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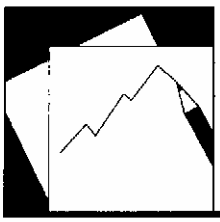

IMF Working Paper

Financing Uganda's Poverty Reduction Strategy: Is Aid Causing More Pain Than Gain?

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Abstract

Uganda's market-friendly development strategy and poverty reduction agenda have attracted large financial inflows, including aid. During 2000–02, concerns about a possible aid-induced Dutch disease were heightened by widening macroeconomic imbalances and an upward trend in the real effective exchange rate (REER). This paper shows that the REER remained broadly stable during a 10-year period and nontraditional exports increased remarkably, contrary to the predictions of the Dutch disease model. Also, economic growth was strong. This good performance is attributed to sound macroeconomic policies and important structural reforms, which have allowed an increased use of available production factors.

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I. INTRODUCTION

Over the last decade, Uganda's progress in implementing a market-oriented development strategy and its commitment to poverty reduction have attracted a considerable amount of financial inflows, including official development assistance (ODA). Since 1998, resources made available by debt relief under the Heavily Indebted Poor Countries (HIPC) Initiative have bolstered the implementation of Uganda's Poverty Eradication Action Plan (PEAP). In 2000, the Bretton Woods institutions endorsed a summary of the PEAP as the country's Poverty Reduction Strategy Paper (PRSP) and declared that Uganda had qualified for additional debt relief under the enhanced HIPC Initiative.[2]

The question of the impact of large donor inflows on macroeconomic management and economic growth emerged, owing to two particular developments pointing to the possibility of "Dutch disease." First, Uganda's monthly real effective exchange rate (REER)[3] index had been on an upward trend since early 1999 despite a sharp deterioration in the country's external terms of trade that started in 1996. Second, the trade and current account balances deteriorated sharply.

The concerns raised, which appear legitimate, prompted controversies (Philipps, 2002). The essence of the controversies is whether ODA, as well as the associated level of public spending, is possibly so high that it can hurt exports and long-term growth by preventing a real exchange rate depreciation that would have been a desirable adjustment to the adverse terms of trade shock that has affected Uganda. However, to the extent that Uganda needs foreign capital to advance the implementation of its Poverty Reduction Strategy (PRS) and that it has attracted ODA and non-ODA inflows, both capable of causing Dutch disease-type symptoms, an important question that could be asked is not whether aid is causing the Dutch disease but whether it is causing more pain than gain.

The answer to this question should be based on a careful analysis of the interaction of different factors that coexist with ODA flows to avoid misguided policies based on faulty diagnoses. This paper places the question of ODA to Uganda in the broader context of the needed economic transformation, as well as sustainable long-term growth that is supposed to underpin the country's poverty reduction efforts. While ODA has enabled Uganda to make progress in the implementation of its PRS, it has also contributed to a relative strengthening of the Uganda shilling, with a possible adverse impact on some exports. The issue, therefore, is whether the strengthening of the shilling has long-lasting adverse consequences on the economy that outweigh the potential long-term benefits of the poverty reduction programs financed with external

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[2] Uganda qualified for debt relief under the original HIPC Initiative in 1997. In 2000, total debt relief under the original and the enhanced Initiatives was estimated at roughly US$2 billion. Actual debt service relief averaged US$52.5 million a year during 1998/99–2000/01.

[3] The REER is computed as the nominal effective exchange rate (NEER) index adjusted for relative movements in national prices or cost indicators of the home country and its trading partners. The NEER index itself is the ratio of an index of period average exchange rates of a country's currency to a weighted geometric average of exchange rates for its trading partners. Where real exchange rate (RER) is used, it refers to the ratio of the price of nontradables to tradables. For both the REER and the RER, an increase denotes an appreciation.

assistance. The paper acknowledges that, in the absence of detailed data showing sectoral linkages, conducting ex ante a meaningful cost-benefit analysis of the impact of large externally financed social spending on long-term growth is difficult.

The literature associates massive ODA, as well as non-ODA inflows, with a combination of benefits and adverse side effects, including disruptive reversals and economic downturns.[4] Tsikata (1999) and Hansen and Tarp (2000) present surveys of the literature on aid effectiveness. Regarding the Dutch disease effects of aid, many studies conducted on a number of countries have reached different conclusions as to whether aid was associated with the Dutch disease. A review of a few of these studies is presented in Nkusu (2004). The analysis conducted below uses a twofold approach.

First, the paper takes a backward-looking approach that examines the behavior of the REER and that of exports to gain insights into the possibility of an ODA-induced Dutch disease. In light of the abundant literature on the impact of capital flows on the REER and the fact that Uganda has attracted both ODA and non-ODA flows, an analysis of the evolution of non-ODA financial flows is included to enhance the treatment of the main question this paper poses. The paper shows that notwithstanding the large ODA, as well as non-ODA flows that Uganda received, not only did the REER not appreciate,[5] but also and more importantly, real exports increased remarkably in contrast with the predictions of the core Dutch disease model. It argues also that, should the REER be considered as displaying symptoms of the Dutch disease, these symptoms are mild and not solely aid driven. Second, in a forward-looking perspective, the paper underscores important premises under which ODA is likely to help Uganda promote sustainable high rates of economic growth, thereby contributing to poverty reduction.

The rest of the paper is structured as follows. Section II highlights some stylized facts about financial inflows, economic growth, and macroeconomic management. Section III presents some information on financial flows to Uganda, macroeconomic performance in general, the behavior of exchange rates, and the performance of exports. Section IV reflects on the appropriateness of the predictions of the core Dutch disease model for Uganda in light of the evolution of Uganda's REER and exports. Section V highlights lessons and provides concluding remarks.

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[4] Calvo, Leiderman, and Reinhart (1993) and Goldstein (1998) analyze the problems associated with non-ODA flows—foreign direct investment (FDI) and portfolio investments—to Latin America and East Asia, respectively. Fischer and Reisen (1993) highlight lessons from many OECD and developing countries' experiences with private capital flows, following capital account liberalization.

[5] Notwithstanding some short-term appreciations, the REER remained on a broadly stable long-term trend.

II. Financial Inflows, Growth, and the Dutch Disease: Background and Analytical Framework

Understanding the nature of financial inflows and the forces driving them is very important to ascertain their macroeconomic impact, their likely volatility, and the balance of payments problems they could engender. It can also be of importance in the design of an appropriate policy response. Pull- and-push factors of financial inflows have been widely analyzed in the literature, providing insights into what drives financial inflows.[6]

Massive financial inflows bring some benefits for recipient countries but they are usually associated with the following side effects: a risk of reversal that could lead to balance of payments difficulties or currency crises, upward pressures on inflation or loss of control over the monetary base, and an appreciation of the real exchange rate. The risk of reversal, as well as the balance of payments and currency crises it is likely to bring about, can be examined by distinguishing private from official flows.

Private inflows include FDI, portfolio flows, and transfers. FDI refers to the acquisition by a foreign investor of a lasting interest in an enterprise within the country. As such, it represents flows with a minor risk of sudden reversal.[7] Portfolio flows are related to equity and debt instruments usually traded in organized financial markets. They have a high risk of reversal, in particular if they are associated with short-term securities.

Official aid flows comprise medium- and long-term concessional loans and grants from bilateral and multilateral sources. Such loans and grants both have an almost nil risk of sudden reversal.[8] Nonetheless, they could be connected to the risk of a sudden stop; the adverse impact on the balance of payments of this risk is smaller than the one associated with a sudden reversal.[9]

A. Financial Inflows and Economic Growth

The different types of financial inflows influence economic growth in a recipient country through different channels. FDI brings some standard benefits, including the transfer of technological know-how and managerial skills. Accordingly, it contributes to strengthening the productive capacity of the economy and to improving efficiency in production.

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[6] See Calvo, Leiderman, and Reinhart (1993 and 1994) for more comprehensive discussions of this topic.

[7] However, FDI figures may include some liability-creating flows, such as intercompany debt, that can be reversed quite quickly.

[8] While disbursements can be stopped anytime, debt servicing will be expected to continue according to an agreed schedule.

[9] Official grants, along with transfers to the nongovernment sector, could generate or exacerbate macroeconomic management problems as those related to capital inflows. In this vein, the analysis of the impact of inflows includes capital as well as noncapital financial flows.

ODA is intended to support infrastructure and human capital building, alleviate the foreign exchange constraint on growth by contributing to the financing of imports, easing the service of an otherwise excessive external debt burden, and raising foreign exchange reserves levels. Investment in infrastructure and human capital aims at providing incentives for private sector development. To the degree that ODA allows such investment to take place, it plays a critical role in laying the foundation for sustainable high rates of private sector-led economic growth and poverty reduction. However, its effectiveness has been a contentious area of debate. Surveys of empirical analyses on aid effectiveness can be found in Tsikata (1999) and Hansen and Tarp (2000). Findings have varied from the more categorical stances of the relationship between aid and growth being nonexistent, negative, or positive to the more recent results suggesting a nonlinear relationship. The nonlinearity has been associated with factors such as a policy index (Burnside and Dollar (2000), Collier and Dehn (2001), Collier and Dollar (2002)) or the level of aid (Hadjimichael and others (1995), Lensink and White (2001), and Dalgaard and Hansen (2001)). Based on the survey they conduct, Hansen and Tarp (2000) conclude that when all the studies are considered as a group, there is convincing evidence of a positive relationship between aid and growth. Nonetheless, the varied results existing in the literature highlight the complexity of the aid-growth nexus.

