Contrary to traditional interpretation, Tanzania’s increased dependence on foreign assistance during its period of adjustment did not lead to a deterioration in domestic savings performance. But the efficiency of investment has been substantially lower in Tanzania than in other reforming Sub-Saharan African countries.
Tanzania embarked on a structural adjustment program in 1986 after a decade of protracted economic decline. Its program was supported by the International Monetary Fund and the World Bank and was accompanied by a substantial increase in foreign assistance. After seven years of adjustment the environment for higher economic growth has improved, but the results are only partially encouraging: economic growth has only slightly exceeded population growth, and officially measured domestic savings have deteriorated. Meanwhile, Tanzania's dependency on foreign assistance has increased, reflected in a deterioration of the current account of the balance of payments. This has led to an increasingly heated debate about whether real adjustment is in fact taking place in Tanzania, or whether foreign aid has served to postpone adjustment instead of supporting it.

Agrawal, Ahmed, Mered, and Nord shed light on the relationship between adjustment and aid dependency on the basis of Tanzania's experience. Tanzania's weak database is adjusted in several respects to correct for the most glaring deficiencies in it. After adjustment of the database, Tanzania's performance is compared in the period 1981-85, prior to when reforms were launched, with that in the period 1986-90, which followed the launch of the Economic Recovery Program in 1986. To put the Tanzanian experience in context, its performance is also compared with that of four Sub-Saharan African countries — Ghana, Kenya, Malawi and Uganda — which embarked on similar reform programs during the 1980s.

The adjustment of the macroeconomic data shows that, contrary to traditional interpretation, Tanzania's increased dependency of foreign assistance did not lead to a deterioration in domestic savings performance. And most of the foreign assistance was used for investment rather than for consumption. But the principal difference between Tanzania and the four Sub-Saharan African countries sampled was the efficiency with which the foreign assistance was used. Using a measure of macroeconomic return on investment, the comparison shows that Tanzania is getting very little return on domestic investment even after the introduction of structural reforms. There are several reasons for this, including the dominance of the Tanzanian economy by a large and highly inefficient parastatal sector. If Tanzania is to generate the accelerated growth that it so urgently needs, one of the key areas of policy reform needs to be the increase in productivity of domestic investment.
STRUCTURAL ADJUSTMENT, ECONOMIC PERFORMANCE, AND AID DEPENDENCY IN TANZANIA

by

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and

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1. Introduction

During the 1980s, many Sub-Saharan African (SSA) countries adopted structural adjustment programs in response to widespread deterioration in economic performance. Problems typically included burgeoning fiscal deficits, mounting external current account deficits and external payment arrears, and gross misalignments in relative prices. These problems had their root causes in domestic economic mismanagement, exacerbated by external shocks such as the dual oil price shocks in the 1970s and the ensuing global economic recession. The anti-inflationary policies adopted in the industrialized countries in the early 1980s, and the resulting sharp rise in real interest rates, caught many heavily indebted developing countries unprepared, and the relatively high growth rates of the 1970s were followed by a severe economic slump.

The adjustment programs adopted by many SSA countries during the 1980s addressed both the macroeconomic distortions, as well as more deep-seated, structural problems in the economies. Usually supported by the IMF and the World Bank, the programs were also a key element in the mobilization of foreign donor support, both in the restructuring of external debt under the London and Paris Clubs, as well as in obtaining increased levels of development assistance.

Tanzania is an example of one such SSA country that embarked upon a wide-ranging structural adjustment program in 1986, after a decade of protracted economic decline. Its program was supported by both the World Bank and the IMF and was accompanied by high levels of foreign assistance. Between 1985 and 1990, the ratio of foreign aid disbursement to GDP increased steadily. This has led to an increasingly heated debate about whether real adjustment is in fact taking place in Tanzania or whether, rather than helping to reduce the imbalances in the economy, foreign aid is serving merely to perpetuate them (Rattsø 1992). Rattsø argues that, given the high level of foreign aid, and the favorable climatic conditions, Tanzania’s economic growth rate has been disappointing. Moreover, noting that both internal and external deficits have widened during the adjustment process, he concludes that as foreign aid inflows increased, domestic savings performance deteriorated, thus making Tanzania more dependent on inflows of foreign aid, and raising the question of the sustainability of Tanzania’s economic reform program.
The objective of this paper is to examine the relationship between structural adjustment, economic performance and aid dependency in Tanzania. Specifically, the paper attempts to answer the following questions:

1. Did large foreign inflows during the period of reform support structural adjustment or did they merely serve to postpone it?
2. Did increased foreign assistance during the reform period substitute for domestic savings, leading to a deterioration in the domestic savings effort?
3. Did increased foreign assistance lead to a consumption boom in the economy at the expense of investment?
4. Given the large inflows of foreign assistance, has the growth performance of the economy been adequate?

