

AGENCY FOR INTERNATIONAL DEVELOPMENT
POL/CDIE/DI REPORT PROCESSING FORM

ENTER INFORMATION ONLY IF NOT INCLUDED ON COVER OR TITLE PAGE OF DOCUMENT

1. Project/Subproject Number

940-0405*

2. Contract/Grant Number

PDC-0095-Z-00-9053-00

3. Publication Date

May 1993

4. Document Title/Translated Title

The Impact of the Togolese Refugee Crisis on the
Beninese Economy

5. Author(s)

1. Kambou, Gerard
2. Leneghan, Tom
3.

6. Contributing Organization(s)

Development Alternatives, Inc. (Subcontractor)
Harvard Institute for International Development (Contractor)

7. Page(s)

37

8. Report Number

9. Sponsoring A.I.D. Office

SIE/S/SMIE

10. Abstract (optional - 250 word limit)

Attached

11. Subject Keywords (optional)

1. Refugee Aid
2. Relief Assistance
3. Crisis Management
4. Settlement
5. Labor Market
6. Benin

12. Supplementary Notes

*Project No. was 930-0095 before FY1993.

13. Submitting Official

FOREST DUNCAN

14. Telephone Number

(202)663-2338

15. Date Submitted to CDIE

16. DOCID

17. Document Disposition

DOCRD[] INV[] DUPLICATE[]

ABSTRACT

The Impact of the Togolese Refugee Crisis
on the Beninese Economy

by

Gerard Kambou
Tom Lenaghan

May 1993

The report examines the impact that the arrival of large numbers of Togolese refugees in the first few months of 1993 had on the Beninese economy and people, and offers guidelines and areas of intervention for USAID/Benin and other donor assistance.

After presenting a profile of the Togolese population in Benin, the paper analyzes the crisis at the macroeconomic and household levels. The macroeconomic analysis examines the short-term effects on the inflation rate, fiscal deficit, and output level; and the impact in key sectors, including the food market, labor market and service sector, housing market, financial and capital goods markets, and the public finance and services sector. The household analysis addresses the short-term material situation of the refugees and their Beninese hosts in terms of lodging, sanitation, and access to food; and the longer-term dynamics of the refugee presence, particularly the capacity of the Beninese economy to integrate the Togolese into the labor force.

The main concern identified in the macroeconomic analysis is the medium- to long-term ability of the economy to absorb the increase in the labor supply represented by the refugees. The most pressing issues found in the household level analysis are fulfilling refugees' basic physical needs, the most critical being housing and sanitation.

The report provides general guidelines and specific actions that USAID/Benin and other donors could take to address the crisis.

G/EG/SMIE:FDuncan:1/24/94:TOGOREF.T28

The Impact of the Togolese Refugee Crisis on the Beninese Economy

Prepared for the U.S. Agency for International Development under the Consulting Assistance for Economic Reform project, contract number PDC-0095-Z-00-9053-00

Gerard Kambou
Tom Lenaghan

May 1993



7250 Woodmont Avenue, Suite 200, Bethesda, Maryland 20814

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EXECUTIVE SUMMARY

This report is the result of two weeks of research carried out by the authors in Benin at the request of the local mission of the U.S. Agency for International Development. The study examined the impact that the arrival of large numbers of Togolese refugees in the first few months of 1993 has had on the Beninese economy and people. The report addresses the crisis at the macroeconomic and the household levels. The macroeconomic analysis rests on the research conducted by the authors during their stay in-country. The household analysis was originally supposed to draw heavily on recent surveys carried out by the Beninese Institut National des Statistiques et de l'Analyse Economique (INSAE) with the support of the United Nations Development Programme. Unfortunately, the results of these surveys were not completed in time to permit their inclusion in this analysis. Therefore, the household-level analysis presented here is based mainly on anecdotal evidence collected in discussions with refugees themselves and with those who are most knowledgeable about their situation. The report concludes with guidelines for setting policies to deal with the crisis and offers several recommendations for specific USAID action.

ECONOMIC IMPACT OF THE REFUGEE CRISIS

The presence of large numbers of Togolese refugees in Benin has not, so far, been accompanied by the traditional signs of a refugee crisis. There are no tent cities or massed camps of indigent refugees. Instead, all but about 2,000 of the estimated 86,000 to 163,000 refugees are living with Beninese families. The Beninese authorities and people have been extremely generous to the refugees, in many cases contributing significantly to their upkeep and allowing them to bring significant amounts of goods and money into the country with a minimum of interference. Because of the close integration of the Togolese into Beninese society, however, it is more difficult to isolate the Beninese economy from the effects of the population movement than would be the case in a more traditional refugee crisis. Thus, the question of the impact of the refugees on the Beninese economy is particularly pertinent.

The main areas subject to change because of the refugees' presence are described below.

Food Market

Contrary to expectations about rising food prices, the extra demand represented by the refugees has not led to any abnormal strain in food markets. Two reasons are advanced to explain this. First, the arrival of the refugees has coincided with a disruption in the normal patterns of maize exports from the north of Benin to Togo and Niger, meaning that there is more available for domestic consumption. Second, much of the refugees' needs have been met through the food distribution mechanisms of nongovernmental organizations (NGOs). Because all of the food distributed so far has been purchased in international markets, this isolates the local food market from the extra demand. Finally, recent climatic conditions have been favorable, leading to a bountiful fall 1992 harvest and promising well for the next harvest.

Labor Market

The available evidence indicates that refugees have not yet sought entry into the Beninese labor markets on a large scale. Preliminary survey data from INSAE and the United Nations Development

Programme indicate that only 6 percent of the refugees have undertaken income-generating activities since their arrival. The only exceptions to this pattern appear to be in informal retail trade and service provision; Togolese women have begun to sell cloth and other consumer goods and Togolese taxis have started to operate in significant numbers.

Much of the income-generating activity taken up by the Togolese so far has been facilitated by the lenient treatment accorded them by Beninese fiscal authorities. The Ministry of Commerce has, until now, been liberal in granting Togolese the right to import goods through the port of Cotonou with only a small transit tariff. Similarly, Togolese traders and families are able to bring with them significant amounts of goods with no border duties. Many of these items are then sold in Beninese markets. In contrast, Beninese seeking to import foreign goods are subject to the full range of import duties and taxes. Given these differences, many refugees have begun to sell transit goods and offer services in the Beninese market at prices well below the established levels. The continuation of these patterns poses a dilemma for Beninese authorities: eliminating the special treatment of Togolese would remove a prime cause of tension between the refugees and Beninese engaged in similar economic activities; it would also take away what may be a significant source of income for many families.

Outside this *petit commerce* segment of the informal sector, the refugees will have a hard time integrating themselves into Beninese labor markets. Coming from urban areas, they are unlikely to consider farming. They also probably lack the skills necessary to succeed in the small-scale artisanal sector. Anecdotal evidence on the refugees' backgrounds suggest that many would look for formal sector professional positions if available — for which Benin already has a surfeit of qualified candidates. Thus, the long-run ability of the refugees to find a productive activity in the Beninese economy remains in doubt.

Housing Market

The arrival of large numbers of refugees has made an already tight housing market even tighter. New construction activity in the Mono region, where many refugees are located, has been reported since the advent of the crisis. Despite these pressures, with the exception of some of the poorer neighborhoods in Cotonou, rents do not seem to have increased significantly. Even in Mono, where the proportion of refugees to permanent residents is the highest and where virtually all vacant housing units are now sheltering Togolese, no increases in rent have been reported, according to the United Nations Development Programme. The most probable explanation for this phenomenon is that Beninese landlords have resisted the temptation to raise prices because of humanitarian concern or because of strong social pressures.

Financial and Capital Goods Markets

The crisis has resulted in three distinct shocks to Benin's financial system. First, there has been a noticeable increase in short-term banking deposits (checking and savings accounts). Some commercial banks in Cotonou report a sharp increase since December 1992 in both the number of accounts and the volume of funds deposited in accounts belonging to Togolese nationals. Given the overall level of deposits in the Beninese economy, however, these increases are not significant and are noteworthy more for what they indicate about the type of refugees arriving in Benin than for their effect on financial markets. There is also some slight evidence of a drop in monetary savings among households that depend on informal sector sources of income. Although banks serving the Benin middle class report no drop in savings because of the crisis, the one informal savings association visited reported a pronounced rise

in early withdrawals by Beninese seeking financial help to cover the cost of supporting refugees from Togo.

Finally, the most important development from the standpoint of the financial market is the significant inflow of capital goods (consisting mainly of cars, scooters, and consumer goods inventories) that has occurred without any corresponding financial outflow. This has happened as Togolese bring their productive assets with them and, in many instances, sell them in Beninese markets to help defray the cost of their upkeep. Although no figures are available to indicate the scale of such transactions, they are probably much more significant to the Beninese economy as a whole than are any changes in banking deposits or household monetary savings.

Public Finance

The refugee crisis has had surprisingly little effect on Benin's budgetary situation. Apart from some unplanned expenditures at the local level, which were covered by transfers from a central budgetary contingency fund and by a reallocation of local social welfare spending from Beninese to Togolese, virtually all of the expense of refugee assistance programs has been assumed by NGOs and donors (primarily the United Nations High Commission for Refugees). When the likely positive impact of the crisis on Benin's revenue collection efforts is considered (because of increased customs revenue; receipts for value added tax, or VAT; and local taxes on informal sector traders), the hypothesis of a net increase in public savings seems plausible.

Macroeconomic Impact

Because of its recent rapid growth, the Beninese economy is better able to cope with the arrival of the Togolese refugees than it would have been several years ago. None of the above effects is likely to lead to any major short-term macroeconomic disturbances. The biggest area of concern lies in the medium- to long-term ability of the economy to absorb the increase in the labor supply represented by the refugees. This increase in labor supply could aggravate the difficulty Benin has had in following through on its commitments to reduce its public sector wage bill by retrenching public workers. Still, in the short run, the windfall of goods moving into Benin from Togo and the increase in the active labor supply from those refugees who have found productive employment have most likely produced a spurt in output. Whether this one-time shock leads to greater overall productivity depends on how long the refugees and the goods they have brought with them stay in Benin and on the ability of the economy to absorb the extra labor. Although it is impossible to predict how long the refugees will stay (this is dependent on how long the political crisis lasts in Togo, and on what the refugees' intentions are), the slim evidence available on the refugees' professional profiles creates grave doubts about their ability to contribute to those sectors of the economy that are most capable of absorbing extra labor — agriculture and small-scale artisanal enterprise activity.