In an economy receiving large financial inflows of any type, the ability of domestic institutions and macroeconomic policies to foster incentives for private sector development is critical for the inflows to contribute to economic growth. For ODA in particular, to the extent that it allows increasing investment in physical infrastructure and human capital, thereby laying the foundation for attracting private investment, the benefits of the economic transformation it can contribute to need to be weighed against possible harmful effects of RER appreciations the recipient country may experience, which do not necessarily embody the Dutch disease (Nkusu, 2004).

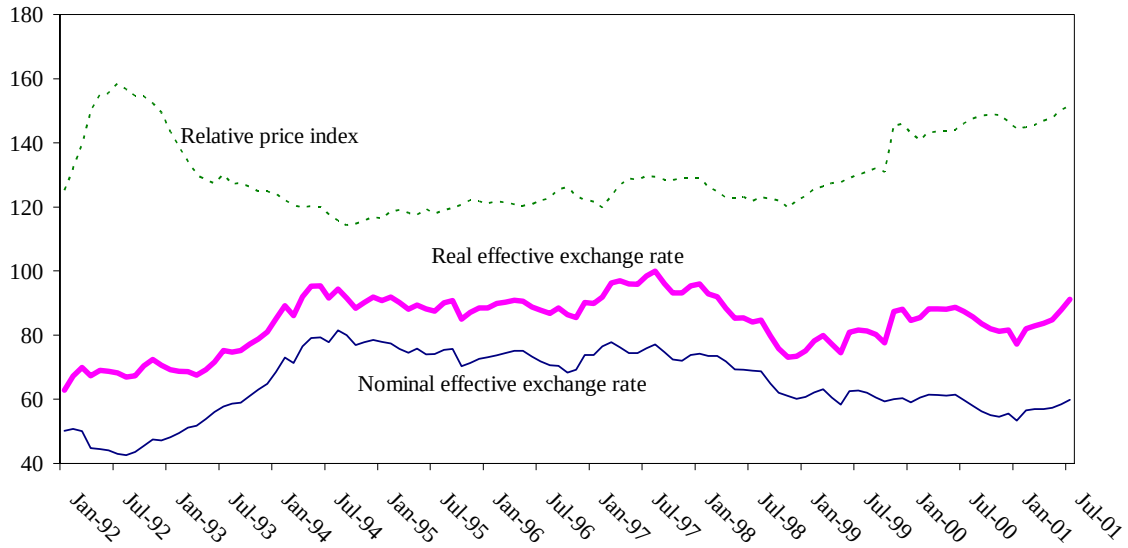
B. Financial Inflows, Macroeconomic Management, and the Real Exchange Rate

The adverse side effects of large financial inflows mentioned above—mainly upward pressures on inflation and REER appreciation—create important macroeconomic management problems in recipient countries. Aware of the possible adverse impact of REER appreciation on exports and on an export-oriented development strategy, researchers and policymakers have attempted to find measures aimed at mitigating the adverse impact of massive financial inflows on the REER. However, they have not come up with a policy or policy mix that could be recommended to all countries facing massive financial inflows. Of the possible policies, sterilization has been used to reconcile price stability and export competitiveness with varied degrees of success in different countries. The high domestic interest rates that sterilization conducted through the sale of government securities induces can exacerbate macroeconomic management problems by attracting further capital inflows—in particular in countries that are highly integrated to international capital markets—and thereby exerting further pressures on the REER to appreciate. When inflows accrue to the government, such as in the case of ODA, and sterilization of the excess liquidity associated with high government spending is carried out through the sale of foreign exchange, the RER would appreciate via appreciations of the nominal exchange rate.

Real exchange rate appreciations associated with large financial inflows have been compared with Dutch disease-type effects of booms resulting from positive terms of trade shock or the discovery of new resources, as analyzed by Corden and Neary (1982), Benjamin,

Devarajan, and Weiner (1989). The concerns raised about the possible Dutch disease-type effects of ODA in Uganda were nurtured by the upward trend in the REER index during 1999–2001 (Figure 1)[10] and the downward trend in the value of exports and the exports-to-GDP ratio (Figure 2 and Table 1). Whether these developments represent a "disease" and whether such a disease should be attributed to aid is an open question. The next section highlights the facts regarding financial inflows to Uganda and the associated development of key macroeconomic variables, including the REER and exports.

Figure 1. Uganda. Effective Exchange Rates, January 1992–July 2001
(Index 1990 = 100)



Source: IMF, Information Notice System (INS).

[10] The REER is computed using the official exchange rate. Since 1992, the parallel market was absorbed by foreign exchange bureaus with the liberalization of the foreign exchange market.

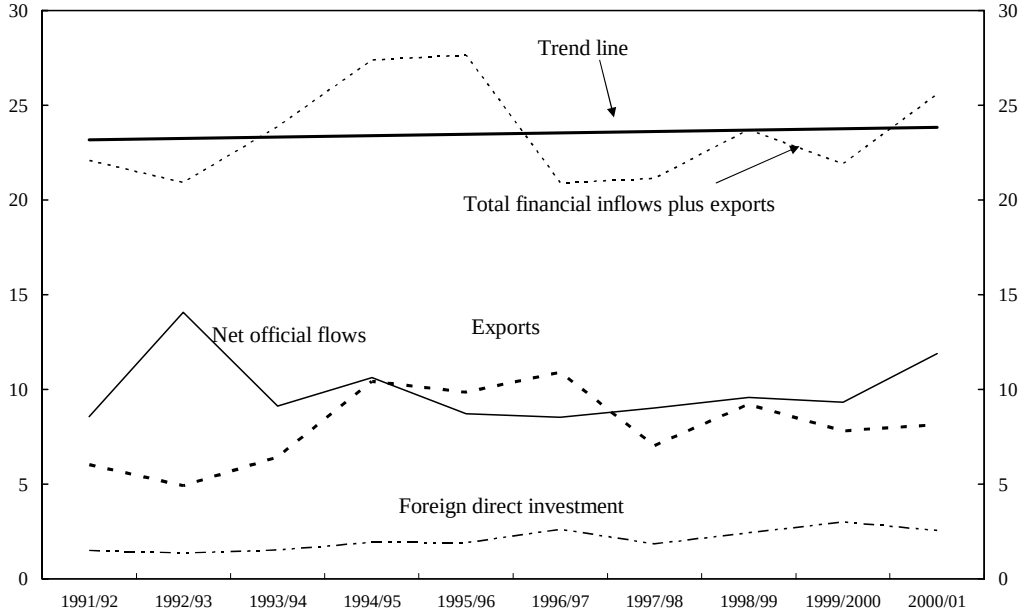
Table 1. Financial Inflows to Uganda, 1991/92–2000/01[1]
(In millions of U.S. dollars, unless otherwise indicated)

	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
Net official flows	244.1	449.7	360.5	607.3	522.4	534.3	589.6	570.7	548.4	670.8
Official budgetary support	144.3	195.3	194.7	220.2	136.2	164.8	206.9	182.5	205.0	291.7
Grants	75.1	111.4	75.5	95.7	86.3	118.8	162.0	118.7	166.5	208.3
HIPC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.2	56.7	55.6
Other grants	75.1	111.4	75.5	95.7	86.3	118.8	162.0	73.5	109.8	152.8
Loans	69.2	83.9	119.2	124.4	49.9	45.9	45.0	63.8	38.5	83.4
Project support	225.2	330.8	305.5	459.9	422.9	419.0	435.8	405.9	404.7	416.9
Grants	131.0	165.4	152.7	207.0	190.3	188.6	217.9	203.0	202.3	183.0
Loans	94.2	165.4	152.7	252.9	232.6	230.5	217.9	203.0	202.4	134.0
Amortization and arrears payments	-125.4	-76.4	-139.6	-72.7	-36.6	-49.6	-53.0	-17.8	-61.3	-37.9
Net private flows	178.4	162.4	474.2	654.9	637.2	163.2	201.6	183.8	351.4	292.1
FDI	42.5	43.5	59.9	110.0	113.4	163.0	120.0	145.3	176.6	143.8
Commercial loans and other private capital	0.0	11.0	110.6	215.0	216.1	-18.3	45.7	17.2	7.8	1.2
Private transfers	135.9	107.9	303.7	329.9	307.7	18.5	35.9	21.3	167.1	147.1
Errors and omissions	34.9	-99.7	-146.2	-291.6	-92.6	-71.3	131.2	110.3	-69.8	20.6
Net private flows plus errors and omissions	213.3	62.6	328.0	363.3	544.6	92.0	332.8	294.1	281.7	312.7
Total financial inflows	457.4	512.3	688.5	970.7	1,067.0	626.2	922.4	864.8	830.1	983.5
Exports	172.1	157.1	253.9	595.3	590.3	683.6	459.4	549.1	459.9	458.3
Total financial flows plus exports	629.5	669.4	942.4	1,566.0	1,657.3	1,309.8	1,381.8	1,413.9	1,290.0	1,441.8
Net official flows and FDI (in percent of total inflows)	62.7	96.3	61.1	73.9	59.6	111.3	76.9	82.8	87.3	82.8
Grants (in percent of net official flows)	84.4	61.5	63.3	49.8	52.9	57.5	64.4	56.4	67.3	58.3
In percent of GDP at market prices										
Net private financial flows	7.5	2.0	8.3	6.4	9.1	1.5	5.1	4.9	4.8	5.5
FDI	1.5	1.4	1.5	1.9	1.9	2.6	1.8	2.4	2.9	2.5
Non-FDI private flows (incl. errors and	6.0	0.6	6.8	4.4	7.2	-1.1	3.3	2.5	1.8	3.0
Net official flows	8.6	14.1	9.1	10.6	8.7	8.5	9.0	9.6	9.3	11.9
Exports	6.0	4.9	6.4	10.4	9.8	10.9	7.0	9.2	7.8	8.1
Total financial inflows plus exports	22.1	20.9	23.9	27.4	27.6	20.9	21.1	23.7	21.9	25.6
Memorandum items:										
Nominal GDP (at market prices)	2849.5	3198.6	3949.6	5717.2	5994.7	6269.3	6539.6	5964.5	5886.1	5640.9
Real GDP growth (in percent)	2.2	8.6	6.4	11.9	8.6	5.1	4.7	7.9	5.4	5.3