The rest of the paper is structured as follows. In Section II, we examine the theoretical and empirical issues of aid flows and aid dependency, and compare the inflow of aid to Tanzania with that in four other SSA countries that also adopted structural reform measures during the 1980s: Ghana, Kenya, Malawi and Uganda. All five countries are considered, to some degree, success stories within Africa, and the increase in the volume of foreign aid to all of these countries after they launched structural adjustment programs is striking. Section III describes the major problems with Tanzania's data, and the efforts that were made to improve their quality. In Section IV, we describe, qualitatively, some of the major policy changes that accompanied the structural adjustment process in Tanzania. Section V attempts to quantify some of these policy measures, and to compare the policies and outcomes of Tanzania's reform program with those of the four comparator countries. Finally, in Section VI, we summarize and draw some policy conclusions.
II. Structural Adjustment and Aid Flows

II.1 Overview of the Literature

The role of external financial assistance in development has been extensively discussed, although results of the discussion have not been conclusive. The theoretical basis of analyzing the macroeconomic role of external financing in the 1950s was the saving-investment gap and the Harrod-Domar growth model. Later, by modifying the rigidities in the growth model and introducing the trade deficit, the two-gap models developed by Chenery and Bruno (1962) and Chenery and Strout (1966) improved on the analytical framework. Taylor (1988, 1990) and Bacha (1990) introduced the fiscal gap as another constraint requiring external financing to augment the Government's tax effort in a noninflationary way. The two major conclusions that emerge from the literature with respect to the effectiveness of aid are that: (i) foreign aid should aim at raising domestic savings to a level sufficient to finance the investment needed to sustain the targeted growth rate of GDP; and (ii) foreign aid should not discourage the recipient countries from seeking to relieve the foreign exchange constraint by improving competitiveness and export diversification.

The empirical relationship between the size of foreign assistance and its impact on both the GDP growth rate as well as domestic savings behavior has been extensively debated. Some studies have questioned the usefulness of aid and showed that there is little or no correlation between aid inflows to developing countries and their GDP growth rates (for example, Gupta and Islam, 1983; or Mosley, 1987) and also that there is a negative impact of increased foreign aid on domestic savings (for example, Weisskopf, 1972). Other studies, however, do not confirm these relationships and there are a multitude of studies that have generally (though not definitively) concluded that aid has been beneficial to the growth prospects of developing countries (for example, Cassen, 1986; or Riddell, 1987).

The IMF and the World Bank have also periodically undertaken reviews of the effectiveness of the assistance they have provided to countries that have adopted stabilization and structural adjustment measures.¹ These studies have found that aid provided in the context of such reform

¹ The World Bank has undertaken three reviews of adjustment lending (RALs) in 1988, 1990, and 1992. The IMF has also undertaken annual reviews of experience under ESAF-supported arrangements.
measures has been successful in raising GDP growth rates, domestic savings ratios, and export ratios, though these gains are more moderate for low income countries than for others. However, the reviews have also found that in many countries, external viability has not been achieved.

2. Empirical Evidence

The volume of foreign assistance increased sharply in Sub-Saharan Africa during the 10-year period 1981-90. Figure 1 represents data on the average annual inflow of net official development assistance (ODA) adjustment in SSA: Ghana, Kenya, Malawi, Tanzania, and Uganda. For purposes of comparison, the period is divided into two halves: the years 1981-85 define the pre-reform period and the years 1986-90 define the period of reform. The substantial increase in aid in all five countries during the period of reform is striking. Figure 1 also shows that Tanzania has remained the largest recipient of foreign assistance, both in the pre-reform period and during the period of reform.

---

2 The source for all data on ODA are the World Bank's World Development Reports, and the African Development Indicators (UNDP/World Bank, 1992), which obtain this data from the OECD. The OECD database is based on reporting from donors. In this database, ODA is defined to include outright debt cancellations by donors but not the debt reschedulings granted under the auspices of the Paris Club.

