Malawi—Selected Issues and Statistical Appendix" SM/97/107 (Washington: International Monetary Fund).
- International Monetary Fund, 1997c, "Zambia—Staff Report for the 1997 Article IV Consultation" SM/97/226 (Washington: International Monetary Fund).
- International Monetary Fund, 1997d, "Zambia—Selected Issues and Statistical Appendix" SM/97/243 (Washington: International Monetary Fund).
- International Monetary Fund, 1998, "Malawi—Staff Report for the 1998 Article IV Consultation and Request for the Third Annual Arrangement Under the Enhanced Structural Adjustment Facility" EBS/98/209 (Washington: International Monetary Fund).
- International Monetary Fund, 1999, "Zambia—Staff Report for the 1998 Article IV Consultation and Request for Arrangements Under the Enhanced Structural Adjustment Facility" EBS/99/35 (Washington: International Monetary Fund).
- International Monetary Fund, 2000, "Malawi—Staff Report for the 2000 Article IV Consultation and Request for a three-Year Arrangement Under the Poverty Reduction and Growth Facility and" EBS/00/263 (Washington: International Monetary Fund).
- International Monetary Fund, 2001, "Malawi—Review Under the three-Year Arrangement Under the Poverty Reduction and Growth Facility and Request for Waiver of Performance Criteria" EBS/01/90 (Washington: International Monetary Fund).
- International Monetary Fund, 2002, "Malawi—Staff Report for the 2002 Article IV Consultation and Economic Program for 2002" EBS/02/131 (Washington: International Monetary Fund).
- International Monetary Fund, 2004, "Malawi—Staff Report for the 2004 Article IV Consultation" EBS/04/355 (Washington: International Monetary Fund).
- International Monetary Fund, 2005, "Uganda—Ex Post Assessment of Performance Under Fund-Supported Programs" SM/05/223 (Washington: International Monetary Fund).
- International Monetary Fund, 2006, "Malawi—Second Review Under the three-Year Arrangement Under the Poverty Reduction and Growth Facility and Request for Waiver of Performance Criteria" EBS/06/109 (Washington: International Monetary Fund).
- International Monetary Fund, 2007, "Malawi—Staff Report for the 2006 Article IV Consultation, Third Review Under the three-Year Arrangement Under the Poverty

- Reduction and Growth Facility, and Request for Waiver of Performance Criterion" EBS/07/11 (Washington: International Monetary Fund).
- Jebuni, C. D., N. K. Sowa, and K. S. Tutu, 1991, "Exchange Rate Policy and Macroeconomic Performance in Ghana" African Economic Research Consortium Research Paper 4.
- Jebuni, C. D., N. K. Sowa, and K. S. Tutu, 1994, "Trade Payments Liberalization and Economic Performance in Ghana" African Economic Research Consortium Research Paper 27.
- Jmungule, K., O., 2004, "The determinants of the real exchange rate in Zambia" African Economic Research Consortium Research Paper 146.
- Kanaan, O., 2000, "Tanzania's Experience with Trade Liberalization" In *Finance and Development*, June 2000, Volume 37, Number 2.
- Kapur, I., M. Hadjimichael, P. Hilberts, J. Schiff, and P. Szymczak, 1991, *Ghana: Adjustment and Growth* Occasional Paper No. 86 (Washington: International Monetary Fund).
- Kiguel, M., and S. O'Connell, 1994, "Parallel Exchange Rates in Developing Countries Lessons from Eight Case Studies" World Bank Policy Research Working Papers WPS1265.
- Kiguel, M., S. Lizondo, and S. O'Connell eds., 1997, *Parallel Exchange Rates in Developing Countries*. Macmillan Press.
- Kihangire, D., 2007, Exchange rate misalignment and financial liberalization: Empirical evidence and macroeconomic implications for Uganda 1993–2004. The Bank of Uganda Staff Papers Journal Volume 1, Number 1, June 2007.
- Leite, S., A. Pellechio, L. Zanforlin, G. Bergashaw, S. Fabrizio, and J. Harnack, 2000, *Ghana: Economic Development in a Democratic Environment* Occasional Paper No. 199 (Washington: International Monetary Fund).
- Lipumba, N. 1994, *Africa beyond adjustment*, Overseas Development Council, Washington D. C.
- Lipumba, N. 1997, *The Liberalization of Foreign Exchange Markets and Economic Growth in Sub-Saharan Africa*, World Institute for Development Economics Research, Helsinki, Finland.
- Lukonga, I., 2000, *Experience with Trade Liberalization*, in IMF, 200, "Malawi—Selected Issues and Statistical Appendix" SM/00/281 (Washington: International Monetary Fund).