Sources: Ugandan authorities; IMF staff estimates; and author's calculations.

1/ Fiscal years begin in July.

Figure 2. Uganda: Financial Inflows and Exports, 1991/92–2000/01[1]
(In percent of GDP)



Sources: Ugandan authorities; and IMF staff estimates.
1/ Fiscal years begin in July.

III. Financial Flows to Uganda, the Real Exchange Rate, and Exports

A. Composition of Financial Inflows and Developments in Macroeconomic Aggregates

External financial flows to Uganda have been of diverse types. Although the debate over the macroeconomic implications of financial inflows has focused on ODA, private flows also have grown very much during the ten-year period to 2000/01 (Table 1), albeit with ups and downs. In fact, while ODA and non-ODA inflows (including errors and omissions) grew by almost 175 percent and 47 percent, respectively, over the ten-year period, on an annual average basis, non-ODA flows grew by over 65 percent, compared with 16 percent for ODA flows.[11]

The financial inflows that Uganda has been receiving are of a broadly stable nature. They indicate the international community's favorable response to reforms and policies that the country implements. During the ten-year period to 2000/01, grants accounted on average for almost 62 percent of net ODA. FDI, grants and long-term concessional loans accounted, on average, for almost 80 percent of all financial inflows. FDI has been an important component of non-ODA

[11] The figures reported reflect also recording errors. Nonetheless, even after excluding errors and omissions, the annual average growth rate of non-ODA flows remains strong, at 26 percent. Developments in non-ODA flows may have, along with various structural changes, encouraged some observers to consider Uganda as an emerging market country, even though institutionally it has not yet reached the standing of countries usually referred to as such. For instance, Montiel and Reinhart (1999) include Uganda in a study of capital flows to emerging markets, and the UN Conference on Trade and Development (UNCTAD) (2000) lists Uganda's emerging market status among its strengths.

inflows, rising by almost 240 percent over the ten-year period, while its share in private flows was rising from 20 percent in 1991/92 to almost 46 percent in 2000/01.[12] Private portfolio inflows have been insignificant, thus mitigating the possible vulnerability of the balance of payments to external financial shocks and to sudden speculative reversals. To the extent that Uganda pursues its reform agenda, it would very likely continue to attract the same type of stable financial flows it has attracted over the past several years.[13]

The increase in financial inflows appears to have benefited Uganda by encouraging a fairly remarkable transformation of the economic environment and by allowing the country to advance the implementation of its poverty reduction strategy. For instance, as regards non-ODA flows, FDI in the privatized telecommunications sector has brought about significant improvements in the provision of services and a boom to the sector. The improved efficiency has helped to ease bottlenecks to private sector development, since Uganda's poor telecommunications network had been pinpointed in earlier studies as one of the obstacles to private investment (Reinikka and Svensson, 2001). Official flows have provided room in the government budget for increased spending on health, education, and other poverty reduction programs covered by the Poverty Action Fund (PAF).[14] The higher spending has been associated with an increase in the value-added of government, which has contributed to mitigating the negative impact on growth of the adverse terms of trade shock that has affected Uganda over several years.[15] Since the early 1990s, economic growth has been impressive, and the incidence of poverty has been reduced sharply, from 42 percent in 1995/96 to 35 percent in 2000/01. Moreover, the high spending on poverty reduction programs, whose outputs and outcomes are expected to lay the foundation for long-term growth, would not have been possible without ODA, in light of Uganda's low, albeit rising, level of domestic revenue mobilization (Box.1).

[12] However, FDI has not necessarily been associated with investment in new enterprises, as part of the recorded inflows is privatization related and part relates to the return of businesses seized from foreigners under the Amin regime to their former owners. Whether it is privatization related or not, FDI will usually fit the "pull" view of capital inflows.

[13] There have been episodes of deferred disbursements associated with delays in implementation of some measures agreed on with donors.

[14] The PAF is a virtual accounting mechanism within the government's budget, established to link debt relief and other donor assistance and domestic resources to spending on poverty reduction programs.

[15] The literature widely acknowledges the positive association between the terms of trade and growth. Uganda's growth performance over the last decade has been in part attributed to variations in terms of trade (Republic of Uganda, 2001).

Box 1. Uganda: Financial Inflows and the Savings-Investment Balance, 1992/93–2000/01[1]
(In percent of GDP)

	1992/93–1994/95	1995/96–1997/98	1998/99–2000/01
Average net external assistance	11.3	8.8	10.3
Average non-ODA inflows[2]	5.5	5.2	5.1
Savings[3]	11.7	10.9	13.2
Investment	15.7	16.5	19.8
Savings-investment	-4.0	-5.6	-6.6
Memorandum items (Government operations):			
Revenue	8.5	10.7	11.3
Noninterest current expenditure	7.5	8.7	10.0
Of which: education	2.1[4]	2.4	2.9
health	....	0.6[5]	0.8
Development expenditure	7.6	6.8	7.8
Overall fiscal balance including grants	-3.1	-1.7	-4.9
Overall fiscal balance excluding grants	-8.4	-6.3	-10.7

Source: Ugandan authorities; IMF staff estimates; and author's calculations.

1/ Fiscal years begin in July.
2/ Total private financial inflows, including errors and omissions.
3/ National savings including current as well as capital transfers.
4/ 1994/95 only.
5/ 1997/98 only.

The higher government spending has been associated with a weakening of the fiscal and external balances and, thus, the savings-investment balance. The widening of the current account deficit stems primarily from the impact of the adverse terms of trade shock on export proceeds and on the value of imports, and, to some extent, from the increased volume of imports associated with financial inflows. An identification of what drives the deterioration of the savings-investment balance would help ascertain its likely impact on long-term macroeconomic performance. Is it a decline in savings or an increase in investment that outweighs that in savings? A decline in savings suggests that financial inflows are being used to increase consumption and should therefore be a cause of concern. In contrast, a deterioration driven by an increase in investment is desirable, more so if investment is of a productive nature. The deterioration of Uganda's savings-investment balance over the ten-year period to 2000/01 appears to be of the latter type, namely, investment-driven and potentially beneficial for the economy."[16] As shown in Box 1, the investment ratio increased more than the savings ratio. In addition, part of the increase in public consumption constitutes an investment in human capital through increased outlays on health and education. The increased investment in physical and human capital should boost long-

[16] However, unless the economy undergoes a transformation that makes it possible to increase domestic revenue mobilization so as to sustain government recurrent outlays, including those associated with the increase in the investment ratio, serious problems would emerge down the road when aid tapers off.

term economic growth and advance the poverty reduction effort down the road provided that efficiency is upheld and structural reforms continue.[17]

B. Financial Inflows and the Real Exchange Rate

Large financial inflows exert pressures on the exchange rate— pressures that can be very disturbing if the exchange rate is already overvalued. In Uganda, Henstridge and Kasekende (2001) suggest that by 1992/93 the significant misalignments in the exchange rate of the Uganda shilling (U Sh) of the late 1980s had been broadly corrected by the liberalization of the foreign exchange market, which also involved the absorption of the black market by foreign exchange bureaus. Taking 1992/93 as a starting point and considering that many factors regarded as determinants of the equilibrium real exchange rate (ERER) have been subjected to nonnegligible changes, it is difficult to form a clear judgment on whether the REER deviated from its equilibrium, unless a thorough econometric analysis is conducted. Atingi-Ego and Sebbude (2000) analyze the behavior of Uganda's REER in a study covering 1972–1999. They find no evidence of a serious misalignment of the REER between 1992 and 1999, albeit their results indicate that the Uganda shilling was slightly undervalued by 1999.