3 The time period under review is held constant in this paper, despite slight differences in the period when reforms were introduced in different countries, in order that external terms of trade shocks could be eliminated as a source of difference between the economic performances of these countries.
Figure 1

Source: IMF and World Bank data, and authors' estimates.
Figure 2

Source: IMF and World Bank data, and authors’ estimates.

Figure 2 shows average aid flows as a percentage of GDP for the five countries in the two periods under consideration. It reveals that net disbursement of ODA as a percentage of GDP has increased in all five countries in the period of reform. The sharpest increase has been in Tanzania where this percentage went up from 13.5 in the pre-reform period to 34.7 in the period of reform. Both in the pre-reform period and during the period of reform, Tanzania has received the largest amount of aid, both in absolute terms, and as a percentage of GDP.
Comparisons of aid receipts as a percentage of GDP across countries could be somewhat misleading, however, since the GDP levels (measured in U.S. dollars) are affected significantly by the extent of exchange rate adjustments. This applies equally to intertemporal comparisons within a single country, particularly if exchange rate changes have been large. Hence, we also look at trends in aid per capita in these countries. Figure 3 shows average aid flows per capita for the five countries in the two periods under consideration. This indicator also confirms that aid flows increased considerably in all countries when they embarked upon reforms. Figure 3 reveals that in per capita terms, while Tanzania was the largest recipient of aid in the pre-reform period, during the period of reform Malawi has become the largest recipient, with aid amounting to US$44 per capita. Furthermore, in per capita terms, Ghana and Kenya got amounts that were roughly comparable to Tanzania, and only Uganda got an amount that was significantly lower (about US$23).
In addition to ODA as measured above, some of the SSA countries have also received substantial amounts of foreign assistance in the form of debt reschedulings at the Paris Club since the reform process began. While the initial reschedulings were on non-concessional terms, they have become increasingly concessional since 1988. Of the five countries being compared in this paper, Tanzania has received by far the largest amount of debt relief under the Paris Club. During the four Paris Club meetings that it has attended, it was granted debt relief (in cash flow terms) of about US$2.5 billion. By comparison, the total debt relief granted to Uganda is only US$352 million, and to Malawi it is even smaller at US$78 million. Ghana and Kenya have not received any debt relief through the Paris Club.

Thus, by all conventional measures, Tanzania receives a very large amount of foreign assistance. Even before the beginning of the structural adjustment programs in 1986, Tanzania ranked among those countries receiving the largest amount of foreign assistance. Since then, higher levels of foreign assistance in Tanzania have been closely correlated with the adoption of stabilization and structural adjustment programs. To some extent then, foreign assistance has cushioned the impact of economic adjustment measures on the economy. Balance of payments support has allowed Tanzania to maintain relatively high levels of imports despite the sharp devaluations of the Tanzanian shilling, which could have been expected to dampen demand for imported commodities, including raw materials and capital goods. To determine whether Tanzania became more dependent on external assistance, or whether the assistance was used productively and has contributed to a more sustainable financial position in Tanzania, we will look, qualitatively and quantitatively, at its program of structural adjustment in sections IV and V, respectively. Before we do that, however, we explain the data adjustments made in the next section.

III. Data Deficiencies and Adjustments

III.1 Data Deficiencies

It is difficult to make an accurate assessment of the performance of the Tanzanian economy because of the severe problems with its official data. This section describes three major problems in Tanzania's macroeconomic data: (i) the flawed compilation of the national accounts data; (ii) the under-recording of foreign aid in the government budget; and (iii) the under-recording of exports in
the balance of payments. This section will focus on our adjustments to the government budget and the balance of payments in Tanzania.  

However, we have not attempted to adjust the official data on the level and growth rates of GDP. While for the sake of comparability it might have been useful to similarly adjust the data of the comparator countries, that is beyond the scope of this paper. The data deficiencies would appear less severe in other countries in the sample, however, and are unlikely to affect our principal conclusions.

The national accounts severely underestimate the level and growth rate of GDP in Tanzania. This goes beyond the usual problem of capturing data on the level of activity in the informal sector of the economy, which is certainly an issue in Tanzania—and leads to an underestimation of both its level of GDP and its growth rate (since the informal sector has been the fastest growing sector)—but is also common in other developing countries. In addition, GDP growth is also underestimated because even the growth that has occurred in the formal sector has not been fully accounted for. This is because the dismantling of the pervasive state control in many sectors of the economy that has accompanied the reforms has eliminated some of the national accounts’ traditional sources of data, such as the large state trading corporations. Centralized reporting requirements, such as in construction, are also no longer in place. In the absence of an accurate assessment of the magnitude of this problem, this paper does not attempt to adjust the level and the growth rate of GDP.