HOUSEHOLD ANALYSIS

Over the next six months, the most pressing issues of the crisis will be those that have to do with fulfilling the refugees' basic physical needs. The most critical problem at present is housing and sanitation. About 25 percent of the refugees report making rental payments to their Beninese hosts. According to local church officials in the Mono region, a significant portion of these refugees risk being turned out in the near future because they can no longer keep up on these payments. In addition, again

particularly in the Mono region, the presence of large numbers of refugees in areas without sewers has resulted in blocked septic pits, which pose serious health hazards.

These developments may pose a threat to the integrationist approach that the government and relief agencies have adopted, under which individual Beninese households assume much of the responsibility for supporting the Togolese. The increasing inability of the refugees to make even partial contributions to the cost of their upkeep places a severe strain on their hosts' incomes. When there are no family ties between refugees and their hosts, it is unrealistic to expect that the Beninese can continue to shelter their guests for an extended period. Furthermore, if the Beninese Government adopts stricter policies toward Togolese who are using the facilities accorded them by customs and regulatory authorities to undercut prices in Beninese markets, this will reduce what is probably a significant source of income in the refugee community. This can only exacerbate the tensions between the refugees and their hosts and may lead to a sharp jump in the number of refugees seeking shelter.

In the long run, the refugees' ability to integrate into the productive economy becomes crucial, because this ability will determine whether their presence in Benin will have a positive or negative effect on the economy's growth. The limited evidence available suggests that the refugees consist of a high proportion of urban professionals, who are already in strong supply in Benin and for whom a rapid growth in demand is unlikely. Thus their prospects for finding jobs at the same level that they had in Togo appear to be dim. Furthermore, they seem ill suited for agricultural or artisanal activities, where the demand for labor is more promising. For these reasons, their continued presence in Benin on a long-term basis is liable to be a drain on the economy and could lead to increased social tension.

Recommendations

Given the potential serious problems at the household level and the unfavorable long-term employment prospects facing the refugees, some general guidelines for designing relief efforts can be advanced. These are:

- The refugees should not be encouraged to stay permanently;
- Priority should be given to short-term relief activities; and
- Assistance programs also should address the burden of the crisis on the Beninese.

Given these guidelines, several specific activities for USAID/Benin are proposed.

1. **Set up an information system to monitor changes in the refugee situation.** To adequately tailor relief efforts to refugee needs, it is crucial that NGOs, donors, and the government have better information about the numbers, composition, and location of the refugee population. In addition, the number of refugees seeking shelter needs to be monitored to permit relief agencies to respond to possible increases with a minimum of delay. Most of this information already exists within individual parishes. Thus, all that would be required would be a systematic data collection and reporting mechanism that could be implemented with the cooperation of church officials.
2. **Accelerate plans for improving sanitation and health delivery and develop contingency plans for providing more shelter.** The sanitation and housing problems are most critical in the overcrowded areas of the Mono region. These actions will be beneficial not only to the refugees themselves, but also to their Beninese hosts who use the same clogged latrines and are exposed

to the same infectious diseases as the Togolese. The arrival of the rainy season makes this even more important.

3. **Institute a mechanism for integrating local food purchases into the food relief procurement.** Beninese farmers in the north have been adversely affected by the collapse of demand in the Togolese market. In coordination with the Office National d'Appui à la Sécurité Alimentaire, a local cereals purchasing campaign could be set up to help offset this effect.
4. **Expand public works programs to accommodate a greater number of refugees.** Providing refugee families with an income could contribute greatly to the continued viability of the integrationist approach to the crisis, because it would give refugees some ability to offset the costs of their upkeep on their hosts. Contractors working for the World Bank-sponsored AGETUR public works project report a continual stream of both Togolese and Beninese applicants. Expanding this project, or initiating similar efforts, could probably absorb a significant numbers of refugees. Although reserving positions for Togolese would be controversial, given the high number of unemployed Beninese, it would probably lead to less tension than continuing the current practice of according favorable fiscal and regulatory treatment to Togolese traders in direct competition with Beninese.

SECTION ONE

INTRODUCTION

This report for the U.S. Agency for International Development in Benin analyses the impact that the influx of refugees from Togo, which began in January 1993, has had and is likely to have on the Beninese economy and people. It follows an earlier report by the USAID Office of Foreign Disaster Assistance analyzing the disaster relief aspects of the crisis. The research for this report was conducted during a two-week mission in early April 1993. During the mission, the authors met with officials from the Government of Benin (GOB), USAID and other donors, nongovernmental organizations (NGOs), private sector managers, and relief workers, as well as with refugees and their Beninese hosts.

The terms of reference for this study call for an analysis of the effects of the refugee crisis on both the macroeconomic and household level. After a brief profile of the refugee population in Section Two, the macroeconomic impact is analyzed in Section Three. Because survey data on the Togolese refugees and the Beninese households that, in many cases, are responsible for their support were not available in time to incorporate into this report, the household-level analysis presented in Section Four is based mainly on impressionistic and anecdotal information. Deeper investigation of this topic will be possible once United Nations Development Programme (UNDP) survey data on the socioeconomic impact of the refugees become available. Specific recommendations for USAID policies, also called for in the terms of reference, along with basic principals to guide policy formulation in the crisis are given in Section Five. A set of specific projections on how the crisis will develop over the next six months and a look at the implications for donor programs are presented in Annex A. The list of persons interviewed appears in Annex B. A simple model of the impact of the refugees is given in Annex C.

SECTION TWO

A PROFILE OF THE TOGOLESE POPULATION IN BENIN

A clearer picture of the Togolese presence in Benin is emerging as preliminary results from the United Nations High Commission for Refugees (UNHCR) census data and the UNDP survey figures become available. A maximum figure for the number of refugees in Benin is 163,000. This number is based on headcounts taken by the National Police at border crossing points since the beginning of the crisis in January 1993. The recently completed UNHCR census registered 86,000 refugees. Local parish rolls compiled independently of the UNHCR census indicate a figure slightly above 86,000. Because of the reluctance of many refugees to take part in the official UNHCR census, most observers place the likely total number somewhere between the UNHCR and border crossing estimates.

Besides the important question of how many refugees have come across the border, the other salient aspects of the refugee population are described below.

SOCIOECONOMIC GROUPS REPRESENTED

Although the refugee population contains many elements, almost all the people who started coming across the border in large numbers in January 1993 are from urban areas and from Lomé in particular. Although data on the professional background of the refugees is not yet available, interviews reveal the presence of many civil servants, teachers, formal sector salaried workers, independent professionals, and taxi drivers. In addition many unattached secondary school students came to Benin to avoid persecution when they became closely identified with the Togolese opposition or just to seek schooling when Togolese schools were shut down. This picture of the refugees as coming, for the most part, from relatively privileged groups is confirmed by reports that many have come across the border with cars and varying amounts of money.

DEMOGRAPHIC AND NATIONALITY PROFILE

The refugees are relatively evenly divided between men (46 percent) and women (53 percent); this distribution seems to remain relatively stable in all geographic areas. A high percentage (approximately 38 percent of the registered refugees) are made up of school age children (from 5 to 18). Children under 5 account for 10 percent and adults over 18 make up 52 percent of the total. Eighty-five percent of the registered refugees are Togolese, with the remainder consisting of Beninese who lived in Togo.

LOCATION, HOUSING, AND FOOD

The refugees are based almost completely within two *départements*: Mono (on the Togolese border) and Atlantique (around Cotonou). According to UNHCR figures, 54 percent of the refugees have settled in the Atlantique — almost all of them in Cotonou. Forty-two percent are located in the Mono region, particularly in the immediate border region around Agoué and Grand-Popo. The arrival of these

refugees has not yet sparked a typical refugee crisis with mass camps and shelters. The Togolese have, until now, been remarkably well integrated into Beninese households — being taken in for the most part by Beninese families rather than living in separate camps. At present, all but approximately 1,200 indigent homeless refugees in Cotonou and a smaller number in Mono are being given shelter by Beninese families or are able to provide for themselves. NGOs, under the aegis of UNHCR, distribute food for 68,000 of the refugees, including those who live in shelters and those living with families. Refugees live with Beninese under a variety of arrangements; the proportions in each arrangement are unknown. The two most commonly reported situations are:

- Refugees living with family members or friends; in these cases rent is rarely paid and the host family may also pay for their guests' sustenance (if enough money is available); and
- Refugees living within households with whom they have no family or relational ties; when these arrangements prevail, rent may or may not be charged.

SECTION THREE

ECONOMIC IMPACT OF THE POPULATION MOVEMENT

In this section we examine the impact of the Togolese refugees and the wider dislocations caused by the Togolese crisis on the Beninese economy by looking at changes in four key sectors: the food, labor, housing, and financial markets. In addition, we look at the impact of the crisis on Benin's public finances and on the demand for public services. We then briefly describe the short-run macroeconomic impact, identifying how the sectoral shocks are likely to affect some important macroeconomic indicators.

SHORT-TERM ECONOMIC IMPACT IN KEY SECTORS

Food Market

The Togolese crisis has brought about several shocks (or sudden changes) to the Beninese food market — from both the demand and the supply side. These developments have occurred simultaneously with other events, such as the advent of severe financial difficulties in Niger, which also has had important repercussions on the Beninese food system. Although estimating the net effect of each of these developments is beyond the scope of this study, given the availability of reliable market prices and reports of changing patterns of grain flows, some general conclusions can be made.

Perhaps the most surprising finding is that the increased demand represented by the Togolese presence has not led to large-scale increases in staple food prices. Although the influx of up to 163,000 extra people represents almost a 4 percent increase in the Beninese population, except for a brief jump in food prices in January at the inception of the crisis, there is little evidence of sustained upward pressure on prices. Table 1 lists the evolution of the price of maize, the basic staple crop, in the Cotonou market (Dantokpa) and the principal market in Mono (Comé). Although maize prices did rise (in Dantokpa especially), when refugees first began to arrive in great numbers in January, they have since remained fairly stable and even declined slightly in March. Officials from the Office National d'Appui à la Sécurité Alimentaire (ONASA) in charge of monitoring market prices report that the current tendency is for continued declines.

TABLE 1

MAIZE PRICES IN CFA/KG (11/92 to 03/93)

Market	Nov	Dec	Jan	Feb	March
Dantokpa	45	60	60/70	70/85	75
Comé	55	55	50	60	N/A

Source: ONASA and USAID figures.

In comparison with the previous year, price levels for food commodities are almost universally lower. Monthly maize prices in Dantokpa since the inception of the crisis are about 20 percent less than they were during the same period in 1992. Furthermore, the significant increase in maize prices in Dantokpa between November and January (which did not occur in Comé) is not all that unusual given the usual seasonal variations: prices between February and August are often 20 to 30 percent above what they are during the rest of the year. Most recent reports of market tendencies in Dantokpa suggest that maize prices have probably reached their seasonal peak and will tend to drop in expectation of a relatively bountiful summer harvest caused by early rains.