The data presented in Table 2 do not support the idea that ODA could be isolated as a factor that is single-handedly exerting upward pressures on the REER. The examination of the changes in the REER and in other variables of interest such as the terms of trade and financial inflows, after dividing the period under observation into two subperiods, is revealing. During the period 1992/93–1995/96, on an annual average basis, the REER appreciated by only 7.5 percent, while the terms of trade improved by 16.6 percent and total financial inflows increased by 24.3 percent. During 1996/97–2000/01, again on an annual average basis, the REER depreciated by one percent,[18] the terms of trade deteriorated by 8 percent, and total financial inflows increased by almost 3 percent.

The highlighted developments in REER, terms of trade, and financial inflows, in addition to structural reforms that the economy has undergone, do not indicate that the behavior of the REER can be ascribed to movements in financial inflows only. As mentioned above, changes in other factors, some recognized in the literature as fundamentals of the ERER, have come into play. On the macroeconomic management front, the accumulation of official reserves during the

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[17] The implementation of Uganda's PEAP has been associated in part with an increase in the number of classrooms, teachers, and health care professionals, and an improvement in the road network. During the period 1997/98–2000/01, expenditure on health, education, and roads averaged almost 38 percent of total expenditures. Deininger and Okidi (2001) provide some indications of the positive impact of education and access to infrastructure on income in Uganda. Using data from the 1992 and 1999/2000 household surveys, they find that raising the level of education of a household's head by one year generates an almost 0.6 percentage points increase in the annual growth rate of the household's income and that the result is statistically significant. They also find that distance to transportation infrastructure, more precisely roads, had a negative, albeit insignificant impact on income growth.

[18] The depreciation of the REER after the revision of the CPI averaged 3.6 percent during 1996/97–2000/01.

years of large aid flows contributed to lessening upward pressures on the exchange rate. By 2000, gross reserves represented almost five months of imports, up from below two months in the early 1990s. Moreover, as discussed in Section IV, other macroeconomic management operations helped avoid large swings in the REER.

C. The Real Exchange Rate and Exports

The REER has certainly had an impact on Uganda's exports over the past ten years, although the assessment of such an impact is not very straightforward from the trend emanating from data presented in Table 2 and Figure 3, whether for coffee or noncoffee exports. Examining the relationship between misalignment of Uganda's REER and nontraditional exports during 1972–99, Atingi-Ego and Sebbudde (2000) find that nontraditional exports are positively related to REER undervaluation and that overvaluation of more than 15 percent hurts exports.[19] The study highlights important policy implications. However, it could suffer from the omission of a key determinant of agricultural output: weather. Considering that Uganda's exports are predominantly agricultural, adverse weather conditions that had affected the country repeatedly could have had a stronger impact on exports than even the REER or a terms of trade shock.[20] Therefore, inclusion of a weather dummy variable in the regression could alter the impact of other variables, including the REER.

Besides the REER, structural reforms have played a role in the development of exports. While it can be argued that the impact of large ODA on the value of the Uganda shilling may have deterred some exports, ODA has allowed the development of basic capabilities that ease constraints on production, including that of exportables.[21] The structural measures that the government has been implementing as part of its development strategy have provided incentives to farmers and other businesses to increase output.

As regards coffee, it appears that over the period 1993/94–1995/96 improved terms of trade, coupled with the relatively limited REER appreciation, contributed to large export volumes.

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[19] The determination of an ERER on the basis of which misalignment should be assessed can, in general, be difficult. In line with his definition of the ERER, Edwards (1989) mentions that, while market-clearing equilibrium in the domestic market can be defined at any level of employment, his representation of ERER presumes full employment or employment being at its natural level. In a country where poor infrastructure and distance to markets have, over the years, prevented full employment of available resources, it is difficult to determine what the full or natural employment level of output would be with reduced infrastructural bottlenecks.

[20] Deininger and Okidi (2001) mention weather and diseases as common determinants of changes in yield for many crops over the period 1992–99.

[21] Budgetary outlays on roads, whose share in total expenditure increased from almost 8 percent in 1997/98 to 12 percent in 2000/01, have translated into improved infrastructure, and have thereby encouraged private investment and exports. In his June 2000 Budget Speech delivered at a parliament session, the Ugandan Minister of Finance indicated that government spending on roads in 1999/2000 allowed for the rehabilitation of 1,200 kilometers of rural feeder roads, in addition to routine maintenance of thousands of kilometers of the country's highway roads (Republic of Uganda, 2000a, p. 9).

From 1995/96 onward, during years of decline in real coffee exports, there were a number of negative and positive developments that affected production and exports. On the negative side, there were adverse exogenous conditions other than the decline in world coffee prices, namely, bad weather and the coffee wilt disease. On the positive side, trade liberalization, the availability of seeds and fertilizers, progress in planting practices, and the replacement of old coffee trees with new, clonal ones with higher yields have had a cost-reducing impact on coffee production that is not fully captured by the consumer price-based REER. Moreover, as mentioned in the 1998/99 annual report of the Uganda Coffee Development Association (UCDA), the introduction of coffee in areas, such as northern Uganda, that traditionally did not produce it, has had a positive impact on coffee production.

Noncoffee exports rose sharply over the ten-year period ended in 2000/01. These exports have been subject to negative and positive factors that contributed to a weakening in the relationship between their volume and the REER. On the negative side, agricultural exports were undoubtedly affected by adverse weather conditions. Between 1999 and early 2001, the imposition by the European Union of a ban on imports of fish products from Uganda affected noncrop exports. On the positive side, Uganda has been expanding nontraditional exports and breaking into new niches. For instance, besides fish, it has developed flower exports and has begun exporting new products, such as dried fruits.

The diversification of exports and the decline in the value of coffee exports associated mostly with lower world coffee prices led to an increase in noncoffee exports as a share of total exports, from 23 percent in 1994/95 to 75 percent in 2000/01. In U.S. dollar terms, total exports declined by 26 percent over the same period. This decline, in spite of Uganda’s effort to implement an export-oriented development strategy, reflects, to a great extent, the decline in world prices of Uganda’s commodities. As discussed below, it does not appear to be a symptom of the Dutch disease.

Table 2. Uganda: Selected External Trade Indicators, 1991/92–2000/01[1]

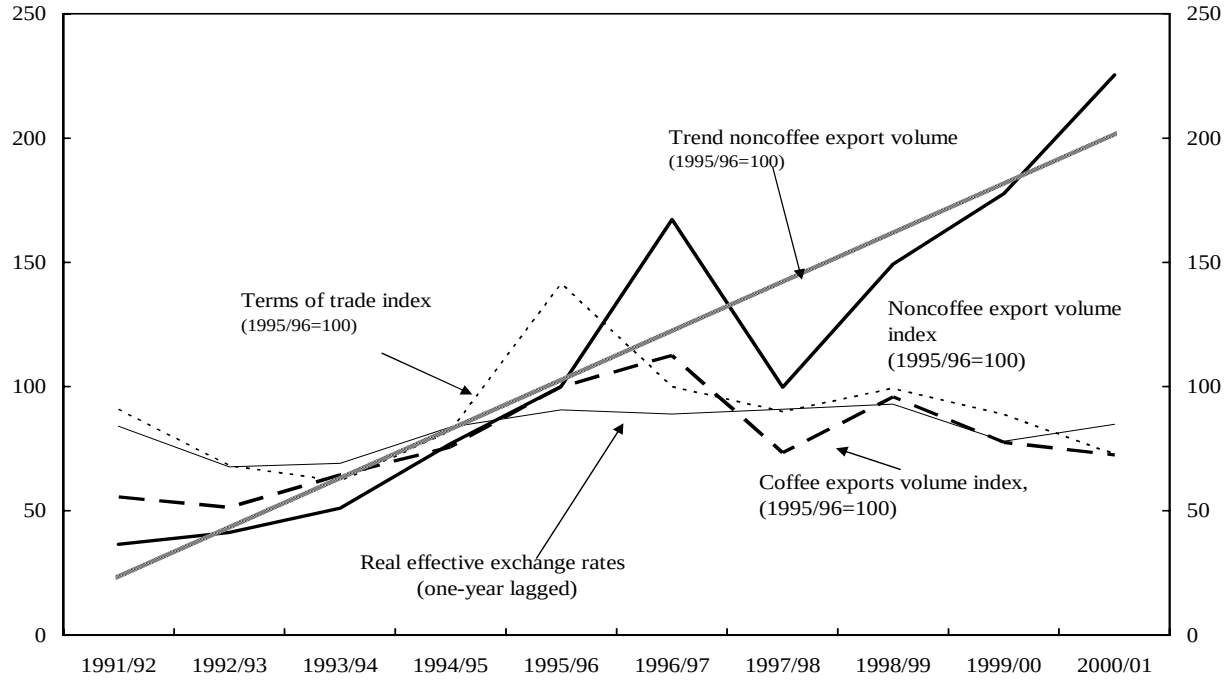
	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01
Exports volume index (1995/96=100)	49.6	48.3	60.3	76.1	100.0	129.8	81.5	112.6	109.4	119.9
Coffee index	55.7	51.5	64.5	75.6	100.0	112.6	73.1	95.8	77.6	72.5
Annual percentage change	25.0	-7.6	25.3	17.3	32.2	12.6	-35.1	31.0	-19.0	-6.5
Noncoffee index	36.5	41.4	51.0	77.1	100.0	167.2	99.7	149.1	177.7	225.3
Annual percentage change	17.6	13.5	23.2	51.0	29.7	67.2	-40.4	49.6	19.2	26.8
Coffee price (in U.S. cents per kg.)	86.0	82.0	113.8	257.0	172.1	138.2	156.6	136.3	102.5	63.7
Exchange rate (Uganda shilling per U.S. dollar)	960.8	1,201.8	1,102.7	932.5	1,012.8	1,058.1	1,149.7	1,362.0	1,511.4	1,762.9
Uganda shillings per Kg of coffee	826.3	985.5	1,254.4	2,396.8	1,743.6	1,462.7	1,800.0	1,856.7	1,548.9	1,123.0
Percentage change in the Uganda shillings' price of	-17.3	19.3	27.3	91.1	-27.3	-16.1	23.1	3.2	-16.6	-27.5
Terms of trade										
Index (1995/96=100)	68.2	61.9	82.1	141.4	100.0	89.0	97.1	86.4	71.6	64.3
Annual percentage change	-24.9	-9.2	32.6	72.2	-29.3	-11.0	9.0	-11.0	-17.2	-10.1
Effective exchange rate										
Nominal										
Index	52.9	48.3	67.6	77.3	73.7	73.1	73.1	62.8	60.8	56.5
Annual percentage change	-34.5	-8.7	40.1	14.3	-4.7	-0.7	0.0	-14.2	-3.1	-7.0
Real (before revision in CPI series)										
Index	67.6	69.2	83.7	90.5	89.0	91.0	93.0	78.1	85.0	83.3
Annual percentage change	-19.6	2.4	21.0	8.1	-1.7	2.3	2.2	-16.1	8.9	-2.0
Real (after rev. in CPI series, annual percent change)[2]	-19.6	2.4	21.0	8.1	-1.7	2.2	2.1	-16.2	-0.2	-6.5
Memorandum items:										
Inflation (annual percentage in prerevision CPI	42.2	30.0	6.5	6.1	7.5	7.8	5.8	-0.2	6.3	4.6
Inflation (annual percentage in CPI index, after [2]	42.2	30.0	5.8	6.8	7.5	7.7	5.8	0.2	5.8	4.5

