

**REVENUE AND THE FISCAL IMPACT
OF TRADE LIBERALIZATION:
THE CASE OF NIGER**

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This study was prepared in the context of several adjustment operations and public expenditure review missions to Niger in order to provide analytical background and empirical context about revenue mobilization and trade reform. The main purpose of the exercise was to understand why Niger's revenue has remained so low, in spite of the economic and trade reforms the country has undertaken. I would like to thank Mr. Pedro Alba (Country Director, AFC13), Mr. Hinh Dinh (Lead Economist, AFTP3), Mr. Emmanuel Pinto Moreira (Senior Economist, AFTP3), Mr. Peter Siegenthaler (Economist, AFTP3) and Mr. Emile Finateu (Senior Financial Management Specialist (AFTFM) for excellent advice and comments, as well as Mr. Thomson Fontaine (Economist, IMF) and Ms. Marie Helene Le Manchec (Economist, IMF) for sharing the Fund expenditure and revenue dataset and for useful insights. I would also like to thank many officials in the Government of Niger for their assistance and collaboration, particularly Mr Agha Salamanou (Assistant Director, Treasury), Mr. Mamadou Youba Diallo (Director General, Customs Directorate), Mr. Boubaca Moumouni (Director, Ministry of Finance) and Mr. Elhadj Sama Tidjani (Director General, Ministry of Finance) .

ABSTRACT

Niger is one of the world's poorest countries, having a GNP per capita of close to \$200 in 2003. A landlocked country located in the Sahara and characterized by subsistence agriculture and low levels of industrial development, Niger has suffered major fluctuations in revenue since the 1970s. The revenue/GDP ratio has fallen from 14 percent in 1980 to 10.6 percent in 2002. Using data collected during several operational missions, this study finds that the principal reasons for low revenue mobilization are: the adverse fiscal impact of trade liberalization, the defiscalization of agriculture in the 1970s, the collapse of the uranium boom in the 1980s, and the poor record of the VAT in mobilizing revenue. The large reduction in tariffs during the 1980s and 1990s in the context of structural adjustment programs and West African regional integration initiatives had adverse effects on trade tax revenue during the period 1980-2003. However, higher import levels after 1994 succeeded in partially mitigating the revenue losses. The experience of Niger demonstrates that without accompanying macroeconomic policies, parallel improvements in tax and customs administration, and success in mobilizing domestic taxes, most notably the VAT, trade reform can have adverse fiscal consequences. Using a SMART model partial equilibrium analysis developed by UNCTAD for negotiators at multilateral trade rounds, three different tariff shocks were simulated to test the fiscal and trade implications of additional trade liberalization in Niger. First, the preferred tariff regime in terms of overall fiscal and trade creation impact was the harmonized Swiss formula in contrast to a ten 10 and 15 percent uniform tariff. Second, a possible Regional Economic Partnership Agreement (REPA) between the EU and UEMOA by 2015 that would abolish duties on EU imports to the UEMOA countries would have negative fiscal effects on Niger of more than 1 percent of GDP, positive effects on trade creation of about 1.5 percent of GDP, and ambiguous effects on local industry. While there will be some welfare gains for consumers and importers from lower import tariffs and the possibility of trade creation, the fiscal losses and adjustment costs would be significant, particularly in the machinery and transport sectors. Third, there are asymmetric gains and losses from regional integration and tariff changes, and a 10 percent uniform tariff would have the greatest impact on Benin and Senegal and some impact on Niger and Togo. In sum, further trade liberalization in Niger will have significant fiscal costs, partially offset by trade creation through increased imports.

TABLE OF CONTENTS

I. INTRODUCTION: THEORY AND EVIDENCE	4
II. COUNTRY CONTEXT	5
III. NIGER: REVENUE.....	5
A. INTRODUCTION AND OVERALL TRENDS.....	5
B. DETAILED REVENUE BACKGROUND	6
C. FISCAL IMPACT OF TRADE LIBERALIZATION	8
D. REGIONAL DEVELOPMENTS AND REVENUE	11
E. COLLECTED TARIFF RATE.....	12
IV. PARTIAL EQUILIBRIUM MODELLING OF TARIFF CHANGES.....	13
A. METHODOLOGY.....	13
B. THE THEORETICAL MODEL	13
C. SCENARIOS	16
D. RESULTS	17
V. GENERAL CONCLUSIONS AND POLICY IMPLICATIONS.....	20

I. INTRODUCTION: THEORY AND EVIDENCE

In the last several decades, there have been ambitious efforts in much of the developing world to liberalize trade and streamline protectionist tariff regimes. Spurred on by multilateral donors, many countries have been engaging in widespread and complex trade policy reforms. Recognizing that trade reform is vital for economic development and poverty reduction, developing country policymakers have lowered tariffs, reduced nontariff barriers, and eliminated many distortions in their economies.