The only exception to this trend of stable food prices since the beginning of the crisis is for manioc flour or *gari*. As shown in Table 2, *gari* prices have been moving consistently upward and are generally higher than they were in 1991-1992. Furthermore, upward pressure on *gari* prices is much more pronounced in Comé than in Cotonou.

TABLE 2
GARI PRICES IN CFA/KG
(11/92 to 03/93)

Market	Nov	Dec	Jan	Feb	March
Dantokpa	90	95	80/115	90/115	105
Comé	80	90	120	1257	N/A

Source: ONASA and USAID figures.

What explanations can be found for this situation and how is it likely to evolve over the next three months?

First, the increased demand for food arising from the presence of the Togolese has been met in part by the distribution of food aid for approximately 68,000 refugees by Catholic Relief Services (CRS) and the World Food Program (WFP).¹ Because these distributions are composed of imported rather than locally purchased cereals, the regular Beninese markets have been somewhat isolated from the extra demand. If the census figures of 86,000 refugees represent the true number of recent arrivals from Togo, these distributions are indeed meeting most of the extra demand for food resulting from the crisis.

Second, the prevailing regional food trading system has been disrupted in a manner that benefits Beninese consumers (although producers are hurt). The political troubles and economic stagnation in Togo have drastically reduced the demand for maize coming from the northern part of Benin (primarily the Attacora region). ONASA reports that maize, which usually is traded on the Lomé market, is now flowing into the southern part of Benin, with the result that all markets seem to be sufficiently provisioned. In addition, ONASA reports that because of the decline in the economic situation of Niger, cereal flows from Benin to that country are also down relative to their customary levels. These changes in cereals flows, coupled with a relatively good fall harvest and early rains that promise well for the next one, seem to have largely dominated any increased demand. The one exception to this generally rosy picture is *gari*, for which, as mentioned above, there has been a sustained price increase — particularly in the Mono region. Here again, though, the reason seems to have more to do with the disruption of

¹ The World Food Program is providing food for 40,000 individuals, while Catholic Relief Services is delivering food for 28,000.

traditional supply routes into Mono from Togo than with an increase in demand. The smaller price increases observed in Cotonou, which is supplied by the Ouémé and Zou regions, tends to confirm this hypothesis.

The main conclusion that emerges from the analysis of the food market is that, for the near future, supply seems adequate and prices should remain significantly below their levels from the previous year — leaving little likelihood of large short-term price increases as long as the refugee situation remains stable and food aid continues to flow.²

Labor Market and Service Sector

Assuming arbitrarily that there are 100,000 Togolese arrivals in Benin, of whom 52 percent are of working age,³ this translates into 52,000 potential labor market entrants, which would more than double the amount of annual new entrants. (World Bank estimates set Benin's total labor force at some 2.2 million in 1990 and give it a growth rate of 2.2 percent per year.) According to recently available UNDP/INSAE (Institut National des Statistiques et de l'Analyse Economique) survey data, only 6 percent of refugees acknowledge having exercised an income producing activity since their arrival in Benin.⁴ Although this figure is almost certainly an underestimate (because refugees probably underreport their independent sources of income), anecdotal evidence collected so far supports the view that there has not yet been a massive movement of refugees into the Beninese labor market. This could be indicative of two things. It could indicate that many Togolese have delayed entry into the labor market, but will enter it should the crisis continue. It could also mean that they view their stay as an interlude and fully intend to return to Togo rather than search for long-term work in Benin. The former interpretation has disturbing consequences, since it suggests that the Beninese economy's capacity to absorb large number of new entrants into the labor force may be tested in the near future. A third probability — that there are no jobs for the Togolese — is discussed below.

Despite Benin's impressive recent growth record, the economy has made only marginal progress in stimulating employment. In particular, the Beninese labor market is plagued by a lack of job opportunities in the formal sector (both public and private). As required under the terms of the World Bank SAP, Benin is continuing with a civil service and state-owned enterprises (SOEs) retrenchment program (4,200 jobs in the public sector have been eliminated since the inception of the SAP, out of a total of 56,000, while SOEs have reduced their rolls by 15,000).⁵

The employment creation that has occurred since the crisis year of 1989 has been concentrated largely in the informal sector. This is shown most clearly in data collected by UNDP that indicate that the proportion of the labor force that is either unemployed or earning less than 10,000 CFA per month (roughly \$35) has declined from 32.3 percent in 1990 to 27.2 percent in 1992. Furthermore, whereas the urban informal sector employed 75 percent of the urban labor force in 1990, it now employs 83

² This does not mean that there will not be significant food problems resulting from refugees' lack of income, however.

³ This percentage corresponds to that percentage of refugees in the over-18 group as reported in the preliminary UNHCR census figures.

⁴ This percentage was calculated on the basis of random surveys given at refugee registration stations. No attempt was made to tabulate results on a household basis.

⁵ Figures from Jacques Charmes, Consultant to UNDP.

percent. Formal sector salaried employees now make up only 14.3 percent of the urban labor force, as opposed to 19.1 percent in 1990.⁶

Thus, although recent arrivals with special skills in the service sector, such as auditors and computer systems technicians, have been able to find work in the formal sector, most Togolese looking for regular salaried employment are faced with limited demand.⁷ Since the beginning of the crisis, only about 100 or so Togolese have made inquiries to CEPEPE, the Beninese agency charged with helping professionals find work in the formal private sector. This is probably explained both by the desire of Togolese salaried workers to return to Togo and by the general lack of formal sector jobs in Benin.

Given the general slackness in the formal sector labor market, except for those few who have the capital to establish their own formal sector enterprises or who possess skills that are in high demand (mainly computer technicians and trained business managers), most Togolese will be forced to look for employment in the Beninese informal sector. To judge this sector's capacity to absorb these extra workers, it is necessary to make a distinction among different segments of the informal sector and consider the obstacles to integration that exist in each of them.

The first segment of the informal sector in which Togolese have already begun to appear in some numbers is in *petit commerce*, or small retail trade in consumables or services. Togolese *revendeuses* (women who specialize in retailing common consumption items in the street or in local markets) have recently started selling cloth and cold water in Cotonou on a large scale. In addition, Togolese merchants have also begun to sell such items as rice, tires, used cars, and shoes in Beninese markets — often at prices well below those practiced by their Beninese competitors. Togolese taxis have also been operating in Benin in large numbers.

This ability of Togolese to undercut Beninese in the informal *petit commerce* segment is often derived from differences in how Togolese and Beninese are treated by Beninese authorities. Officials at the Beninese Ministry of Commerce have been told to exercise lenience with Togolese importers who are unable to use the port of Lomé to facilitate the transit of goods through Benin to Togo. Thus they have been liberally according import permits to Togolese traders for transit goods destined to be sold in Togo or the interior Sahelian states. To use the Cotonou port facilities and clear their goods through customs, Togolese are required to pay only the minimal transit tariff. Similarly, Togolese refugees are able to bring with them their stocks of merchandise without paying any sort of tax at the border.⁸ In contrast, Beninese importers are required to pay full import duties, the licensing tax (the *patente*) and must register to pay the regular commercial income tax. Togolese taxis, too, have not been required to pay for insurance or licensing fees and have been accused of undercutting prices determined by the Beninese taxi drivers union. With these differences in fiscal and regulatory treatment, it is hardly surprising that many refugees have begun to sell transit goods and offer services at low prices in the Beninese market.

Conflicts have already begun to arise because of this. In the case of Togolese cloth traders, they have been driven from the Dantokpa market by the Beninese market women's associations and are now

⁶ UNDP/INSAE, "Suivi des caractéristiques et comportements des ménages et des groupes vulnérables en situation d'ajustement structurel," February 1993.

⁷ Several computer training schools run by Togolese have been established with great success in Cotonou.

⁸ Reports indicate that many refugees return regularly to Togo to bring goods into Benin.

reported to be selling out of their homes through a system of intermediaries.⁹ The Association of Beninese importers has also made complaints to the Ministry of Commerce about Togolese selling rice and frozen food products without paying the normal import tariffs. In the Mono *département*, after an initial period of conflict, the local taxi drivers union negotiated with the Togolese arrivals to ensure that they would respect existing rate structures. What effect the arrival of the Togolese has on individual taxi drivers' revenue remains to be seen.

Should the crisis go on and Togolese continue to receive lenient treatment from Beninese fiscal authorities, more conflict in the *petit commerce* sector is inevitable. Beninese competitors resent the facilities offered to the Togolese. The Government of Benin faces a tough decision in the near future on this question. Continuing to accord lenient fiscal and regulatory treatment to the Togolese is one form of indirect assistance, since it gives them a rent. As long as this continues, *petit commerce* has the potential to furnish a significant source of revenue to refugees.¹⁰ However, it also creates tension with Beninese competitors and gives the Togolese little incentive to orient their efforts to other activities.

Two other areas of the informal labor market in which the Togolese have apparently not yet begun to appear in significant numbers are agriculture and artisanal activities. Probably the greatest capacity for absorption exists in agriculture. Unfortunately, there is little to suggest that the refugees, who come from urban areas, are willing to farm. Furthermore, little land is available in southern Benin. A survey of free cropland in the Mono region carried out by the *préfecture* revealed only a small amount of unclaimed land on what were previously state-owned farms. Given the ethnic makeup of the refugees, they are unlikely to be willing to move to the north, where more land is available.

As for the microenterprise segment of the informal sector, it is estimated that there are 135,00 such enterprises engaged in artisanal work, auto repair, construction, food processing, and similar activities. The employment base of people engaged in these activities is estimated to be 500,000 to 700,000. However, officials from UNDP's informal sector artisan support project (which reaches 5 to 10 percent of Benin's microenterprises) report little or no new activity by Togolese entrepreneurs. Some Togolese have been reported crossing the border with grain mills, which indicates that they may be trying to set up milling operations in Benin; but except for these isolated cases, no general pattern of entry into artisanal or processing activities is emerging.

Again, as was true for agriculture, there may be several reasons for the scarcity of Togolese refugees in the artisanal sector. The primary reason may be that, because most of the refugees are from urban groups with substantial levels of education, they lack the skills and aptitude to launch small-scale productive enterprises. The question of capital is also important. Although activities in *petit commerce* may tie up capital in the form of inventories, credit (often from suppliers) is readily available for this type of quick pay-back operation; in contrast, setting up productive enterprises requires a longer-term investment horizon and is a much riskier proposition, because productive capital is much less liquid. Given the fact that most refugees view their stay as temporary, it is hardly surprising that they have not

⁹ Togolese cloth traders are, for the most part, the same women who dominated this activity in Lomé. Prior to the crisis these traders furnished a major part of the Beninese market in *pagnes*. They have now brought their stocks with them and are apparently selling directly to Beninese consumers at nearly the same prices that they used to sell to Beninese importers in Lomé.