Sources: Ugandan authorities; IMF staff estimates; and author's

1/ Fiscal years begin in July.

2/ The weighting of different goods and services comprising the consumption basket used for the determination of the CPI was revised in 2002.

Figure 3. Uganda: Real Effective Exchange Rate, Terms of Trade, and Exports, 1991/92–2000/01



Sources: Ugandan authorities; and IMF staff.
1/ Fiscal years begin in July.

IV. The Core Dutch Disease Model and Uganda's Real Exchange Rate and Exports

As shown above, despite massive financial inflows and the upward trend in the REER index (Figure 1), there has been neither a significant appreciation in Uganda's REER nor a decline in its real exports, as would be expected under the core Dutch disease framework.[22] Obviously, the applicability of the core Dutch disease model to Uganda has been weak. In late 2002, the Ugandan authorities revised the weighting of goods and services comprised in the consumption basket used for the determination of the consumer price index. Changes in the REER based on the revised CPI series further undermine the idea of an ODA-induced Dutch disease. In particular, in 1999/2000 and 2000/01, the REER depreciated by 0.2 percent and 6.5 percent, respectively, compared with the prerevision 9 percent appreciation for 1999/2000 and almost 2 percent depreciation for 2000/01 shown in Table 2 and embedded in Figure 1.[23]

The following three factors explain the observed weak applicability of the predictions of the core Dutch disease model to Uganda: some prevailing characteristics of the Ugandan

[22] It is possible that the relatively strong Uganda shilling may have somewhat affected some exports even though total exports increased in real terms.

[23] The revision in the CPI left annual average changes in the REER for fiscal years preceding 1999/2000 almost unchanged.

economy that depart from key assumptions of the Dutch disease model, economic liberalization and the deteriorating terms of trade, and monetary and exchange rate management.

A. Characteristics of the Ugandan Economy vs. Premises of the Dutch Disease Model

This subsection highlights some characteristics of the Ugandan economy that are not in line with the assumptions of the core Dutch disease theory. In particular, the assumption of full and efficient employment of the country's production factors raises questions for an economy such as Uganda's. Most observers will agree that Uganda is very likely still producing within its production possibility frontier (PPF). Uganda has important unused or inefficiently used production factors, such as labor and, to some extent, land. In this regard, financial inflows encouraging an increased and more efficient usage of these factors need not necessarily generate a resource transfer effect in the manner assumed by the Dutch disease theory.

The availability of land is highlighted in Uganda's PEAP. The 1997 version of the PEAP states that an estimate of only one-third of available land was utilized (Republic of Uganda, 1997, p. 26). The availability of land is illustrated by the fact that areas devoted to the cultivation of food crops have increased steadily since 1991 without seeming to adversely affect the cultivation of cash crops.[24] On the contrary, there are indications of increases in areas devoted to the cultivation of coffee, cotton, and tea. Nonetheless, while land is available, probably on a small scale, investors' surveys and interviews revealed that there are severe limits on the availability of large-scale land parcels (UNCTAD, 2000).

As regards labor, the imperfections of the labor market and its segmentation weaken the likelihood of a meaningful upward real wage flexibility. On the supply side, an abundance of unskilled potential workers coexists with a scarcity of skilled ones. On the demand side, the government's increased demand for labor to implement its poverty reduction strategy has drawn on both unskilled (for road and construction) and specialized (health care professionals and teachers) labor, for which the possibility of transfer from the tradables sector needs to be examined carefully.

The increased demand for unskilled workers can, to a great extent, be satisfied from the pool of the unemployed without generating neither an increase in real wages that would be out of the ordinary nor a transfer of labor from the tradable sector.[25] The likelihood that the increased demand for skilled labor—nurses and teachers—draws labor from the agricultural sector that produces most exportables is weak on two grounds. First, most farmers and/or farm workers do

[24] The area devoted to the cultivation of food crops increased from 4 million hectares in 1991 to 5 million hectares in 2000 (Appendix, Table A1).

[25] Unemployment figures for Uganda are sketchy. Nonetheless, inferences can be drawn from poverty indicators and from the 1997 PEAP. According to the 1997 Household Survey, 24 percent of adults living in urban areas were unemployed while another 5 percent was referred to as economically active but not employed. In rural areas, the unemployed and economically active but not employed represented 9 percent and 4 percent, respectively (Appendix, Table A2). The 1997 PEAP indicates that "employment opportunities are very few relative to demand and because of this, salaries and wages are low" (p. 31).

not have a level of education allowing them to possess or acquire easily the skills necessary to be employed as nurses or teachers in the short to medium run. Second, there has not been a significant increase in real wages that can be attributed to increased spending on poverty reduction programs particularly. The 1997 civil service reform was accompanied by a rationalization of the pay system that aimed at having a reduced, better paid, and motivated workforce. Prior to the civil service reform, real salary per teacher more than tripled between 1991 and 1995, albeit from a very low base of the equivalent of about US$12 per month (Ablo and Reinikka, 1998). Between 1998/99 and 2000/01, the increase in the government's wage bill for teachers was driven more by an increase in the number of teachers on the payroll than by wage increases.[26]

The small-country assumption is another premise of the Dutch disease literature whose implications can be called into question with regard to the domestic market for importables in Uganda, as in many LICs, because of the imperfect substitutability between imports and domestic import-competing products. Uganda's manufacturing sector produces for the domestic market primarily and, to some extent, for the East African market. The imperfect substitutability between domestic products and imports provides room for domestic manufacturers to raise prices and increase supply in response to domestic market conditions, such as increased domestic demand (Nkusu (2004) and Benjamin, Devarajan, and Weiner (1988)), regardless of whether they use imported or domestically produced inputs.[27]

Based on the highlighted special characteristics of the Ugandan economy, its experience with large aid flows would not fit into the core Dutch disease model, but would rather be more suited to the modified framework presented in Nkusu (2004) that eases both the full employment and the small country hypotheses, leading to a reversal of the predictions of the core Dutch disease model.[28] Beyond the characteristics of Uganda's economy, the avoidance of the Dutch disease was furthered by economic liberalization and other structural reforms, the adverse terms of trade shock that the country has experienced, and prudent macroeconomic management.

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[26] Between 1998 and 2000, the wage bill for primary school teachers increased by 15.4 percent (from U Sh 89 billion to U Sh 103 billion), while the number of teachers on the payroll increased by almost 11 percent (from 80,427 to 89,052).

[27] Firms importing inputs can benefit from a relatively less depreciated shilling in terms of lower costs. For instance, soft drink producers, such as Coca-Cola, import sugar, one of the main ingredients in soft drinks. The oil-processing sector imports 75–80 percent of the raw materials or semifinished edible oil products it needs, as the domestic supply of inputs covers only 20–25 percent of the demand of the processing mills (UNCTAD, 2000, p. 7).