- Mathisen, J. 2003, Estimation of the Equilibrium Exchange Rate for Malawi. IMF Working Paper 03/104.
- McPherson, M., 1995, The sequencing of economic reforms: lessons from Zambia. Harvard Institute for International Development, Development Discussion Paper number 516.
- Mkenda, B. K., 2001, Long-run and Short-run Determinants of the Real Exchange Rate in Zambia. Working Papers in Economics no 40. Department of Economics Göteborg University
- Musila, J, and J. Newark, 2003, "Does Currency Devaluation Improve the Trade Balance in the Long Run? Evidence From Malawi," African Development Bank.
- Muttardy, A., 2003, Determinants of Growth and Poverty Reduction in Ghana. IMF, 2003, "Ghana—Selected Issues" SM/03/134 (Washington: International Monetary Fund).
- Mwase, N., 2006, "An Empirical Investigation of Exchange Rate Pass-Through to Inflation in Tanzania." IMF Working Paper WP/06/150.
- Mwase, N., and B. Ndulu ,2008, "Tanzania: explaining four decades of episodic growth" in *The Political Economy of Economic Growth in Africa, 1960-2000*, ed. by Ndulu, B., S. O'Connell, J.P. Azam, R. Bates, A. Fosu, J. W. Gunning and D. Njinkeu, (Cambridge University Press)
- Ndung'u, N.S., 2000, The Exchange Rate and Monetary Policy in Kenya. African Development Review. Volume 12, Issue 1, pp. 24–51.
- Ndung'u, N. S. and R. W. Ngugi, 1999, Adjustment and liberalization in Kenya: the financial and foreign exchange markets. Journal of International Development J. Int. Dev. 11, 465–491 (1999).
- Nord, R., Y. V. Sobolev, D. G Dunn, A. Hajdenberg, N. Hobdari, S. Maziad, and S. Roudet, 2009, Tanzania, The Story of an African Transition, International Monetary Fund.
- O'Conell, S., B. O. Maturu, F. M. Mwega, N. S. Ndung'u and R, W. Ngugi 2010, Capital Mobility, Monetary Policy, and Exchange Rate Management in Kenya. In Adam, Collier and Ndung'u, eds (2010) Kenya: Policies for Prosperity (Oxford University Press): 172–210.
- Ocran, M. K, 2007, A Modeling of Ghana's Inflation Experience: 1960–2003" African Economic Research Consortium Research Paper 169.
- Pinto, B., 1988, "Black Market Premia, Exchange Rate Unification, and Inflation in Sub-Saharan Africa" World Bank Working Papers 37.

- Quirk, P.J., B. V. Christensen, K. Huh, and T. Sasaki, 1987, *Floating Exchange Rates in Developing Countries* Occasional Paper No. 53 (Washington: International Monetary Fund).
- Reserve Bank of Malawi, 2000, Exchange and Interest Rate Determination in Malawi: Past and Present. Reserve Bank of Malawi. <a href="http://www.rbm.mw/research\_papers.aspx">http://www.rbm.mw/research\_papers.aspx</a>
- Reserve Bank of Malawi, 2003, Evolution of exchange rate determination in Malawi: past and present. Reserve Bank of Malawi. <a href="http://www.rbm.mw/research\_papers.aspx">http://www.rbm.mw/research\_papers.aspx</a>
- Reinhart, C., 2002, A Modern History of Exchange Rate Arrangements: Parallel Markets and Dual and Multiple Exchange Rates. MPRA Paper No. 3327.
- Robinson, D., M. Gaertner, and C. Papageorgiou, 2011, "Tanzania: Growth Acceleration and Increased Public Spending with Macroeconomic Stability" in *Yes Africa Can Success Stories from a Dynamic Continent*, ed. by Chukan-Pole, P. and M. Angwafo, (Washington: The World Bank).
- Rutasitara, L., 2004, Exchange rate regimes and inflation in Tanzania. AERC Research Paper 138 African Economic Research Consortium, February 2004.
- Sahn, D., P. Dorosh, and S. Younger, 1997, *Structural Adjustment Reconsidered: Economic Policy and Poverty in Africa*. Cambridge University press.
- Sgherri, S., 2001, *Inflation Dynamics in Zambia*, 1980-2001, in IMF, 2001, "Zambia—Selected Issues and Statistical Appendix" SM/01/319 (Washington: International Monetary Fund).
- Sharer, R., H. R. De Zoysa, and C. McDonald, 1995, *Uganda: Adjustment with Growth* Occasional Paper No. 121 (Washington: International Monetary Fund).
- Simwaka, K., 2006, "The Effectiveness of Official Intervention in Foreign Markets in Malawi," MPRA Paper No. 1123.
- Simwaka, K., 2007, "Modeling and Forecasting the Malawi Kwacha-US Dollar Nominal Exchange Rate," MPRA Paper No. 3327.
- Ssewanyana, S., J. M. Matovu, and E. Twimukye, 2011, "Building on Growth in Uganda" in *Yes Africa Can Success Stories from a Dynamic Continent*, ed. by Chukan-Pole, P. and M. Angwafo, (Washington: The World Bank).
- Taylor, J., 2000, "Low Inflation, Pass-Through, and the Pricing Power of Firms," European Economic Review, Vol. 44, No. 7, pp. 1389–1408.
- Tarp, F. C. Arndt, H. T. Jensen, S. Robinson, and R. Heltberg, 2002, Facing the Development Challenge in Mozambique. An Economywide Perspective. International Food Policy Research Institute Research Report 126.

- Treichel, V, 2005, "Tanzania's Growth Process and Success in Reducing Poverty" IMF Working Paper WP/05/35.
- Ubide, A. 1997, Determinants of Inflation in Mozambique. IMF Working Paper 97/145.
- United Nation Development Program, 2012, International Human Development Indicators. http://hdrstats.undp.org/en/indicators/103106.html
- Were, M. A. Geda, S.N. Karinigi, and N. S. Ndung'u, 2001, Kenya's Exchange Rate Movement in a Liberalized Environment: An Empirical Analysis. Kenya Institute for Public Policy Research and Analysis Discussion Paper No. 10.
- World Bank, 2002, Tanzania at the turn of the century: Background papers and. Statistics, (Washington: The World Bank).