¹⁰ Not enough is known about how this income is distributed within the refugee community to judge how important it is for the majority of households. The extensive retail activity and networks of Togolese cloth traders indicates that such activities may furnish income to a large number of households.

yet exhibited a willingness to take the long-term perspective required of entrepreneurs in the productive sector.

Overall, then, it seems that the greatest capacity for absorption of Togolese into the Beninese labor market lies in retail *petit commerce* trading activities. In many cases, Togolese merely continue the same activities they practiced in Togo. This seems to be the case for taxi drivers and cloth traders. These activities could become less attractive, however, if the government chooses to adopt a stricter attitude on customs and regulatory matters concerning Togolese living in Benin. Thus, a prolongation of the crisis coupled with a stricter enforcement of customs duties that would reduce the profitability of *petit commerce* for refugees could induce greater numbers of Togolese to look for opportunities in other areas of the Beninese labor market — where their prospects are hardly brilliant. Besides exacerbating Benin's unemployment problems, this would also lead to a deterioration in living conditions of many refugee households.

Housing Market

As with many booming economies, the Beninese housing market is tight. The redynamization of the economy after 1990 has created a new demand for housing that has kept rents on a steady increase. Given this underlying situation, it is not easy to assess what exactly has been the impact of the influx of Togolese refugees. The residential rental market is also extremely fragmented, with prices often moving in opposite directions in different market segments. Adding to these difficulties is the wide variety of financial arrangements that refugees have worked out with their Beninese hosts. The different modalities include:

- Completely rent-free support;
- Rent-free rights, but with an initial investment in basic household maintenance (such as paying for a new roof or cementing a courtyard);
- Rent-free lodging, but with participation in common expenditures such as food and utilities;
- Regular rental payments with eviction if arrears accumulate; and
- Rental payments only as long as the refugees can afford to make them with no subsequent attempt to evict or collect.

Approximately 25 percent of refugees report making some form of rental payment.¹¹

Based on the anecdotal evidence collected so far, rent increases in excess of underlying market trends seem to have been surprisingly rare. The single exception to this pattern seems to be in Cotonou, where in some *quartiers populaires* it is reported that rents have increased by as much as 20 percent since the refugees began arriving. Rapid rates of increase at the high end of the Cotonou housing market have also been reported, although it is unclear whether this is caused by the booming economy or the influx of relatively well-off Togolese and expatriate businessmen from Lomé.

The most surprising figures, however, are from the Mono region, where preliminary indications are that in the regions experiencing the highest concentrations of refugees — particularly Grand Popo and

¹¹ Figure from Jacques Charmes, UNDP consultant.

Agoué — prices have remained stable or even dropped. This is surprising because there is virtually no unoccupied residential property in these areas. One explanation for this phenomenon is that landlords are offering their lodgings at lower than market rates for humanitarian reasons.

In any case, the housing and construction sector was already entering a phase of rapid expansion before the refugees arrived. The real value of construction activity in 1991 was 22.2 percent above its average level for the period 1987-1989. Estimations for 1992 call for continued expansion. A Beninese host interviewed in Comé reported that he was able to support 24 refugees in his household of 8 without dipping into his savings because his construction materials business was so profitable that he could easily absorb the extra expenditures. The same informant reported that he rapidly exhausts his stocks of cement and has had trouble ordering more. According to one of the main cement companies, there has been a noticeable increase in orders from the Mono region since November 1992, which the company attributes to an increase in construction activity due to the refugee influx.

To sum up, then, it seems clear that the arrival of the Togolese has provided a windfall to some landlords in Cotonou and even further stimulated what was already a lively construction sector, especially in the Mono region. Beninese hotels also report booming business as a quick survey of 31 hotels of various levels of standing in the Cotonou region revealed an occupancy rate of 90 percent.

Financial and Capital Goods Markets

The arrival of the refugees from Togo has resulted in three shocks to the Beninese financial system — a rise in short-term banking deposits, increased pressure on personal saving, and an inflow of capital in the form of goods (mainly inventories). These three developments and their differing impacts are detailed below.

Rise in Formal Sector Banking Deposits

Nowhere is the significant increase of the Togolese presence in the Beninese economy more graphically illustrated than in the formal financial sector. At the second largest commercial bank in Cotonou, where Togolese nationals and companies opened 72 checking and savings accounts in 1992, the Bank's managers estimate that they have been opening approximately 15 per day since the middle of January. The total balance of Togolese checking and savings accounts in this same bank passed from 332 million CFA on December 1, 1992 to between 600 and 700 million at the end of March. Bank officials also report more account openings and increased deposits immediately following political incidents in Togo. Nearly one-third of the Togolese accounts opened in 1992, for instance, were opened in November — at the beginning of the general strike and one month after the Togo army began a particularly violent wave of repression. Most of these new accounts were made with cash deposits.

These movements of short-term funds belonging to Togolese residents are, for the most part, a direct consequence of the restrictions placed on their blocked accounts in Togo. Beninese banks with branches in Lomé (ECOBANK and Crédit Lyonnais) have been instrumental in helping Togolese get access to these funds. The mechanism used to do this is simple: Togolese residents and companies with blocked accounts present letters from their banks in Lomé to their Beninese branches authorizing them to draw on and deposit funds using the blocked account as backing. Regular statements of activity are sent from Cotonou to Lomé to keep blocked accounts "current." Because Benin has recently bumped up against the ceiling set by the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) for such nonresident transfers, Togolese desiring to transfer money from their accounts in Lomé must now be official residents of Benin or be incorporated under Beninese law to have access to these funds. Such

major Togolese companies as the Office Togolaise de Phosphates, which has a monopoly of Phosphate exports, have set up affiliates in Benin to take advantage of these opportunities.

This increase in short-term deposits is not likely to have any major impact on the Beninese financial market. Even assuming that the other four commercial banks matched ECOBANK's deposit growth, this would amount to only a four-month growth in deposits of 1.8 billion CFA in a banking system that has deposits of more than 100 billion CFA. More importantly, given BCEAO's strict rules requiring banks to keep long- and short-term credits in line with deposits and the dearth of long-term savings, Beninese banks have little ability to relax long-term credit merely on the basis of growing short-term deposits. (Nor would this be prudent.) BCEAO's current high interest rate policy also tends to suck in any excess liquidity in the banking system, giving banks little incentive to do anything but place their short-term liquidity in overnight deposits at BCEAO. The only real impact of these flows, then, will be to increase the income from transactions of Beninese commercial banks. This increase should help solidify the banks' profitability and help reestablish the national financial sector after the liquidation of all public commercial banks under the first SAP in 1990 and 1991.

Decline in Personal Savings

Although no systematic data are available on household consumption and coping strategies for dealing with the influx of refugees, there is surprising little evidence of dissavings as a response to the crisis. Commercial banks targeting the Beninese middle class report little evidence of declining savings.¹² However, there is some evidence that dissaving has occurred from the accounts of mutual savings banks that target less favored sections of the population who derive their income from the informal sector. According to the informal savings association, known as the "Banque des Pauvres," there has been a sharp increase in the number of people asking for early withdrawals of savings earmarked to pay school fees in the fall. Many people report that they need these funds to help support the added burden of relatives or friends that have arrived from Togo. This phenomenon is more important at the household level, however, than at the macroeconomic level, because it is unlikely that the monetary savings of people in these social categories contribute significantly to overall private savings. Furthermore, any modification in the rate of personal savings as a result of the crisis is likely to be only a temporary phenomenon that will end when the refugees either return to Togo or insert themselves into the Beninese labor market. Thus, the drop in savings does not seem to be, by itself, a major concern for the economy as a whole, although for individual households it may indeed have negative repercussions.

Inflow of Capital Goods¹³

According to reports of people familiar with the movements of refugees, people coming over in the initial wave in January came over with more cash than goods. Although no hard data is available, it seems likely that the brief inflationary pressure experienced at this time may reflect a rapid rise in liquidity. (This would tend to be confirmed by the evidence presented above about short-term deposits.) Since this period, refugees have been making efforts to bring in household goods, business inventories,

¹² According to ECOBANK officials, savings have even increased since the refugee crisis began. Similarly, officials from the Bank of Africa report no run on savings.

¹³ We are adopting a loose definition of capital goods here to include such items as cars and inventories of consumer goods (goods in this latter category can be looked upon as working capital).

cars and scooters, and even some capital equipment (such as the grain mills mentioned above). The alleviation of the inflationary pressures noticed in January may be one indication of the scale of these activities because more goods are now coming to market without any concomitant increase in liquidity.

In any case, the impact of this flow of goods is likely to outweigh the effects of any change in household savings or increase in short-term banking deposits. In effect, Benin has seen a rapid growth in its stock of cars, imported consumer goods, agricultural produce, cloth, and assorted other items without any associated financial outflow. Although Benin's formal financial markets are not likely to respond to such movements, largely because of the high interest rates and the restrictive credit policies of the BCEAO, it is reasonable to assume that prices of these goods will fall in informal markets. This should contribute to lower costs of capital in market segments that use these goods as inputs. Thus people engaged in transport, clothing manufacture, retail trade, and other activities making use of the goods coming across the border can expect to benefit from reduced costs.

Public Finance and Services

The impact of the refugee crisis on public expenditures is a crucial question given the importance of public expenditure management in Benin's SAP. The main question that needs to be answered is: Does the inflow of refugees threaten to reverse or slow the Benin government's progress in reducing its budget deficit? To answer this question, we will look at the impact of the crisis on two levels. The first of these is the effect it has on government expenditures resulting from increased demands being placed on public services and resources. Secondly, we will examine the likely consequences of the crisis for revenue collection.

Added Stress on Public Services and Budgets

The influx of Togolese residents has necessitated an increased level of public expenditures — particularly at the local level where most basic services are provided. At the inception of the crisis, public authorities in Mono took the initiative of purchasing food for refugees, setting up temporary shelters, requisitioning empty public housing units, and providing extra security patrols and emergency health care. Since January, an organized response from NGOs has relieved local authorities of the responsibility of providing and distributing food as well as administering the shelters. However, some refugees still draw on public subsidies on a case-by-case basis and local authorities still furnish electricity and water to NGO shelters and requisitioned public housing units. In the Mono Préfecture, the estimated cost of these services during the first three months of 1993 amounted to 1.5 million CFA out of a total annual operating budget of 30 million. One million CFA of these expenditures have been covered by a transfer from the central treasury. For the rest, *préfecture* officials report that they have frozen the *préfecture*'s social security and equipment loan programs designed to provide needy Beninese households with social emergency and small-scale enterprise loans. Furthermore, such questions as how to handle the rent payments (a total of 72,000 CFA per month) on the public housing units occupied by refugees have not yet been addressed and could represent a further (albeit small) drain on the *préfecture*'s budget.¹⁴

In Cotonou, the picture is somewhat different. Local government officials pay water, electricity, and security costs for the Cotonou II shelter, but NGOs have handled food distribution since the inception

¹⁴ These rental units do not, however, represent a real economic cost (except maybe for increased depreciation), since they were vacant before the arrival of the refugees.

of the crisis and have arranged a voucher system to pay for refugees' health care, which reduces the frequency of the requests for aid that are addressed to local authorities in Mono.