[28] Failure of the increase in spending associated with large aid flows or other sectoral booms to give rise to the Dutch disease is documented for Botswana (Harvey, 1992), Sri Lanka (Bandara, 1995) Tanzania (Nyoni, 1998), Cameroon (Benjamin, Devarajan, and Weiner, 1989), and Ghana (Sackey, 2001). On the theoretical front, Torvik (2001) develops a full employment endogenous growth model showing that depending on the characteristics of the economy experiencing a boom, production and productivity in both the tradables and the nontradables sectors can go either way.

B. Economic Liberalization and the Adverse Terms of Trade Shock

External assistance has been accompanied by or tied to structural reforms. In the 1990s, the Ugandan government implemented a wide range of structural reforms aimed at liberalizing the economy. These reforms, undertaken in a broadly stable political environment, encouraged crop production and investment in various sectors of the economy through the removal of price controls, privatization of public enterprises, and trade liberalization. Over the last decade, Uganda has liberalized its trade system markedly.[29]

The liberalization has encouraged both exports and imports. Over the period from 1991/92 to 2000/01, exports, f.o.b. and imports, c.i.f., in percent of GDP at market prices, increased from 6 percent to 8 percent and from 13 percent to 17 percent, respectively. The widening trade balance mirrors an increased demand for foreign exchange that has been satisfied, in part, by drawing on ODA flows. In light of the adverse terms of trade shock that has affected Uganda since 1998/99, the increase in foreign inflows did not result in a significant increase in the availability of foreign exchange, as the inflows were somewhat compensating for the shortfall in export proceeds emanating from the fall in coffee prices (Table 1 and Figure 2).

C. Macroeconomic Management: Satisfactory Performance

Monetary and exchange rate management played an important role in encouraging private sector development in an environment of large ODA and other financial inflows. The rate of inflation has been low (Table 2), and both inflation and the REER have been on a broadly stable path.[30] Over the last decade, Uganda has managed exchange rates to avoid large swings in real rates (Figures 3 and 4). As stated above, the 1994/95 coffee boom triggered by bad weather conditions in Brazil was not associated with a significant increase in the REER. The Ugandan authorities implemented a fiscal adjustment and managed the exchange rate to prevent the real exchange rate from appreciating markedly in response to an improvement in the terms of trade perceived as temporary.[31] In subsequent years, sterilization through sales of foreign exchange and treasury bills has been used to deal with excess liquidity emanating from increased government spending financed by large official inflows. Hence, an assessment of how Uganda's exchange rate has adjusted to the adverse terms of trade shock experienced since 1998/99 needs to also take into account the behavior of the exchange rate in years preceding the terms of trade shock, in order to avoid overlooking Uganda's prudent exchange rate management over the three-year period to 1994/95. Overall, during most of the period 1992/93–2000/01, Uganda managed the exchange rate quite well. A comparison of Uganda's REER with those of other coffee-exporting and oil-importing East African countries supports this assessment (Figure 4).[32]

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[29] The country's trade restrictiveness index has declined from 7 to 2 on a 10-point scale, where 10 represents an extremely restrictive trade system.

[30] Low and stable inflation and low variability of the RER are widely recognized in the literature as encouraging private investment and growth.

[31] A temporary coffee stabilization tax was introduced in the mid-1990s.

[32] The comparison suffers from a lack of consideration of the behavior of all ERER determinants in all countries.

Open market sales of treasury bills made treasury bill rates volatile and high, fuelling concerns about crowding out of the private sector. Nonetheless, as illustrated in Figure 5, the annual growth rate of new loans extended to the private sector remained on an upward trend,[33] although high treasury bills rates during some periods may have reduced some banks' incentive to lend.

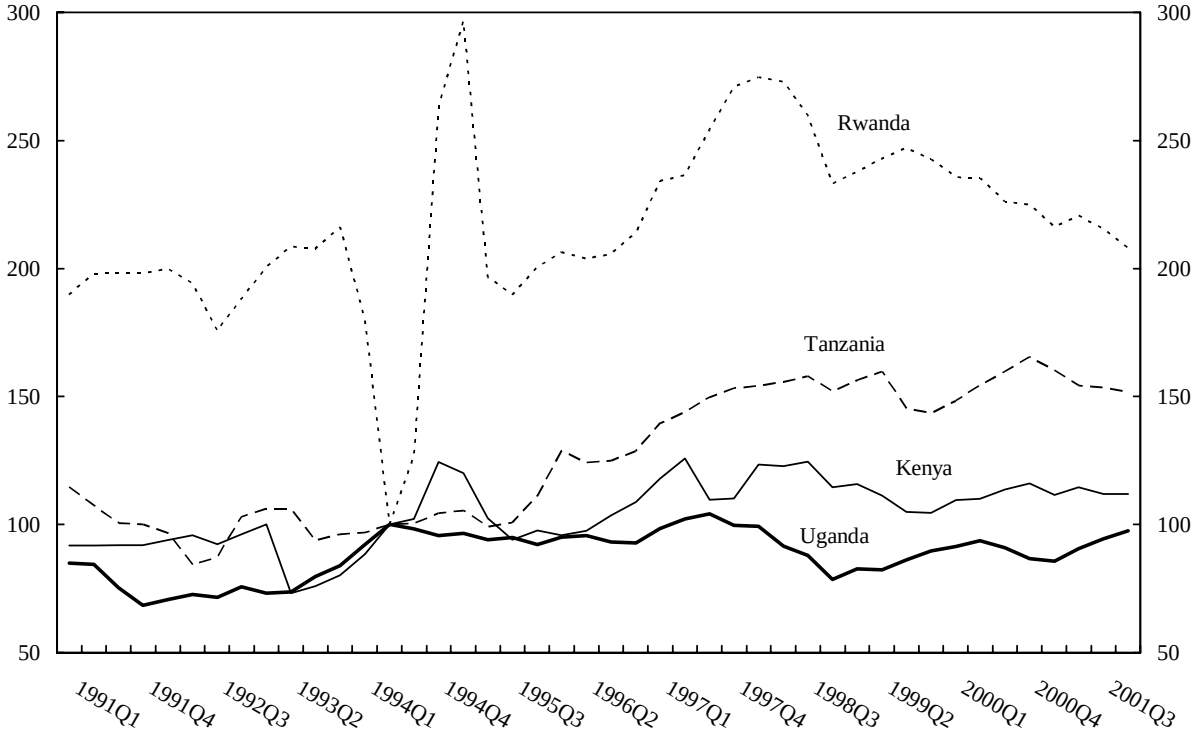
Sterilization has helped Ugandan policymakers achieve price stability while controlling real exchange rate appreciation. This outcome is due in part to the country's poor integration into international financial markets that limits the attractiveness of Ugandan monetary and financial assets, regardless of the interest rate. In particular, as risk-averse investors treat Ugandan and foreign assets or Ugandan assets denominated in different currencies as imperfect substitutes, sales of government securities that lead to high interest rates do not necessarily induce an increase in capital inflows that would exacerbate REER appreciation. Nonetheless, in light of the shallowness of Uganda's financial system and the limited number of instruments at the disposal of the monetary authorities, there is a limit to the level of aid that can be managed. While ODA flows of 10–13 percent of GDP have been managed in the past few years, although with difficulties, larger aid flows could exceed the sterilization capacity of the monetary authorities and render macroeconomic management very difficult or even undermine growth prospects.[34]

While pursuing efforts to improve and strengthen the Ugandan financial system, policymakers can exploit the country's poor integration into international capital markets in their conduct of monetary policy and in exchange rate management, bearing in mind that as they manage financial inflows, ODA in particular, their open market sales of foreign exchange and government securities have an impact on economic activity through interest rates and exchange rates. In this context, they need to strike the right balance between the use of domestic securities and foreign exchange sales in their open market operations.

[33] Table A3 in the appendix provides the data from which Figure 5 is derived.