4 To ensure consistency, we have used a flow-of-funds model for Tanzania developed by Ahmed (1992), which adjusts some of the key macroeconomic data for inter-sectoral flows.

5 Estimates by Maliyamkono and Bagachwa (1990) indicate that the official statistics underestimate the level of GDP in Tanzania by at least a third.

6 It should be borne in mind that this could lead to an exaggeration of our results. Since the underestimation of GDP is likely to be larger than in the comparator countries, all ratios may overstate the degree of aid dependency and inefficiency of investment in Tanzania.
III.2 Adjustments to the Data

III.2.1 Foreign assistance

Data on disbursements of foreign assistance are difficult to obtain, and the poor quality of aid data leads to inconsistencies between the aid recorded in the balance of payments accounts and that recorded in the fiscal accounts. Sometimes the discrepancies arise from purely definitional differences, for example, depending on whether or not debt relief is included. More often, however, it reflects the difficulties of accurately measuring and accounting for aid receipts. For some types of aid, expenditure is incurred overseas, and payment made directly by donors, so that it never passes through the Tanzanian government accounts. In Tanzania, such aid would be foreign technical assistance and direct project assistance, usually in the form of specific commodities, which together accounted for roughly half of total foreign assistance in the late 1980s. As a result, the balance of payments accounts, which are based on donor reporting, record substantially larger inflows of aid than the fiscal accounts.

In the analysis below, two adjustments have been made to the fiscal data to get a more accurate picture of total Government expenditures and the split between recurrent and development expenditures. The first adjustment is necessary to get a more precise measure of the fiscal deficit; the second is necessary to get a more accurate measure of public (and hence also total) investment, which is critical for the measurement of the productivity of investment in Tanzania.

The fiscal data are adjusted in two stages. First, the expenditure in the development budget is adjusted upward to include all project aid captured in the balance of payments. This adjustment allows the fiscal accounts to reflect more accurately the level of total government expenditure in
Tanzania. Second, since the Tanzanian development budget records all donor-funded expenditure regardless of whether it is in fact recurrent in nature, the level of development expenditure is not an appropriate proxy for public investment. Thus, in a second step, we adjust the fiscal data based on rough estimates indicating that about one third of donor-funded expenditures recorded in the development budget are in fact recurrent, and the breakdown between public consumption and public investment in the national accounts is adjusted accordingly.

III.2.2 Exports

In Tanzania, the balance of payments does not capture the large volume of unofficial exports. Since 1984, Tanzanian citizens have been allowed to import a large variety of commodities if they used their "own funds", i.e., if no foreign exchange was requested from the Bank of Tanzania. At the same time, it was illegal to hold foreign exchange, as all receipts had to be immediately surrendered. The myth was therefore upheld that Own Funds imports were financed from private transfers from abroad, and a counterpart to these imports was recorded as such in the balance of payments. Evidence strongly suggests, however, that these imports are financed by exports otherwise not recorded, and we have therefore used the data on private transfers as a proxy for unofficial exports. In recent years, we estimate that almost half of exports have remained unrecorded, accounting for about 13 percent of GDP.

By distorting the trade balance, the exclusion of these unrecorded exports introduces an important flaw in the national accounts framework. Within the familiar output-absorption relationship in equation (1):

\[ Y = C + I + X - M \]  

(1)
GDP (Y) in Tanzania is calculated from the production side. On the absorption side, estimates are obtained for investment (I), and imports (M). For exports (X), only data on official exports are included, and consumption (C) is derived as a residual. Since the value of total exports is underestimated, this leads to a corresponding overestimation of consumption by the same magnitude. Gross domestic savings are similarly affected, as illustrated in equation (2):

\[ Y = C + S \]  

(2)

representing the income-expenditure relationship, and in which gross domestic savings (S) are a residual. The overestimation of consumption in equation (1) thus leads to a corresponding underestimation of domestic savings in equation (2) by the same amount.

### III.3 Results of the Adjustments

Table 1 presents the official and the adjusted macroeconomic data, and illustrates the enormous difference that the adjustments make to a number of economic variables, especially in the reform period.