Ministry of Finance officials have set aside 10 to 16 million CFA to accommodate unplanned expenditures relating to the refugee crisis.¹⁵ This extra expenditure is taken out of the 400 million CFA *crédits global non-affectés* line item in the 1993 budget.¹⁶ The short-run budgetary impact of these unplanned expenditures, although they can disrupt local authorities financial plans and necessitate a certain amount of budget reallocations, are of limited importance to the overall state of public finances. With 79 billion CFA in planned total current expenditures in 1993, these unplanned expenditures still represent only a small proportion of the total. The Health Ministry's 1993 recurrent budget alone is 2.8 billion CFA. On the local level, the refugee crisis may cause some hardship among families as social support funds are reallocated from Beninese to Togolese households. Still, no major disruptions in either the local or central government's ability to furnish the limited array of services that they traditionally provide have been reported or are likely to occur. Furthermore, as more and more of the refugee support operations are taken over by UNHCR and NGOs, the likelihood of serious problems arising at this level recedes even further.

Besides the question of planning for basic needs, the Benin government's social services are also coming under strain from the influx of refugees. But despite the fact that existing Beninese institutions are being used to provide both education and health services, once again, the crisis is having little budgetary impact. To take the example of education, according to USAID estimates, the cost of accommodating 37,000 Togolese children in Beninese primary schools for 5 months would total almost 933 million CFA. Because most of these costs are fixed, extending this aid for the entire 9-month school year would increase this total to around 1 billion. Once an estimate of the cost of extra books and teachers to accommodate an estimated 16,000 secondary school aged children are added to the calculation, meeting the total extra demand placed on the Beninese public education system could easily cost as much as 1.4 billion CFA per year.¹⁷

¹⁵ The 10 million figure is from the Ministry of Finance, Direction du Budget. The 16 million figure is from the Ministry of the Interior.

¹⁶ As of March 1993, all but 47 million in this account had already been earmarked (including the 10 million for the refugees). Thus, there is now less leeway for government officials to free further funds to defray the costs of the refugees on public institutions.

¹⁷ The figure of 16,000 secondary school students is calculated based on the following assumptions:

- 163,000 refugees;
- 38 percent of refugees of primary and secondary school age (figures from UNHCR census);
- 50 percent of school age children at secondary level; and
- 50 percent of these actually seeking enrollment.

The extra cost of providing these students with books and teachers alone can be calculated as follows:

Books: One book for two students, four required books @ 4,000 CFA each $(16,000/2)*4*4,000 = 128$ million CFA.

Teachers: As with primary school students, it is assumed that 32 percent of students can be accommodated in existing classes with no extra expense. This leaves 11,000 students in need of teachers. With 50 students per class, this implies 220 extra classes. At the secondary level, Beninese standards call for eight teachers per five classes at an average monthly salary of 67,500 CFA. Thus the number of new teachers required is 352 $[220*(8/5)]$ at a total monthly cost of 23.7 million CFA. On a 12-month basis this gives a total annual cost of 285 million CFA.

Although this figure looks impressive when compared to the Education Ministry's 1993 recurrent expenditure budget of 15.7 billion CFA, few of these costs will come out of the national education budget. In fact, budget officials do not report any modification in the share of recurrent expenditures allocated to the Ministry of Education in response to the refugee crisis and do not anticipate any increase or acceleration in expenditures. Currently, government education expenditures consist mainly of teacher salaries, which account for 94 percent of the 1993 education budget. Because plans call for donors to pay for the teachers hired to accommodate the refugees, the government is responsible for virtually none of the extra expenses associated with the refugee influx. Families will be asked to pick up the major part of the nonsalary recurrent costs in the form of user fees. Donors and NGOs will pay most of the capital costs. Therefore, as long as families, donors, and NGOs contribute as expected to the extra cost of accommodating refugees into the public health and education institutions, there should be little impact on the budget — although the substantial increase in the number of people using public services may have some negative effects on quality.¹⁸

Generation of Added Revenue

Although data on tax receipts are not available, the increase in economic activity taking place inside Benin's frontiers as a result of the Togolese crisis has had an undoubtedly positive impact on public revenues. The relocation of both formal and informal sector activities creates new opportunities for revenue collection at many different points. Goods formerly shipped through Lomé are now transiting Benin. Togolese and Beninese agricultural goods from the frontier regions in both countries that were formally sold in Togo are now being exchanged in Beninese markets.¹⁹ Togolese refugees are liquidating their assets to buy Beninese goods, thereby contributing to Benin's value added tax.

Increases in revenue are particularly likely to occur at two levels. The first of these is the local government level, where taxes on informal sector trading activities are levied. Municipalities collect daily *droit de places* for merchants in fixed stalls and also try to tax ambulatory merchants (although with less success). The second and more important level where one would expect to see rising revenues is in customs receipts. Monthly data on customs receipts since the crisis began are not yet available, but tonnage figures from the port of Cotonou show significant increases in traffic since November 1992. One can hypothesize, therefore, that the crisis has had a positive impact on Benin's revenue collection efforts (although firm data to gauge the size of this effect are not yet available.)

Summing the cost of extra books and teachers at the secondary level, along with the cost of primary school students gives a total of 1.4 billion CFA. This must be considered a floor estimate, because the costs of constructing new secondary facilities and furnishing them with electricity have not been included.

¹⁸ It should be noted that the question of school fees, out of which nonsalary recurrent costs are paid, has been left to the discretion of individual school principals. In many cases, they have allowed Togolese students to attend without payment, under the expectation that they would pay at the end of the year when final exams are given. Because the ability of many of Togolese families to pay these fees is doubtful, there still may be a substantial problem in covering nonsalary recurrent costs.

¹⁹ In Agoué, for instance, the Préfecture of Mono financed the construction of a market that was never used by local farmers and merchants, who preferred to go across the border to Togo. Now that products are flowing in the other direction, the market is used every week, attracting both Togolese and Beninese.

SHORT-TERM MACROECONOMIC IMPACT

The ability of the Beninese economy to support the Togolese refugees is enhanced by its recent rapid growth. Having achieved 3.2 percent real GDP growth in 1990 (0.3 percent per capita), 4.7 percent growth in 1991 (1.8 percent per capita), and an estimated 4.1 percent in 1992 (1.2 percent per capita), Benin is much more capable of absorbing a substantial number of refugees than it would have been in 1989, when its economy was stagnant or even shrinking. Not only are employment possibilities better than they were a few years ago, but real per capita income by individual household has risen by 6.4 percent between 1989 and 1991.²⁰

This solid growth has been accompanied by an ambitious Structural Adjustment Program sponsored by the World Bank. Under this program, Benin has taken notable steps towards reducing its fiscal deficit, liberalizing prices and trade restrictions, instituting a nondistorting value added tax, and restructuring its banking system. These reforms have contributed to a thriving tertiary sector (largely dominated by trade and trade-related services) that, together with substantial increases in agricultural production, has been responsible for much of the country's impressive growth performance. In contrast, growth in industry and processing activities has lagged behind.

Given this pattern of growth, it is clear that the sectors most capable of absorbing the refugees are agriculture and trade. However, the growth patterns of both of these sectors are subject to wide yearly fluctuations caused mainly by exogenous factors — rainfall in the case of agriculture and demand conditions in neighboring states in the case of trade. Adequate rains in both 1991 and 1992 have spurred agricultural production, and forecasts are again good for 1993. Unfortunately, as mentioned above, the refugees are unlikely to take up farming activities on any large scale. In the trade sector, as we have seen, the continuing crisis in Togo has brought a windfall to Benin as merchandise that was destined to or previously routed through Togo is now transiting via the port of Cotonou.

Thus, given Benin's healthy growth performance of late, together with such fortuitous events as adequate rainfall and a booming regional trade, it seems unlikely that the massive movement of persons from Togo will provoke any significant macroeconomic imbalances that could destabilize the economy over the next year. The influx of people has not led to severe supply-demand imbalances in the food market, which would have resulted in acute food shortages and sustained price increases. Similarly, financial markets have not been adversely affected and the economy is benefiting from an inflow of goods into the country. Housing markets have become tighter; but once again this benefits many Beninese and has contributed to a thriving construction sector. Finally, the massive and unexpected influx of Togolese has not led to an appreciable increase in public expenditures beyond what was planned for the fiscal year, or to a change in the composition of these expenditures. If anything, it probably has had a positive net impact due to increased customs receipts.

A major concern on the macroeconomic level that warrants close attention is the capacity of the Beninese labor market and service sector to absorb significant numbers of Togolese. Tensions are already mounting in the retail trade sector, largely because of special treatment accorded to Togolese importers and refugees importing personal items that are really business inventories or capital goods. Furthermore,

²⁰ All per capita figures calculated assume a stable annual rate of population growth of 2.9 percent for a population of 4.7 million in 1990, as reported in World Bank, *World Development Report*, 1992. Real GDP, household income, and deflator figures are from INSAE, "Comptes Economiques, 1988-1991," January 1993.

the ability of the informal sector to absorb significant number of refugees in any area other than trade, as well as the refugees' capacity to contribute to productive activities, are both doubtful.

These difficulties in labor absorption may have a negative impact on the government's effort to reduce fiscal imbalances by limiting personnel expenditures. Already, progress in this area has been much slower than expected. The civil servant retrenchment program, which envisaged a reduction of 10,000 workers by 1992, has met so far with a weak response. As of December 1992, only 2,700 civil servants had left. Despite the promotion of several job creation schemes (CEPEPE, and UNDP self-help initiative), the unemployment rate among educated Beninese remains high with thousands of redundant civil servants and university graduates unable to find work. Any further influx of Togolese into the informal sector labor market — the option of last resort for university graduates and former civil servants — will only make it harder to implement the reduction in public sector employment called for under the SAP.

To sum up, it is unlikely that there will be any great change in the overall macroeconomic situation within the next six months. Yet, on a long-term basis, the ability of the Beninese economy to integrate the refugees into its productive sector remains doubtful.