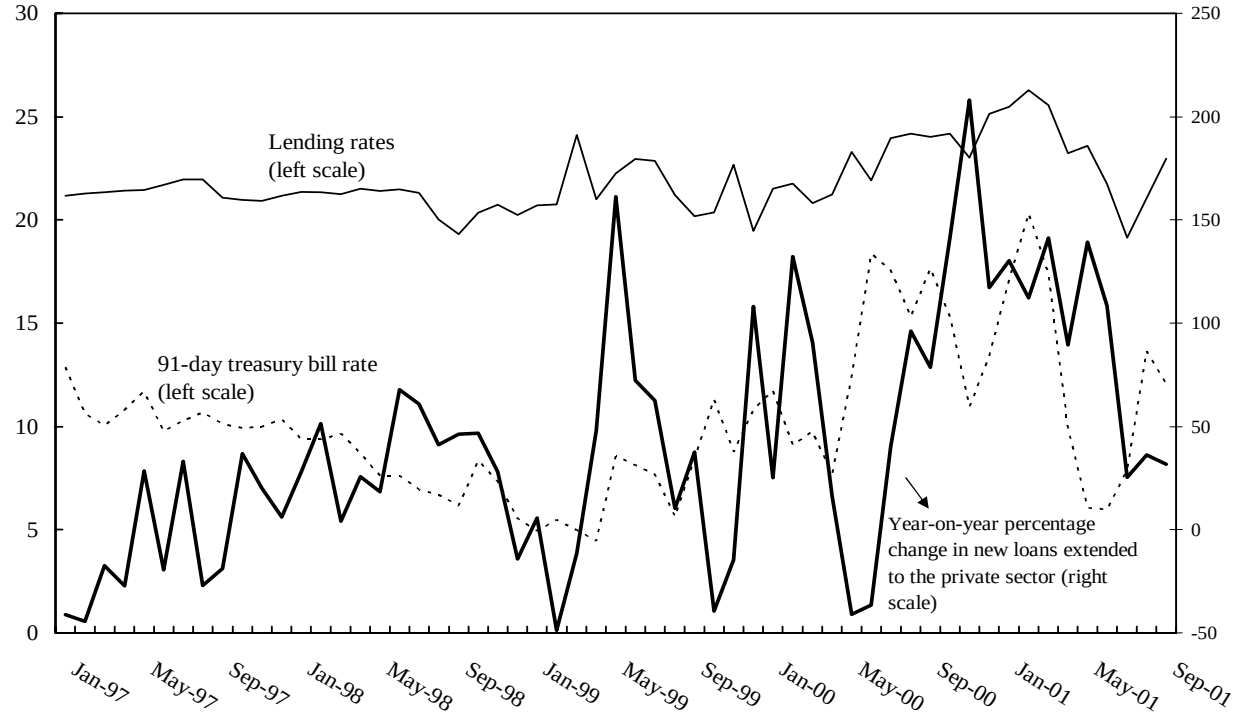
[34] According to many studies of the diminishing returns to aid, aid to Uganda would still be below the turning point, which is placed at 50 percent of GNP in Lensink and White (2001) and 25 percent of GDP in Hadjimichael and others (1995) and Hansen and Tarp (2000). Collier (1999) argues that aid could benefit growth even at 30 percent of GDP. Here again, it is important to emphasize that country-specific circumstances matter to the level of aid an economy can accommodate.

Figure 4. Uganda and Neighboring Countries: Real Effective Exchange Rate Indices, 1991:Q1-2001:Q4
(1994:Q2=100; foreign currency per local currency)



Source: IMF, Information Notice System.

Figure 5. Uganda: Interest Rates and New Loans, January 1997-September 2001



Sources: Ugandan authorities; and author's calculations.

V. LESSONS AND CONCLUSION

A useful lesson to be learned from the exercise carried out in this paper is that it is important to understand the full scope of changes that an economy undergoes in order to ascertain the pain or gain that can be attributed to large ODA flows, in the midst of many other factors coming into play. Although the analysis conducted above suggests that Uganda appears to have dealt well with large ODA flows, a word of caution is needed in light of the difficulty of assessing the full scope of advances and setbacks induced by such flows. A definite stance on the impact of the observed levels of ODA flows on long-term growth, a key ingredient in the poverty reduction effort, would involve measuring the outcome associated with such levels of ODA flows, as opposed to outcomes associated with alternative levels. While the paper does not conduct such an analysis, it nevertheless goes deeper into the changes that some variables of interest have undergone to understand the factors behind such changes and the role that ODA may have played.

Although the concerns about the adverse impact of ODA on the REER and growth in Uganda have merit in that they indicate attentiveness to the country's development prospects, they were exaggerated, to the extent that non-ODA inflows have been growing and could also be a source of Dutch disease-type effects. Moreover, there is no evidence suggesting that ODA has caused more pain than gain.

The analysis suggests that, so far, large ODA inflows appear to be associated with more gains rather than pain. The pain, identified as that of managing the liquidity injected through high government spending, appears to have been bearable. To suggest that the pain outweighs the gain or that no or little good has come out of large ODA flows, or that the country would have been better off with less aid, one should be able to determine not only what the pain is but also what the good would or should have been. The data presented in the paper indicate that while receiving an average of over 10 percent of GDP of ODA during the ten-year period ended in 2000/01, Uganda has upgraded its road infrastructure and invested more in education, health, and other social programs. Moreover, inflation has been reduced to low single digits and investment has been rising. Large ODA flows have helped to offset the shortfall in export proceeds emanating from lower world coffee prices, thereby contributing to the relative stability of the REER. Also, these ODA flows and the associated increased public spending have not prevented nontraditional exports from growing remarkably in contrast with the predictions of the Dutch disease model. The country has experienced strong economic growth, with real GDP growth averaging over 6.5 percent a year. Overall, financial inflows to Uganda, ODA in particular, appear to have contributed positively to the country's poverty reduction effort.

Uganda's experience confirms the idea in Nkusu (2004) that the Dutch disease need not materialize in many poor countries that can draw on their idle productive capacity to satisfy the increased demand for nontradables that large ODA flows induce, while using ODA flows to ease constraints that prevent them from producing at their full potential. Besides the availability of unused production factors that makes the country produce inside its PPF, structural reforms and prudent macroeconomic management, leading to both an easing of supply bottlenecks and a stronger foreign exchange reserve position, have contributed to curbing the prospects of a resource transfer against the tradables sector. Whether this apparently successful experience with large ODA, albeit associated with large fiscal and external sector imbalances, masks weaknesses that could be storing up troubles for the years to come has yet to be substantiated. Sustaining good performance would depend, to a great extent, on whether sound macroeconomic policies and the strengthening of institutions are pursued with resolve.

While highlighting the important role played by sound macroeconomic policies and structural reforms, together with availability of production factors in the avoidance of the Dutch disease in Uganda, the paper acknowledges the potential harmful impact on exports of REER appreciations induced by financial inflows that exceed the sterilization capacity of the monetary authorities. Looking ahead, the paper underscores the point that it is important to assess the level of aid that Uganda can absorb without undermining growth. It also emphasizes the importance of increasing domestic revenue mobilization so as to improve the prospects for the country to support a greater share of the cost of implementing its poverty reduction strategy, should aid taper off. Against this backdrop, the paper expresses guarded optimism that the benefits of ODA flows of the magnitude Uganda has been receiving in recent years are likely to outweigh the side effects, provided that (i) inflows can be managed to curb disincentives and establish a supportive environment for private sector development; (ii) structural reforms continue; and (iii) prudent macroeconomic management and the efficiency of public expenditure are upheld.

Table A1. Uganda: Cultivated Areas and Production of Selected Food Crops, 1991–2000
(Areas in thousands of hectares; and production in thousands of metric tons)

	1991	1995	1997	1998	1999	2000
Banana (matooke)						
Area	1,430	1,512	1,538	1,553	1,576	1,598
Production	8,080	9,012	9,303	9,318	10,244	9,533
Cassava						
Area	389	332	342	356	375	401
Production	3,229	2,224	2,291	3,204	4,875	5,207
Sweet potatoes						
Area	425	494	529	544	539	555
Production	1,785	2,223	1,894	2,176	2,354	2,498
Irish potatoes						
Area	35	50	56	60	64	68
Production	254	402	360	384	449	478
Maize						
Area	420	571	598	616	608	629
Production	567	913	740	924	1,053	1,259
Finger millet						
Area	384	395	395	401	376	384
Production	576	632	502	642	606	614
Wheat						
Area	5	5	5	5	6	7
Production	9	9	9	9	11	12
Pulses 1/						
Area	643	752	790	810	835	870
Production	488	509	346	517	558	721
Oil seeds 1/						
Area	364	430	445	459	466	499
Production	264	294	248	309	331	364
Total						
Area	4,095	4,532	4,698	4,804	4,845	5,011
Production	15,252	16,180	15,693	17,483	19,186	20,686

Source: Ministry of Finance, Planning and Economic Development.

1/ Pulses consist of beans, field peas, cowpeas, and pigeon peas. Oil seeds consist of groundnuts, soya-beans, and sim-sims.

Table A2. Uganda: Poverty Profile for Adults by Occupational Activity and Location

Occupational Activity for Adults	Share of Population[1]			Poorest 20 Percent			Poor			Nonpoor		
	R	U	T	R	U	T	R	U	T	R	U	T
Unemployed	9	24	11	4	2	4	11	25	12	7	24	11
Economically active but not usually employed	4	5	4	11	34	12	4	3	4	3	5	4
Professional, administrative, or clerical work	3	10	4	2	1	2	2	2	2	3	11	5
Service worker	11	49	16	5	31	6	7	40	8	14	50	22
Agricultural worker	74	12	65	78	32	76	77	30	74	72	9	59

Source: The Republic of Uganda (2000c, p.12). Based on the 1997 Household Survey.

1/ In percent of the relevant group or subgroup. “R,” “U,” and “T” stand for rural, urban, and total, respectively.