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<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption</td>
<td>89.6</td>
<td>89.3</td>
<td>99.0</td>
<td>86.7</td>
</tr>
<tr>
<td>Investment</td>
<td>18.3</td>
<td>18.7</td>
<td>26.1</td>
<td>28.2</td>
</tr>
<tr>
<td>Exports</td>
<td>8.7</td>
<td>9.6</td>
<td>13.8</td>
<td>26.9</td>
</tr>
<tr>
<td>Gross Domestic Savings</td>
<td>10.4</td>
<td>10.7</td>
<td>1.0</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Source: IMF and World Bank data, and authors' estimates.
The adjustments show that some of the traditional conclusions that were drawn about the impact of the adjustment program in Tanzania may need to be reconsidered. First, rather than being accompanied by a stagnation of exports, the reform program has seen a sharp improvement in export performance, increasing from an average of 9.6 percent of GDP in the pre-reform period to an average of 26.9 percent during the period of reform. Second, the adjustments show that as a share of GDP, consumption fell from 89.3 percent in the pre-reform period to 86.7 percent during the reform period, while at the same time investment rose from 18.7 percent to 28.2 percent, indicating that the bulk of the foreign assistance was used for investment rather than for consumption purposes. Finally, the increase in foreign assistance does not appear to have been detrimental to the domestic savings performance. The adjustments to the data show that rather than falling from an average of 10.4 percent in 1980-85 to one percent of GDP in 1986-90, domestic savings increased to 13.3 percent in the second half of the decade.

Before examining how Tanzania’s performance compares with other countries, in the next section we describe the reforms undertaken by Tanzania when it embarked upon structural adjustment.

IV. The Structural Adjustment Program in Tanzania

From the late 1970s to the mid-1980s, Tanzania’s economy was characterized by extensive administrative controls, and suffered from severe internal and external imbalances, largely as a result of inappropriate exchange rate and pricing policies, expansionary financial policies, and deep-rooted structural problems. Between 1980 and 1985, the economy experienced low or negative growth in real GDP as production and exports declined and capacity utilization fell. Inflation was high, averaging over 30 percent per year, the balance of payments registered large deficits, and the country faced a severe shortage of foreign exchange reserves, leading to an accumulation of external payment arrears.

An Economic Recovery Program (ERP), supported by the IMF and the World Bank, was initiated in 1986, aimed both at macroeconomic stabilization and structural reform of the economy. External policies initially addressed the substantial overvaluation of the Tanzanian shilling by implementing a series of discrete devaluations. The real effective exchange rate depreciated by over 60 percent in 1986, and by a further 60 percent between 1987 and 1989. Despite the large
adjustments, the Tanzanian shilling remained overvalued during the first few years of the adjustment program, and the spread between the official and the parallel exchange rates, while reduced considerably, persisted. In 1992, the reform of the exchange system was intensified when Tanzania introduced foreign exchange bureaus, which are authorized to buy and sell foreign exchange at freely negotiated rates. At the same time, far-reaching liberalization of Tanzania's foreign exchange legislation was introduced, which allowed Tanzanian citizens to hold foreign currency deposits at domestic banks. The official exchange rate was adjusted to within 30 percent of the prevailing parallel rate prior to the opening of the bureau market, and this spread was reduced to 20 percent in the first six months of the operation of the bureaus.

Trade reform under the ERP was predated by the introduction of the "own funds" facility in 1984, which allowed Tanzanian residents to import (fairly) freely when using their own foreign exchange resources; a policy that the Tanzanian Government adopted against a background of severe shortages of imported spare parts and basic consumer goods. In 1989, Tanzania introduced a limited Open General License (OGL) import system, governed by a short positive list of eligible imports. The positive list was replaced by a negative list of ineligible goods in 1991, and the scope of freely accessible imports was widened somewhat, although the financing of the OGL remained wholly donor-driven. In 1992, import liberalization was accelerated; the OGL negative list was shortened substantially to cover only about 20 percent of the value of non-oil imports, and the Bank of Tanzania started using its own foreign exchange reserves to support the OGL.