Although the risk of short-term macroeconomic destabilization is low, the crisis may have some marginal impact on several macroeconomic indicators.

Inflation Rate

INSAE estimates the inflation rate in 1992 as measured by the GDP deflator at 3.5 percent. Although Beninese complain that "Togolese don't know how to bargain" and that this drives prices up, the analyses carried out above show that except for the first weeks of the crisis, when there was an injection of liquidity into the economy, there is little evidence of sustained inflationary pressure. If anything, the amount of goods now flowing into Benin from Togo should be contributing to declining price levels. Of course, supply and demand conditions in certain sectors (housing) may go against this trend, but, with the current monetary policy of the BCEAO, there is little likelihood of an inflationary spurt.

Fiscal Deficit

The immediate impact of the refugees on the fiscal deficit is channeled through its effect on expenditures. The analysis presented above indicates that the increased demand for education, health, and security stemming from the presence of refugees has not pushed the government to increase its level of expenditure beyond previously programmed levels. On the revenue side, the relocation of a good percentage of Togo's economic activity toward Benin can be expected to have only a favorable impact on revenue collection, as customs receipts and the VAT capture transactions that formerly took place outside of national boundaries.

Output Level

The refugees are likely to affect the level of output in three ways. First, they increase the available labor supply (and reduce prevailing real wages). Second, they bring goods with them that increase the stock of goods that can be consumed and put to productive use. Third, they bring knowledge of new techniques and offer competition to existing enterprises and individuals, both of which stimulate

productive efficiency. It is clear that the first two effects have produced a short-term spurt in Benin's output level. Whether, in the long run, wages will drop enough and the special expertise of the Togolese can be harnessed to increase productivity remains to be seen. This depends, first, on how many of the Togolese stay in Benin and on the success they have in integrating themselves into the labor market. If substantial numbers of Togolese stay in Benin and are able to find work, downward movements in real wages will be more than a transitory phenomenon, and one can expect the Beninese economy to gain in competitiveness and efficiency. (This is described more rigorously in Annex C.) If, however, the Togolese stay and are not able to find productive outlets, the dynamic gains from the crisis will be minimal and increased social tension will be inevitable.²¹

²¹ The successful experience of Ghana in integrating the Ghanaian deportees from Nigeria in 1983 was a result of its ability to encourage many of the returnees to take up agricultural activities that were newly favored under Ghana's Structural Adjustment Program.

SECTION FOUR

HOUSEHOLD-LEVEL ANALYSIS AND PROGRAM RESPONSES

Even a cursory examination of the situation of the refugees and their hosts reveals that the crisis is likely to come to a head at the household level long before it causes any major macroeconomic problems. The first part of this section addresses the short-term material situation of the refugees and their Beninese hosts. In the second part we analyze the longer-term dynamics of the refugee presence.

SHORT-TERM PERSPECTIVE

The material situation facing most Togolese refugees is deteriorating. Thus, in the short run (over the next six months), the disaster aspects of the crisis are liable to present the most crucial problems.

The situation of the refugees is approaching a critical stage in several areas. The most pressing of these now appears to be lodging. According to UNDP, 25 percent of the refugees report making rental payments to Beninese. Although it is not clear what percentage of these represent token payments to family members or friends and what percentage are real market transactions, parish officials in Comé report that many refugees are no longer able to make payments and face eviction within the next few months. There is, thus, a significant risk of an upturn in the number of refugees seeking shelter from NGOs.

Similar severe problems exist in sanitation. In the Mono region, in particular, refugees are living in open courtyards in compounds with blocked septic pits. Families are eliminating their wastes *dans la nature* in an area with an extremely low water table before the onslaught of the rainy season. Refugees are also showing an increasing dependence on the WFP and CRS food distribution programs, as very few have resources to fulfill their needs on the open market. As a result, quantities distributed are exceeding expectations — meaning that NGO food deliveries will have to be accelerated.

These developments threaten to disrupt the smooth functioning of the integrationist approach adopted by the government and NGOs, which has so far proved effective. Under this approach, much of the responsibility for taking care of the refugees has been assumed by individual Beninese households who furnish them with varying degrees of support. Yet, as the substantial number of renters and reports of refugees making investments in household maintenance indicate, many refugees are expected to contribute something in return. As refugees exhaust their ability to contribute to the cost of their upkeep, this essential lubricant, which makes the integrationist approach viable, is running thin.

This suggests that, should the crisis continue, more Togolese households will be seeking shelter and that increasing demands will be made of NGO relief organizations that could push the situation in the direction of a traditional refugee crisis. The key factor in evaluating this likelihood is the number of refugees who will be turned out of Beninese households once the burden of supporting them becomes too great. Although there is no way to gauge this with certainty, if the one quarter of registered refugees

now paying rent are turned out — this could result in 22,000 people in need of shelter, or more than 10 times the number of people that are currently housed in refugee centers.²²

LONG-TERM PERSPECTIVE

If the crisis persists beyond six months, the problem of combining disaster relief with an overall strategy for meeting the refugees' aspirations will become critical. The question of whether or not the refugees should be encouraged to stay in Benin must be addressed. As is clear from the analysis in Section Three, this hinges on whether the Beninese economy has the capacity to integrate the Togolese into the productive labor force. Although it is risky to base a judgment on the limited data at hand, the prospects for such an integration appear dim. Informal sector trade is able to provide a stop-gap source of revenue for many refugees, but it is unlikely to be able to support the significant numbers of active adults who apparently have not yet entered the labor market, particularly if the present customs loopholes are closed. Similarly, for reasons relating to the makeup of the refugee population, agriculture and artisanal activities do not seem to offer much long-term promise. Obviously, many refugees would welcome job opportunities in the Beninese formal sector, but these are extremely rare and are already the subject of intense competition by Beninese. Thus, despite the short-run adjustments in food markets and regional trade patterns, which have done much to offset the burden of supporting the refugees, their continued presence in a country where their employment prospects are extremely limited is likely to constitute a long-term drag on the Beninese economy.

The main lesson to be drawn here is that donors and NGOs should take care to design programs that do not encourage the refugees to remain in Benin after the crisis is over. It will be important that their basic needs be addressed, but particular caution should be used in designing health and education programs to ensure that the refugees do not remain in Benin merely because they have access to special programs that are superior to those offered in Togo (or in Benin for that matter). Thus, although the government and donors should continue to provide schooling and health care, the programs offered should be commensurate with those customarily offered to Beninese and Togolese. Also, the wisdom of granting general fee waivers on a prolonged basis should be seriously examined. These may be necessary in the short-run, but, should the crisis continue, other solutions must be sought. (One such solution, using labor intensive public works projects to carry out needed infrastructure improvements and give refugees some earned income, is described in Section Five.)

The preponderance of evidence indicates that most refugees intend to return to Togo once the crisis is over (when the current regime is no longer in power). Among those who made inquiries of CEPEPE about employment possibilities in the formal sector, nearly all freely admitted that they were only seeking temporary posts and planned to return to Togo. Similarly, the absence of refugees in activities with longer-term payoffs, such as setting up their own microenterprises, indicates that most expect to return when the political situation becomes more stable. The challenge, then, is not to disabuse the refugees of settling permanently in Benin, which they don't want to do anyway. Rather, donors and NGOs should seek only to not skew the incentive structure so as to cause a revision in the refugees' intentions.

²² Assuming 1,200 are being lodged at Cotonou II and around 400 to 800 in different centers in the Mono region.

SECTION FIVE

RECOMMENDATIONS

The Togolese crisis in Benin poses some complicated problems for those seeking to aid the refugees. Above all, the close integration of Togolese into Beninese households makes it difficult to design specifically targeted programs of assistance and to gauge the extent of the crisis in basic needs. Given this situation, a few basic guidelines can be suggested to guide USAID's response.

- **The refugees should not be encouraged to stay permanently.** As shown above there does not appear to be a good match between the capacities of the refugees and the needs of the Beninese labor market. Therefore USAID should not initiate assistance programs to encourage their continued presence after the crisis is over.
- **Priority should be given to short-term relief activities.** The most pressing problems at present and for the foreseeable future are sanitation and shelter. The demand for food relief is likely to grow as well.
- **Programs should also address the burden the crisis places on the Beninese.** The extent of the refugees integration into Beninese households poses some delicate problems about targeting relief efforts. Rather than trying to spend much effort refining assistance delivery mechanisms to exclude Beninese, NGOs and donors should recognize (as by and large they already do) that, in the current context, the "leakage" of aid to Beninese households is hardly a serious fault to the degree that they, too, are contributing to the refugees' upkeep.

Given these general guidelines, several areas exist where resources from USAID and donors could be particularly useful. These are considered below.

1. Set up a basic information system to monitor changes in the refugee situation. As mentioned in the earlier Office of Foreign Disaster Assistance report, USAID needs to follow closely the disaster aspects of the crisis, especially because these seem to be more pressing than the larger macroeconomic concerns. To plan adequately for housing provision and food shipments and to anticipate medical needs, donors, government, and NGOs must have accurate, timely data on the number of new arrivals in Benin and on the movements of refugees within the country. Most of this information already exists with parish priests, who have the most contact with refugees and intimate knowledge of the local environment. A regular reporting schedule could be set up, in which parishes would tabulate and communicate basic data on numbers and movements of refugees, as well as data on the number of homeless refugees and the number seeking free food. This would amount to little more than regularly updating the current parish registration records and should not require significant added resources. The difficult problem will be centralizing all this data in a timely fashion so it can be of use to NGOs and donors coordinating the relief effort. This latter aspect of the task may warrant some outside support and monitoring.

2. Accelerate plans for improving sanitation and health delivery and develop contingency plans for providing more shelter. This is an especially critical issue for refugees in the overcrowded part of the Mono region (mainly Agoué). Emptying septic pits in overcrowded houses and increasing refugees' access to health care in these areas are important because, given the current state of sanitation, the onset of the rainy season is likely to witness a sharp increase in disease. This action will also be warmly received by the Beninese, who will also derive substantial benefit from better sanitation and reduced exposure to infectious diseases. Similarly, NGOs can expect an increase in the number of persons

seeking shelter, because some Togolese will be forced to leave their Beninese hosts when they are no longer able to contribute to shared expenses.

3. Institute a mechanism for integrating local food purchases into food relief procurement. One of the unforeseen consequence of the crisis has been the loss of the Togolese market to Beninese maize producers in the north. Early indications from ONASA are that producers are having trouble selling their stocks. The negative impact of this development could be mitigated by a program of integrating local purchases of maize and other cereals into the procurement of food aid destined to the refugees. To achieve this in a controlled fashion (without disrupting supplies in key markets), any local purchase campaign would have to be conducted with knowledge of market prices and flows in different markets across the country. Fortunately, most of this data already exists at ONASA. Thus rather than set up an independent monitoring system to guide local grain purchases, much insight could be gained by simply involving ONASA officials in existing food procurement activities and using ONASA data. ONASA officials have already indicated that they would be in favor of such a program.