Table A3. Uganda: Interest Rates and New Loans Extended to the Private Sector, January 1997–September 2001 (In percent)

	Rate on 91 day T-bills	Lending rate	Change in new loans extended 1/
1997 Jan.	12.9	21.2	-41.2
Feb.	10.6	21.3	-44.5
March	10.0	21.3	-17.4
April	10.8	21.4	-27.1
May	11.7	21.4	28.4
June	9.8	21.7	-19.4
July	10.3	22.0	33.2
Aug.	10.7	22.0	-27.0
Sept.	10.1	21.1	-18.9
Oct.	9.9	21.0	36.8
Nov.	10.0	20.9	20.0
Dec.	10.3	21.2	6.0
1998 Jan.	9.4	21.4	28.0
Feb.	9.4	21.3	51.5
March	9.6	21.3	4.1
April	8.7	21.5	25.6
May	7.6	21.4	18.3
June	7.6	21.5	67.9
July	7.0	21.3	61.0
Aug.	6.7	20.0	41.2
Sept.	6.2	19.3	46.4
Oct.	8.3	20.4	46.7
Nov.	7.3	20.7	28.0
Dec.	5.5	20.2	-14.1
1999 Jan.	5.0	20.7	5.7
Feb.	5.5	20.8	-48.8
March	5.0	24.1	-11.2
April	4.4	21.0	48.3
May	8.6	22.3	161.3
June	8.1	23.0	72.2
July	7.7	22.9	62.7
Aug.	5.6	21.2	10.3
Sept.	8.5	20.2	37.8
Oct.	11.3	20.4	-39.5
Nov.	8.8	22.7	-14.5
Dec.	10.8	19.5	108.2
2000 Jan.	11.7	21.5	25.2
Feb.	9.1	21.8	132.3
March	9.8	20.8	90.6
April	7.7	21.2	16.3
May	12.4	23.3	-41.0
June	18.4	21.9	-36.5
July	17.6	24.0	40.3
Aug.	15.3	24.2	96.1
Sept.	17.6	24.0	78.8
Oct.	15.3	24.2	141.2
Nov.	11.0	23.0	208.1
Dec.	13.4	25.2	117.2
2001 Jan.	17.1	25.5	130.4
Feb.	20.3	26.3	112.2
March	17.4	25.6	141.2
April	10.0	23.2	89.5
May	6.1	23.6	139.3
June	6.0	21.7	108.4
July	7.9	19.1	25.4
Aug.	13.6	21.1	36.1
Sept.	12.1	23.0	31.8

Sources: Ugandan authorities; and author's calculations.

1/ Year-on-year percenatage changes.

References

Ablo E. Y., and Ritva Reinikka, 1998, "Do Budgets Really Matter? Evidence from Public Spending on Education and Health in Uganda," World Bank, Policy Research Working Paper No. 1926 (Washington: World Bank).

Appleton Simon, 2001, "What Can We Expect from Universal Primary Education," in *Uganda's Recovery: The Role of Farms, Firms, and Government*, ed. By Ritva Reinikka and Paul Collier (Washington: The World Bank), pp.371–405.

Atingi-Ego, Michael, and Rachel K. Sebbude, 2000, "Uganda's Equilibrium Real Exchange Rate and Its Implications for Export Performance," *Bank of Uganda Staff Papers*, Vol. 2 (No.1).

Bandara, Jayatilleke S., 1995, "Dutch Disease in a Developing Country: the Case of Foreign Capital Inflows to Sri Lanka," *Seoul Journal of Economics*, Vol. 8 (Fall), pp. 314–29.

Benjamin, Nancy C., Shantayanan Devarajan, and Robert J. Weiner, 1989, "Dutch Disease in a Developing Country: Oil Reserves in Cameroon," *Journal of Development Economics*, Vol. 30 (January), pp. 71–92.

Burnside, Craig, and David Dollar, 2000, "Aid, Policies, and Growth", *American Economic Review*, Vol. 90 (September), pp. 847–68.

Calvo, Guillermo, Leonardo Leiderman, and Carmen M. Reinhart, 1993, "Capital Inflows and Real Exchange Rate Appreciation in Latin America," *Staff Papers*, International Monetary Fund, Vol. 40 (March), pp. 108–51.

———, 1994, "The Capital Flows Problem: Concepts and Issues," *Contemporary Economic Policy*, Vol. XII (July), pp. 54–66.

Collier, Paul, 1999, "Aid Dependency: A Critique," *Journal of African Economies*, Vol. 8 (December), pp. 528–45.

———, and Jan Dehn, 2001, "Aid, Shocks, and Growth," World Bank Policy Research Working Paper No. 2688 (Washington: The World Bank).

Collier, Paul, and David Dollar (2002), "Aid Allocation and Poverty Reduction," *European Economic Review*, Vol. 46 (September), pp.1475–500.

Corden, W. Max, and Peter J. Neary, 1982, "Booming Sector and De-Industrialisation in a Small Open Economy," *Economic Journal*, Vol. 92 (December), pp. 825–48.

Daalgard, Carl-Johan, and Henrik Hansen, 2001, "On Aid, Growth and Good Policies," *Journal of Development Studies*, Vol. 26 (August), pp. 17–41.

Deininger, Klaus, and John Okidi, 2001, "Rural Households: Incomes, Productivity, and Nonfarm Enterprises," in *Uganda's Recovery: The Role of Farms, Firms, and Government*, ed. by Ritva Reinikka and Paul Collier (Washington: The World Bank), pp. 123–75.

Edwards, Sebastian, 1989, *"The Real Exchange Rate, Devaluation and Adjustment: Exchange Rate Policy in Developing Countries,"* (Cambridge Massachusetts: MIT Press).

Elbadawi, Ibrahim A., 1999, "External Aid: Help or Hindrance to Export Orientation in Africa?" *Journal of African Economies*, Vol. 8 (December), pp. 578–616.

Fischer, Bernhard, and Helmut Reisen, 1993, *Liberalizing Capital Flows in Developing Countries: Pitfalls, Prerequisites, and Perspectives*, (Paris: Organization for Economic Cooperation and Development).

Goldstein, Morris, 1998, *The Asian Financial Crisis: Causes, Cures, and Systemic Implications*, (Washington: Institute for International Economics).

Hadjimichael, Michael T., and others, 1995, "Sub-Saharan Africa: Growth, Saving, and Investment, 1986-93," International Monetary Fund: Occasional Paper No. 118 (Washington: International Monetary Fund).

Hansen, Henrik and Finn Tarp, 2000, "Aid Effectiveness Disputed," *Journal of International Development*, Vol. 12 (April), pp. 375–98.

Harvey, Charles, 1992, "Botswana: Is the Economic Miracle Over?" *Journal of African Economies*, Vol.1, (November), pp. 335–68.

Henstridge, Mark and Louis Kasekende, 2001, "Exchange Reforms, Stabilization, and Fiscal Management," in *Uganda's Recovery: The Role of Farms, Firms, and Government*, ed. by Ritva Reinikka and Paul Collier (Washington: World Bank), pp. 49–79.

Lensink, Robert, and Howard White, 2001, "Are There Negative Returns to Aid?" *Journal of Development Studies*, Vol. 26 (August), pp. 42–65.

Montiel, Peter and Carmen Reinhart, 1999, "Do Capital Controls and Macroeconomic Policies Influence the Volume and Composition of Capital Flows? Evidence from the 1990s," *Journal of International Money and Finance*, Vol. 18 (August), pp. 619–35.

Nkusu, Mwanza, 2004, "Aid and the Dutch Disease in Low-Income Countries: Informed Diagnoses for Prudent Prognoses," IMF Working Paper 04/49 (Washington: International Monetary Fund).

Nyoni, Timothy S., 1998, "Foreign Aid and Economic Performance in Tanzania," *World Development*, Vol. 26 (July), pp. 1235–40.

Philipps, Michael M., 2002, "Uganda Fears Help Could Hurt; Official Split on Currency Effect," *Wall Street Journal* (New York), May 29, Sec. # A4.

Reinikka, Ritva, and Jakob Svensson, 2001, "Confronting Competition: Investment, Profit, and Risk," in *Uganda's Recovery: The Role of Farms, Firms, and Government*, ed. by Ritva Reinikka and Paul Collier (Washington: World Bank), pp. 207–34.

Republic of Uganda, 1997, *Poverty Eradication Action Plan: A National Challenge for Uganda, Volume I* (Kampala: Ministry of Finance, Planning, and Economic Development).

———, 2000a, *2000 Budget Speech* (Kampala: Ministry of Finance, Planning, and Economic Development).

———, 2000b, *Poverty Eradication Action Plan: Revised Volume I* (Kampala: Ministry of Finance, Planning, and Economic Development).

———, 2000c, *Uganda Poverty Profile: What Do We Know About the Poor?* (Kampala: Ministry of Finance, Planning, and Economic Development).

———, 2001, *Poverty Reduction Strategy Paper, Progress Report*, (Kampala: Ministry of Finance, Planning, and Economic Development). Available via the internet: http://www.imf.org/external/NP/prsp/2001/uga/01/030201

———, Ministry of Finance, Planning, and Economic Development, *Statistical Abstract*, various issues (Kampala: Ministry of Finance, Planning, and Economic Development).

Sackey, Harry A., 2001, "External Aid Flows and the Real Exchange Rate in Ghana," AERC Research Paper No. 110 (Nairobi: African Economic Research Consortium).

Torvik, Ragnar, 2001, "Learning by Doing and the Dutch Disease," *European Economic Review*, Vol.45, pp. 285–306.

Tsikata, Tsidi, M. 1999, "Aid Effectiveness: A Survey of the Recent Empirical Literature," in *International Economic Policy Review*, Vol. 1, ed. by Paul Masson, Podma Gotur, and Timothy Lane (Washington: International Monetary Fund), pp. 73–90.

United Nations Conference on Trade and Development (UNCTAD), 2000, *Investment Policy Review: Uganda* (Geneva and New York: United Nations).