Standard trade theory suggests that trade liberalization leads to a more efficient allocation of resources, enhanced productivity, and higher economic growth. Edwards (1993) finds that there is a strong empirical correlation between an open trade policy and economic growth since trade liberalization has a positive effect on export growth. However, in recent years, there has been some criticism of this prevailing orthodoxy. Rodrik (2001) has argued that the benefits of trade reform have been oversold and that economic policy should focus on growth and not on trade. He argues that an excessive emphasis on trade liberalization can backfire if it diverts scarce energies and political resources of government leaders from the growth fundamentals. While reforms in the area of commercial policy are an effective instrument for raising trade volumes in Sub-Saharan Africa, the effect on economic growth has been somewhat limited.

However, since many low-income developing countries are often heavily dependent on trade taxes, trade liberalization has clear fiscal consequences. Depending specifically on each country's particular economic structure, trade regime, political economy, and the relative mix of protective and revenue motives in trade interventions, trade liberalization can have an important impact on government revenue. While many economists find trade taxes a suboptimal method of taxation on efficiency grounds, the alternatives warrant consideration. The relationship between trade liberalization and tax revenue has been debated in the economic literature, especially in the last decade. In an influential study on the fiscal implications of trade policy reform, Greenaway and Milner (1993) find that there is a wide range of possible revenue outcomes from trade liberalization, depending on initial conditions, the components of the reform package, the effects of changes in tariff rates, changes in the import base, and changes in the exchange rate.

In a seminal paper for the International Monetary Fund, Ebrill, Stotsky, and Gropp (1999) find that the revenue implications of trade liberalization depend significantly on the form of liberalization and the circumstances under which it occurs. More specifically, trade liberalization will have the fewest consequences on revenue mobilization provided that: the initial position is highly restrictive; trade liberalization involves the tariffication of quantitative restrictions; trade liberalization includes such reforms as reduction in tariff dispersion, introduction of minimum tariff, or the elimination of exemptions; trade liberalization is accompanied by reforms in customs and tax administrations, which reduce the incentive to evade taxes; and trade liberalization is supported by sound macroeconomic policies that ensure liberalization is consistent with external balance. In order to mitigate the adverse fiscal effects of trade liberalization, Tanzi and Zee (2001) suggest a three-part process for developing countries: first reducing the scope of tariff exemptions in the existing system, then compensating for the tariff reductions on excisable imports by a commensurate increase in their excise rates, and finally adjusting the rate of the general consumption tax (such as the VAT) to meet remaining revenue needs.

In a review of recent African country experience of the fiscal impact of trade liberalization commissioned for the OECD Development Center, Fukasaku (2003) finds that the overall impact of trade liberalization in Sub-Saharan Africa is ambiguous and depends on a

multiplicity of facts, especially the nature and sequencing of reforms. Examining a database of 22 African countries, he finds that trade liberalization in the last decade has contributed to declines in the ratio of trade tax revenue/total government revenue of more than 20 percent (Mauritius), more than 10 percent (Côte d'Ivoire and Senegal), and more than 5 percent (Cameroon, Tunisia, and Mozambique). In several countries, notably Mauritius and Senegal, domestic indirect taxation and the VAT compensated for the fiscal losses, while in most other countries, domestic resource mobilization was somewhat weaker. The author concludes by stressing that reductions in tariff rates in Africa should be compensated by increases in domestic commodity taxes, an effective VAT, and the institutionalization of trade-policy-cum-tax reform, particularly in countries with a regional trade agreement.

The objective of this paper is to analyze the revenue trends in Niger from 1980 to 2003, assess and quantify the fiscal implications of trade liberalization in the context of the country's structural adjustment program and West African regional integration initiatives, and prepare partial equilibrium simulations of tariff shocks on Niger's revenue and trade. Using data obtained in the course of adjustment credit and public expenditure missions, this case study is an attempt to understand the reasons for low revenue mobilization in Niger and to assess the relationship between trade liberalization and government revenue performance, particularly in relation to international trade taxes.