4. Set up an expanded public works labor program to accommodate a greater number of refugees. The continued viability of the current situation, in which most refugees are housed by Beninese, is contingent upon some contribution from the refugees. Given the limited capacity of the Beninese economy to absorb an increased labor supply, offering employment to Togolese through an expanded public works program, such as that currently offered by AGETUR, is a promising avenue for providing refugees with the needed income. The ability of the AGETUR public works project to attract Togolese laborers is clear. Although no figures are available on the participation of refugees, interviews at a worksite reveal a constant flow of both Togolese and Beninese applicants. Expanding this program to accommodate greater numbers of refugees and extending its geographic scope to the Mono region could provide many refugees with a needed source of revenue. It would also be a less conflictual and more equitable way of supporting refugee households than the present system under which the Benin government accords indirect subsidies through lenient regulatory and customs treatment to Togolese merchants in direct competition with Beninese.²³

Because this type of employment is rigorous and relatively poorly paid (one AGETUR contractor reported paying its unskilled laborers at the rate of 640 CFA per day — about \$2.40 a day)²⁴ compared with the income earning possibilities that were commonly available to refugees holding salaried positions in Togo, there is little likelihood that these jobs would encourage refugees to settle permanently in Benin. Furthermore, such a program could conceivably address some of the direct needs of the refugees by allocating labor to improving sanitary facilities and constructing health centers in overcrowded zones.

²³ USAID has already tried a similar approach in its Somali Refugee Self-Reliance project between 1983 to 1988. The project component designed to make improvements in agricultural lands and roads through labor-intensive projects directed by private voluntary organizations managed to furnish nearly 2,200 man/years of work to about 10 percent of the 700,000 refugee population living in Somalia for a cost of \$6 million. Although much of the infrastructural improvements carried out under the project subsequently deteriorated due to a lack of maintenance, PVOs found no shortage of willing laborers who were drawn from both Somali and refugee populations.

²⁴ On an annual basis (260 days) this amounts to \$624, which is significantly above the Beninese per capita GDP of \$360 in 1990.

ANNEX A
SPECIFIC PROJECTIONS AND PROGRAM
DESIGN IMPLICATIONS

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We now offer some specific projections of what sort of problems are likely to develop over the next year, on both the macroeconomic and household levels, assuming that the basic numbers of refugees in Benin remains steady over this period. The implications of these problems for USAID programs are also addressed. Specific recommendations are given in Section Five of the main report.

THE SITUATION ONE MONTH FROM NOW

Household Level

- Problems in housing and sanitation will get worse. Sickness and health care will become major problems, particularly in the most affected parts of Mono (Agoué and Grand Popo).
- Staple cereals will continue to be available in local markets at reasonable prices. Nevertheless, increasing pressure will be placed on NGO distribution points as refugee resources wear thin.

Macroeconomic Level

- No major concerns coming to a head in one month, although if GOB starts taxing Togolese refugees' movements of goods across the border or becomes stricter about according transit status to Togolese imports through the port of Cotonou, this could induce more refugees to enter the labor market.

Program Design Implications

- Priority should be placed on developing a plan to provide health care to refugees located outside of Cotonou. The establishment of two NGO health centers in the Mono region should help alleviate some of this need. The problem of sanitation remains, however. Plans for resolving the problem of full septic pits in places such as Agoué, where people depend on well water and where the water table is extremely low, will need to be implemented quickly. The advent of the rainy season adds urgency to this issue.

THE SITUATION THREE MONTHS FROM NOW

Household Level

- If the crisis continues, the crucial point for many refugee families may come around this period. The possibility of a sharp increase in homeless refugees is a distinct possibility. If families choose to remain in Benin at this point many will either have to be taken into charge by NGOs, or family members will have to insert themselves to a greater degree into the labor market.
- A movement of individual refugees from Mono to Cotonou to seek work (probably without their families) is likely to occur by this time as resources are used up and families find that they cannot pay rent. Family members of working age will be expected to provide for themselves.

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Macroeconomic Level

- The informal labor market will come under increased pressure as more Togolese are willing to assume jobs below the level of what they held in Togo. This will cause increased tension in areas where competition with Beninese is particularly fierce, such as *petit commerce*.
- The rate of replenishment of NGO food stocks will need to be accelerated as increasing numbers of indigent refugees will require food.

Program Design Implications

- This will be a critical stage in organizing the donor response to the crisis. Choices will have to be made between the integrationist and traditional refugee approaches. There will surely be more demand for traditional refugee type aid, including emergency shelter, food, and medical care. Labor absorption will also be a critical point at this stage, especially if GOB cracks down on Togolese selling transit merchandise in Benin. Expanding the AGETUR public works project to accommodate an enlarged supply of Togolese laborers may be called for at this stage. The continued viability of the integrationist approach to the crisis may hinge on finding an answer to the labor absorption problem.
- The question of how to structure food aid purchases will become important. Some attention should be given to how regional flows of cereals are evolving. If producers in the north are still unable to sell their stocks because of the collapse of the Togolese market, NGOs should consider procuring a portion of their stocks from local sources.

THE SITUATION SIX MONTHS OR MORE FROM NOW

Household Level

- The crisis point reached at the three-month point for some families will have been reached by all Togolese who are not part of the business class with their own enterprises. Many will still be living with Beninese, but only if enough of their members are working so that they are able to contribute significantly to household expenses.

Macroeconomic Level

- Infrastructural constraints will become critical. If the crisis persists for another six months, even more of Togo's economic activity will be channeled through Benin, placing greater stress on the port and roads.
- Public revenues should begin to show significant positive variances as VAT and customs receipts swell from "captured" Togolese activities. This assumes that NGOs and donors continue to bear the brunt of refugee relief efforts.
- The civil service retrenchment program will become increasingly difficult to implement, as opportunities in the informal sector become scarcer because of an increased Togolese presence.

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Program Design Implications

- The main program issues here will follow from those of the preceding period. The question of how to handle a sustained increase in the demand for public transportation infrastructure will become increasingly important.

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ANNEX B

LIST OF PERSONS INTERVIEWED

Antoine ADANKPETO	Directeur Général, SOGEMA
Albert AGASSOUNON	BCEAO Cotonou
Gilbert AHO	Economist, UNDP
Leontine ASSIAKOLE	Real Estate Agent
Ferdinanad ASSOGBA	Service des Statistiques, Port Autonome de Cotonou
Justin BAGIRISHYA	Directeur, World Food Program
Maurice BANKOLE	INSAE
Pierre BESSAN	Worksite Foreman, Ouvriers du Monde Nouveau
Jacques CHARMES	ORSTOM, Consultant to UNDP
Ousmane DIAGANA	World Bank
Père DOUSSOU	Parish Priest, Agoué
Jacques EDJROKINTO	CEPEPE
Pierre Clavier GODOLOU	Directeur de la Protection Civil, Ministère de l'Intérieur
Filippo GRANDI	UNHCR
Gilbert GUERRARD	Assistant Director, ECOBANK
Christian HAUZEME	UNDP
Maxime HODONOU	Directeur de l'Exploitation, AGERTRAC
Nestor HOUETON	Directeur Général, INSAE
Abdoul KA	ECOBANK
Nicaise KODJOGEB	INSAE
Lambert KOTI	Directeur Général, AGETUR
Mathais KOUADJO	Secrétaire Général, Croix Rouge-Benin
Eduardo LOCATELLI	Resident Representative, World Bank
Francois-Xavier LOKA	Directeur du Commerce Intérieur, Ministry of Commerce
Nicolas LOKPE	Direction du Budget, Ministry of Finance
Luc LOMPO	ONASA
Issa MOKO	Préfet, Préfecture du Mono
A. OLAFINJI	President, Africa Cultures

Koffi RANDOLPH	Office of the President, Government of Benin
André RIGUE	Directeur, CIMBENIN
Edgard SAIZONOU	Bank of Africa
Noudjaidou SOUMNAOU	Ministry of Commerce
Ange TINGBO	Assistant Representative, Catholic Relief Services
Tetevi Robert VINYOR	Ingénieur Agronome
M. le Curé de Comé	Parish Priest, Comé

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ANNEX C

**MODELING THE MACROECONOMIC IMPACT OF THE
INFLUX OF REFUGEES IN BENIN**

by

Gerard Kambou

INTRODUCTION

This annex represents a preliminary attempt to model the effect of the Togolese refugee crisis on the Beninese economy. It is meant to offer a short mathematical representation of the possible effects of an increase in the supply of labor. More work is necessary to refine the model to incorporate a number of elements such as the change in Benin's capital stock due to the crisis, as well as rigidities in labor markets and the skills profile of the refugees.

The findings summarized in the main report suggest that the key channel through which the influx of Togolese can affect the economy of Benin is by shifting the supply of labor. Survey results have shown that more than 50 percent of the estimated 160,000 refugees are working-age adults of various skill categories who could join the labor force. Assuming that they all decide to seek employment, then the labor force, which has a size of about 2.2 million and grows at an annual average rate of 2.2 percent, will have to absorb about 80,000 additional employment seekers. Clearly, this increase in the number of labor force participants will affect the supply and demand for labor and, hence, wages. Viewed in this way, then, the influx of refugees can be characterized as an exogenous shock that primarily affects labor markets, causing the supply of labor of all skill categories to increase sharply. Assuming unchanged demand, the increase in the supply of labor inputs will lead to lower nominal wages, to which the economy can be expected to respond in three ways.

First, the decline in the price of labor will cause the price of goods and services that are labor-intensive in production to fall, which will stimulate demand. Second, producers seeking to maximize profit will attempt to maximize the use of labor inputs in production. Third, profitability of producing substitutes, which may be traded or nontraded goods, will rise, inducing more resources to be devoted to their production. In short, this large increase in the supply of labor caused by the massive influx of refugees will lead to lower prices, which, in turn, will affect the demand for goods and factors and alter the allocation of scarce resources among competing sectors of the economy.

The purpose of this annex is to present a method for tracing and measuring the potential impact on the economy of Benin of the large and unexpected increase in the supply of labor induced by the influx of Togolese refugees. This method involves the use of a computable general equilibrium (CGE) model that combines an input-output structure, which captures the interactions between sectors, with a fairly detailed treatment of government, household, income, and flow of funds within the domestic economy, as well as foreign trade. Because the model explicitly accounts for the interactions and linkages among sectors and markets, it expands our understanding of the mechanisms through which the presence and behavior of refugees may affect the Beninese economy. A better understanding of the nature and magnitude of the economic effects induced by the presence of refugees may enable policy makers, who must choose between alternative expenditure programs in the context of a budget constraint, to make rational decisions.