Fiscal reforms, which aimed at broadening the revenue base and reducing the overall budget deficit, were also undertaken during the adjustment period. The revenue to GDP ratio increased substantially, from an average of 18.3 percent in 1981-85 to 22.1 percent by 1991. Together with expenditure restraint, this allowed for a steady reduction in the overall budget deficit (after grants) from an average of 10.1 percent in 1981-85 to 3.5 percent by 1991. At the same time, the Government reduced its reliance on domestic bank financing of the deficit, and in 1990 and 1991 the Government in fact made net repayments to the banking system. The structure of the tax system was progressively reformed, lowering the maximum tax rates and reducing the dispersion of the rates, contributing to a more efficient tax system. In addition, steps were taken to improve the administration of the tax system in an effort to improve collection.
Major structural reforms were introduced in a number of sectors. In the agricultural sector, the first two years witnessed the deconfining of maize and paddy at the primary society level with private traders allowed to participate and negotiate purchase prices. Most domestic retail prices were also decontrolled. In 1990, the fixed official producer prices were replaced by an indicative price system, and the role of the National Milling Corporation, which previously held a monopoly in grain marketing, was sharply curtailed, so that by 1991 its operations were limited to commercial milling. However, while reforms in the marketing of food grains have been substantially completed, the traditional export crops continue to be subject to a de facto government monopoly in their marketing arrangements, and for some crops producers continue to receive prices that are well below world market levels.

In 1991, the Government initiated a comprehensive reform of the financial system. The banking sector was opened to private sector participation, both domestic and foreign, and the rigid structure of fixed interest rates and differentials was replaced by a single maximum lending rate. The Bank of Tanzania's role in prudential supervision was strengthened, as regulations were issued regarding the licensing of commercial banks, loan provisioning, and capital adequacy requirements. Existing commercial banking institutions were subjected to an in-depth portfolio audit, and their balance sheets were restructured with the help of a liquidation agency and a recapitalization by the Government.

In the next section, we examine the outcome of the policy measures undertaken by Tanzania, and compare the success of the Tanzanian reform program, as measured by the adjusted data, with that of the four comparator countries.

V. Cross-Country Policy and Performance Assessment

V.1 Methodology

First, we compare Tanzania's policy stance with that prevailing in the other reforming countries, both before and during the reform period, based on four indicators: (i) the real effective exchange rate; (ii) the current account deficit to GDP ratio; (iii) the budget deficit to GDP ratio; and (iv) the inflation rate. Subsequently, we review four indicators that are more reflective of economic
performance: (i) the real GDP growth rate; (ii) the ratio of domestic investment to GDP; (iii) the ratio of domestic savings to GDP; and (iv) the ratio of exports to GDP.

V.2 Policy Indicators

V.2.1 Real Effective Exchange Rate

Table 2 below gives the comparative results on movements of real effective exchange rates for the five countries, including Tanzania.

<table>
<thead>
<tr>
<th>Country</th>
<th>1981-85</th>
<th>1986-90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>5.9</td>
<td>-15.2</td>
</tr>
<tr>
<td>Kenya</td>
<td>0.4</td>
<td>-7.1</td>
</tr>
<tr>
<td>Malawi</td>
<td>-0.4</td>
<td>-1.0</td>
</tr>
<tr>
<td>Uganda</td>
<td>-23.2</td>
<td>-6.0</td>
</tr>
<tr>
<td>Tanzania</td>
<td>16.1</td>
<td>-27.8</td>
</tr>
</tbody>
</table>

Source: IMF and World Bank data.

The comparison shows that real exchange rate adjustment has played a role in all five countries under review. Tanzania, in part because of the size of the initial distortions, has made the largest adjustment, with a real depreciation of the shilling averaging 27.8 percent per annum during 1986-90, in stark contrast to its appreciation by 16.1 percent per annum during 1981-85.

V.2.2 Current Account Deficit

Figure 4 presents data on the current account deficit (after grants) as a percentage of GDP for the five countries under comparison. It shows that the initial current account deficit in Tanzania was much larger than in the other countries, except Malawi. In the reform period, Tanzania's current account deficit has widened. Except for Malawi, this also occurred in the other reforming countries, and may not necessarily indicate a "worsening" of the external situation if all that it reflects is that
more aid is available to countries that initiate economic reforms. Ultimately, one needs to look at an indicator such as the rate of growth of exports, in order to evaluate the success of the reforms in improving the external position.\footnote{A recent survey by the IMF of 19 countries that are undertaking SAF/ESAF supported stabilization programs found that although the underlying external position in these countries has tended to strengthen, with the reserve position usually improving, the current account deficit of the balance of payments did not show a clear trend.}
V.2.3 Fiscal Deficit

Fiscal deficits for the five countries are presented in Figure 5, and illustrate that all five countries succeeded in reducing the size of the deficit during the period of reform. In the case of Tanzania, substantial adjustment took place during the reform period, and its overall government budget deficit (after grants) as a ratio of GDP declined from an average of 10.1 percent in the pre-reform period to 5.6 percent during the reform period.
V.2.4 Inflation Rate

Figure 6 presents data on average annual inflation rates in the two periods for Tanzania and the four comparator countries. Tanzania's record of controlling inflation is positive and compares favorably to that of the other countries. Starting from an initially distorted situation, despite substantial devaluation and price liberalization during the reform period, Tanzania managed to keep inflation at historical levels on average. By comparison, structural adjustment in Malawi and Uganda was initially accompanied by an increase in the rate of inflation.