Description of the CGE Model

General Characteristics of Computable General Equilibrium Models

Computable general equilibrium models are analytical tools that have evolved from input-output and linear programming (LP) models widely used in centrally planned economies in the early 1960s to solve the fundamental economic problem of resource allocation. All together, these models form the class

of medium-term multisectoral planning models whose main purpose is to provide a framework for a quantitative assessment of the effects of exogenous changes at the economy-wide and sectoral levels.

A distinguishing characteristic of CGE models is that they simulate the workings of a market economy in which prices vary to equate supply and demand for all commodities and factors. The basic premise underlying these models is that economic performance is mainly determined by the independent choices made by consumers and producers interacting across all markets in response to price signals. It is assumed that consumers seek to maximize utility subject to budget constraints while producers seek to maximize profits subject to technological constraints. Thus, CGE models emphasize markets and market clearing prices to which decentralized optimizing consumers and producers respond. The government enters these models as an independent actor that can affect the state of the economy by providing incentives, such as tariffs and export subsidies, that work through the price system.

Another distinctive characteristic of CGE models is that they are highly nonlinear and can embody a variety of substitution mechanisms, including substitution in production, consumption, and trade, all occurring in response to price changes.

In essence, all CGE models are represented by a set of nonlinear equations that describe the optimizing behavior of decentralized producers and consumers, the market clearing mechanisms, and the budget constraints the model must satisfy to ensure internal consistency. These equations, which attempt to capture the structure of the economy, are used to solve endogenously for prices, wages, and exchange rates, all adjusting to equate supply and demand in the markets for output, labor, and foreign exchange. Supply and demand in each market originate from producers and consumers responding to market conditions, government policies, and other exogenous forces.

Mathematical Structure of the Model

Domestic Production and Factor Markets

The model divides the economy into a given number of sectors, and assumes that each sector produces a single composite commodity according to a constant return to scale production function with three labor categories (l_1 , l_2 , and l_3) and capital (K_i). Output X_i is given by:

$$X_i = A_i \left[\frac{dl_1}{l_1} \right] \left[\frac{dl_2}{l_2} \right] \left[\frac{dl_3}{l_3} \right] K_i^{d_i} \quad (1)$$

where

$$d_{d_i} = 1 - \sum_m dm_i \quad (m = 1, 2, 3)$$

and A_i is a constant. The capital stock, K_i , is sector-specific and fixed in the short run, so that, in a given period of time, sectoral production depends on the demand for labor.

The labor market is segmented into three distinct categories: rural (*I1*), urban-unskilled (*I2*), and urban-skilled (*I3*), all supplied in fixed quantities. The formal specification of the labor market starts with the definition of net price or the price of value added of sector *i*, PN_i , as follows:

$$PN_i = (PD_i - td_i) - \sum_j P_j a_{ji} \quad (2)$$

where PD_i is the domestic price in sector *i*, a_{ji} is the (*j,i*) input-output coefficient, and td_i is the indirect tax rate in this sector. P_j is the price in sector *j* of the composite good, defined as an aggregation of imported and domestically produced goods.

Given equations (1) and (2), and assuming perfect competition, the demand for labor by skill type is derived by solving the first-order condition for profit maximization:

$$PN_i \frac{dx_i}{dL_m} = W_m \quad (3)$$

where W_m is the wage level in sector *m*.

Total labor demand for each category *m* is the sum across sectors:

$$LD_m = \sum_i L_{im} \quad (4)$$

where LD_m is the aggregate demand for labor type *m*.

Finally, the labor market in each skill category clears when aggregate demand equals the exogenously fixed labor supply:

$$\sum_i l_{im} = \bar{L}_m \quad (5)$$

Consumer Demand

A single household sector is assumed, with a representative consumer who maximizes a Cobb-Douglas utility function over commodities subject to a budget constraint and saves a fixed proportion of disposable income. The household total income, *Y*, is given by the sum of factor earnings:

$$Y = \sum_i PN_i X_i \quad (6)$$

from which the net tax or tax on disposable income, YD , is derived as:

$$YD = (1-t)Y \quad (7)$$

where t is the uniform income tax rate. Total consumption, C , depends on the savings rate, S , and disposable income. It is given by:

$$C = (1-S)YD \quad (8)$$

The assumption that the household seeks to maximize a Cobb-Douglas utility function implies that sectoral consumption, C_i , is allocated according to fixed expenditure shares:

$$C_i = \frac{\beta_i^c}{P_i} \quad (9)$$

where β_i^c is the share of disposable income spent on good i .

Government Demand

The government's revenue comes from indirect taxes, import tariffs, export duties, and foreign borrowing. Government revenue, GR , is therefore given by:

$$GR = \sum_i td_i PN_i x_i + tm_i Pm_i + te_i PD_i E_i + \bar{F}(ER) \quad (10)$$

where:

ER = exchange rate	\bar{F} = foreign borrowing
tm_i = import tariffs	Td_i = tax on domestic output
te_i = export duties	PN_i = price of value added in sector i
M_i = imports of good i	x_i = output in sector i
E_i = exports of good i	PD_i = domestic price level, sector i .

With its income, the government buys goods and services according to fixed expenditure shares. Thus, G_i , government demand for good i , is given by:

$$GC_i = \overline{SG}_i \frac{GC}{P_i} \quad (11)$$

where \overline{SG}_i is the share of total government spending on good i , and GC represents total government expenditures, which are assumed fixed in real terms. It is also assumed that all government expenditures go to the public service sectors, which means that $\overline{SG}_i = 0$ for the remaining sectors. Government savings

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is determined residually as the difference between revenues and total expenditures. Since the latter are fixed, government savings depend critically on revenues.

Investment Demand

Total savings — the sum of household, government, and foreign savings in the economy — is assumed to determine the level of investment. Thus, total investible funds TIF must equal total savings:

$$TIF = sYD + Sg + \bar{F}(ER) \quad (12)$$

where Sg represents government savings and \bar{F} foreign savings.

Real private investment in sector i , DK_i , is given by a fixed proportion, H_i , of the investible funds deflated by the price of capital, PK_i , or:

$$DK_i = \bar{H}_i \left(\frac{TIF}{PK_i} \right) \quad (13)$$

where:

$$PK_i = \sum_j b_{ij} P_j \quad (14)$$

and b_{ij} is the (i,j) element of the capital coefficient matrix.

In the short run, the capital stock is fixed and investment does not add to capital formation. However, since investment depends on available savings, an increase in the latter — given the price of capital — will lead to an increased demand for investment from the capital-goods-producing sector. Investment demand from these sectors, referred to as investment by sector of origin, Z_i , is obtained as follows:

$$Z_i = \sum_j b_{ij} DK_j \quad (15)$$

Intermediate Demand

Intermediate inputs are used according to fixed input-output coefficients. The intermediate demand equations for material inputs, V_i , are given by:

$$V_i = \sum_j a_{ij} X_j \quad (16)$$

where a_{ij} are the (i,j) input-output coefficients.

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Supply-Demand Equilibrium

Aggregate demand for the composite commodity, X_i , at price P_i , is the sum of household, government, investment, and intermediate demands:

$$X_i = C_i + G_i + Z_i + V_i \quad (17)$$

Supply of the composite good comes from either domestic sources (D_i) or imports (M_i). If d_i represents the proportion of total demand satisfied by domestic production, and assuming that d_i is the same for all components of aggregate demand, then total domestic production for domestic consumption (D_i) is given by:

$$D_i = d_i (C_i + G_i + Z_i + V_i) \quad (18)$$

where $d_i = \frac{D_i}{X_i}$

Adding exports to domestic production yields sectoral demand for the domestic good X_{id} :

$$X_{id} = D_i + E_i \quad (19)$$

For general equilibrium, supply must equal demand:

$$X_{is} = X_{id} \quad (20)$$

The Balance of Payments Constraint

The balance of payments constraint is given by:

$$\sum_i \overline{pw}_i M_i - \sum_i \overline{pw}_i E_i - \overline{F} = 0 \quad (21)$$

where \overline{pw}_i is world price of imports; and $\overline{pw}_i E$ is world price of exports.

Underlying this equation is the assumption that the nominal exchange rate and the level of foreign capital inflows are fixed, which is intended to accommodate two important institutional features of CFA economies. One has to do with the fact that the domestic currency is tied to a foreign currency, the French franc, and therefore does not freely adjust in response to changes in supply and demand for foreign exchange. The other institutional feature is that foreign capital flows are mainly determined by external shocks such as the coffee and cocoa windfall gains of the late 1970s. With the nominal exchange rate and the level of foreign savings fixed exogenously, the domestic prices of domestically produced goods become the equilibrating variables, adjusting endogenously to eliminate all excess demand.

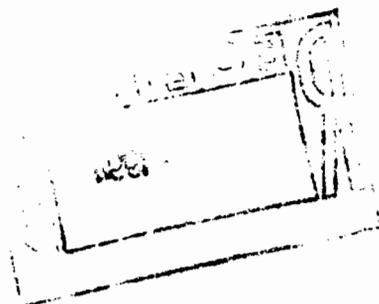
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The Effects of an Exogenous Shift in Labor Supply

Let us consider an exogenous increase in the number of labor force participants such that, at the initial wage rate, the supply of labor is four times higher than it had been. All other parameters in the model remain constant, and the government keeps the overall price level constant by appropriate macroeconomic policies. What will be the price and resource allocation effects of the outward shift in labor supply?

The initial effect of the increase in the size of the labor force will be to create an excess supply of labor. Throughout the economy, total supply of labor will exceed total demand. This disequilibrium, brought about by the outward shift of the labor supply functions, will lead to price adjustments that restore general equilibrium in the economy. In response to excess supply, nominal wages will tend to fall. The fall in wages will lead to lower domestic costs of production. As a result, domestic prices, essentially the prices of nontradable goods, will tend to fall. This, in turn, will act to induce a movement of resources out of the nontradable goods sectors, whose relative profitability has declined, toward the tradable goods sectors of the economy. As this movement of resources occur, exports will tend to rise, which will lead to higher production and employment and increased foreign exchange inflows.¹

Government revenue, which depends on the level of domestic production and the volume of foreign trade, will also increase. Other things being equal, the increase in government revenue will translate into higher government savings, which will cause the level of savings in the economy to increase. Since savings determine investment, the latter will rise, which will stimulate economic growth.



¹ Tradable goods are goods whose prices are determined by world market conditions. In contrast, nontradable good prices are determined by domestic conditions. Examples of nontradables include construction and services.