Source: IMF and World Bank data, and authors' estimates.
V.3 Performance Indicators

V.3.1 GDP Growth Rate

GDP growth rates for the five countries under comparison are shown in Figure 7. It reveals that the rate of economic growth in all countries except Malawi increased, in some cases markedly, during the period of reform. In Tanzania, the rate of growth of GDP increased sharply, from 0.5 percent per annum in the pre-reform period, to 4.2 percent per annum in the period of reform. Nevertheless, two questions arise related to the performance of each country's economy. Firstly, was the level of investment adequate in each country, or was the country consuming "too much" and investing "too little"? Secondly, did the investment that took place provide an adequate "rate of
return" or, to put it differently, was the growth rate that was achieved "satisfactory" relative to the level of investment that took place.

Figure 8

Source: IMF and World Bank data, and authors’ estimates.

V.3.2 Investment

To answer these questions, we look at two related indicators: the ratio of investment to GDP, and a measure of the "rate of return" or the efficiency of investment, i.e., the GDP growth rate as a ratio of a unit of investment (defined as the ratio of gross domestic investment to GDP).

Figure 8 presents data on the ratio of gross domestic investment (GDI) to GDP for the five countries. It reveals that in all countries except Malawi, reform was accompanied by an increase in the share of GDP being invested. In the case of Tanzania, there was a dramatic increase, with investment's share of GDP increasing from an already high average of 18.7 percent in the pre-reform
period to a still higher average of 28.2 percent in the period of reform. Of the five countries being compared, this makes Tanzania the country with the highest level of investment in the period of reform.

**Figure 9**

![Efficiency of Investment](image)

Source: IMF and World Bank data, and authors’ estimates.

Figure 9 presents data on the efficiency of investment, and reveals one of the shortcomings of the Tanzanian reform program. It shows that both in the pre-reform period and during the period of reform, Tanzania has had the lowest efficiency of investment of all five countries. When compared with Uganda, in particular, the results are especially striking: the efficiency of investment in Tanzania in the reform period is only about a quarter of that in Uganda. Uganda, with an average investment share of only 11.0 percent of GDP in the reform period, has been able to achieve an average growth rate of 6.5 percent per annum during that period. In contrast, during the same period, Tanzania with an average investment share of 28.2 percent of GDP, has only been able to achieve an average growth rate of 4.2 percent per annum.
On the other hand, during the process of reform, the efficiency of investment improved in all countries except Malawi. In fact, the most marked increase was in Tanzania where, according to this indicator, the efficiency increased more than five-fold. Despite that, however, the returns to investment remain low in Tanzania.

Figure 10

![GDS as Ratio of GDP](image)

Source: IMF and World Bank data, and authors' estimates.

V.3.3 Domestic Savings

Figure 10 presents data on the gross domestic savings (GDS) rate as a ratio of GDP for the five countries. It indicates that the impact of the structural adjustment programs on domestic savings is mixed. Given the problems of measuring the savings rate (usually calculated as a residual in the national accounts), and the problems that many of the SSA countries face with respect to the quality
of economic data, cross-country comparisons of the saving rate should probably be viewed with caution. Bearing that in mind, however, it appears that, with the exception of Malawi, the adjustment programs have not had a marked negative impact on the domestic savings performance. This observation would contradict the hypothesis that the additional foreign assistance accompanying the adjustment process leads to a substitution of foreign for domestic savings. In the case of Tanzania, the comparison underlines that, after the data adjustments described in Section III.2 above, Tanzania's domestic savings performance has not deteriorated during the adjustment period, and in fact, is better than in all other countries in the sample except Kenya.

V.3.4 Export Growth

The relative performance of merchandise exports in the five countries is shown in Figure 1.1. It shows that the export performance of the countries under review has been mixed. In Ghana, Kenya, and Tanzania, exports had been declining prior to reform. The introduction of reform led to a marked improvement in export performance, especially in Ghana and Tanzania. Kenya also experienced a reversal in export performance, though not as dramatic as that in Ghana and Tanzania. However, in Malawi and Uganda, both of which had positive export growth rates prior to reform, the situation was reversed: these countries experienced falling exports during the period of reform. In Uganda, the reversal is quite severe, with growth rates of exports declining from an average of 8.3 percent per annum to -0.4 percent per annum.

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8 Export volume data for Ghana reflect only cocoa exports, while for Uganda they only capture coffee exports. For lack of information, export volume data for Tanzania include only officially recorded exports.
V.4 Overall Assessment

The policy indicators show a remarkably similar policy stance in the countries under review: while real progress was made towards achieving a more appropriate real effective exchange rate and towards reducing the size of the overall budget deficit, this was usually not accompanied by a reduction in the external current account deficit. Only on inflation is the record mixed: in three countries (including Tanzania) inflation declined during the reform period, whereas in the other two, it went up. However, even in the countries where inflation declined, with the exception of Malawi,

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9 The widening of the current account deficit that is observed in a number of countries under review may be the result of the initial import liberalization that was part of most adjustment programs. While import levels tend to rise immediately, exports, on the other hand, may take longer to respond, especially in countries exporting mainly primary commodities. Several factors could account for the lag in export response, such as inefficiencies in the agricultural marketing systems, infrastructural constraints, and gestation lags in production.
the inflation rate continues to be high (about 20 percent or higher), indicating that, more often than not, Governments have encountered difficulties in tightening monetary policy as much as targeted.

In most countries under review, with the exception of Malawi, the policy stance appears to have yielded results: economic growth has risen, investment has increased, and domestic savings rates have stabilized. At the same time, for these countries, the efficiency of investment increased during the reform period. The data show a clear difference, however, in the efficiency with which countries have made use of the, mainly externally financed, investment. Particularly in Tanzania, the return on investment has been very low. Such low rates of efficiency could be explained by the fact that the Tanzanian economy was, and continues to be, dominated by a highly inefficient parastatal sector, with low capacity utilization. Most of these parastatals were kept alive only through substantial amounts of fiscal and quasi-fiscal subsidies. In addition, the regulatory environment for the development of the private sector continues to hinder the emergence of a vibrant and efficient private sector. While there has been some growth in the informal sector, this sector is not very capital-intensive, and its contribution to the level of investment in the economy remains minimal.

VI. Summary and Conclusions

The analysis of aid dependency and structural adjustment in Tanzania has generally been hampered by the poor quality of the data available, which fail to capture a significant part of the impact of the reform programs. Adjusting for the most obvious data shortcomings—the inadequate coverage of the government budget and the flow of unrecorded exports—shows that Tanzania’s record under structural adjustment is broadly comparable to that of other Sub-Saharan African countries with relatively successful reform programs. Domestically, it succeeded in reducing the overall budget deficit and reduced inflation. On the external side, it improved its competitive position by depreciating its exchange rate in real terms. While the external current account deficit widened, this was a common feature among successful adjustment programs, as they led to an increased level of foreign support. The results of these policies have been equally encouraging. Economic growth has improved, investment has risen, and exports—including unofficial exports—have increased. By all measures, Tanzania has done as well, or better, than the comparator countries.

The striking difference between Tanzania and the other Sub-Saharan African countries sampled, is the efficiency with which the additional foreign assistance that went into investment was
used. Using a measure for return on investment, Tanzania's performance, although improving during the reform period, lags far behind the comparator countries. Thus, while the data do not support the hypothesis that foreign aid has replaced domestic savings, it is likely that the return on foreign-financed investment has been very low in Tanzania. The low productivity of investment can partly be attributed to the domination of the Tanzanian economy by a large and inefficient parastatal sector.

From an economic policy perspective, three main conclusions stand out. First, macroeconomic and structural adjustment has worked in Tanzania, and the increased foreign support has probably eased the adjustment path. Rather than financing continuing domestic imbalances, foreign-assisted reforms have contributed to reducing the disequilibria. Second, Tanzania has not been successful in using the increase in foreign assistance efficiently. It is beyond the scope of this paper to fully determine why productivity has been low, but future research could focus on the absorptive capacity of the Tanzanian aid administration and the composition of the assistance received by Tanzania. Finally, the emphasis of economic policy should shift towards increasing the productivity of investment. In the Tanzanian context, this would mean accelerating the reform of the parastatal sector, long a favored recipient of foreign assistance, and improving the environment for private sector development. The reform of the civil service, which administers the aid flows accounting for 50 percent of GDP, also stands out as an area where an improvement in productivity could yield large benefits.
Bibliography


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