II. COUNTRY CONTEXT

Niger is one of the poorest and landlocked Sahelian Francophone countries in Western Africa, having a GNP per capita of only \$200 and a very undiversified economic structure. Its small economy relies mostly on subsistence agriculture, animal husbandry, re-export trade, and uranium. Condemned by geography to a harsh environment, it is mostly situated in the Sahara Desert and was ranked 174 out of 175 countries in 2003, according to the UNDP Human Development Index. Furthermore, two-thirds of the population live below the poverty line. Although it is a member of the seven-country monetary and economic grouping, the UEMOA (*Union Monétaire et Economique de l'Afrique de l'Ouest*), its landlocked location has made it particularly vulnerable to economic and political changes in neighboring countries.

III. NIGER: REVENUE

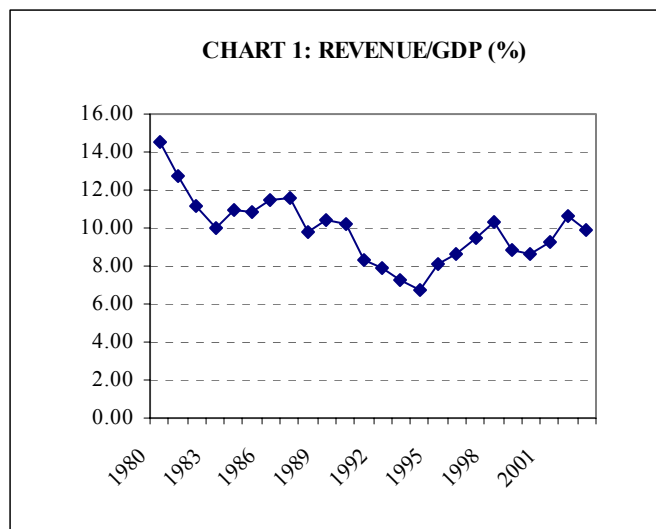
A. INTRODUCTION AND OVERALL TRENDS

One of the major obstacles to public expenditure in Niger has been low revenue mobilization by the central authorities. A variety of factors, both domestic and external, can explain the poor capacity for revenue mobilization. Foremost is the weak economic structure of the country and the narrow resource base. Unlike many of its neighbors, Niger is not conspicuously blessed with natural resources, especially oil and timber. It has suffered from the devastating Sahel droughts of the 1970s and the growing expansion of the Sahara Desert, which has shrunk the country's arable land. This landlocked country has attempted to construct a strategy of economic development on a fragile revenue base and uncertain donor assistance. Having a population the majority of which lives within 100 miles of the southern border, the country lacks both natural resources and physical infrastructure and is dominated by rain-fed agriculture, small herder livestock population, and mining. Furthermore, the economy has a large distinction between a small formal sector, encompassing the civil service, the state enterprises,

and the mining sector, and a large growing informal one, including small-scale manufacturing, handicrafts, and village micro-enterprises. On the external front, the economy's exports are highly concentrated among a few primary commodities (mostly, uranium, cattle, and onions) and hence the country is vulnerable to commodity price shocks. However, the start of gold operations in 2005 should partly diversify the export base.

There are several key trends that emerge from a cursory examination of the data. First, Niger's revenue/GDP ratio has declined significantly from 1980 to 1994 due to a combination of

trade liberalization and the associated loss of tariff revenue, stagnant trade due to economic recession in the CFA zones, and indirectly, an overvalued exchange rate that hindered the region's competitiveness. Only recently has revenue showed an upward movement. Over the whole 22 year period, Niger's revenue/GDP has fallen from 14% in 1980 to 10.6% in 2002. Second, there have been fluctuations in the rate, suggesting a significant vulnerability to terms of trade shocks as well as changes in policy regime. Third, the revenue trend can be linked both analytically and empirically to the trend in trade tax revenue. Despite numerous attempts by the government to improve resource mobilization in the 1980s and 1990s, through improvement in the direct tax system, adoption of the VAT, and customs reforms, it was the 1994 devaluation that provided a turning point for the country's revenue performance.

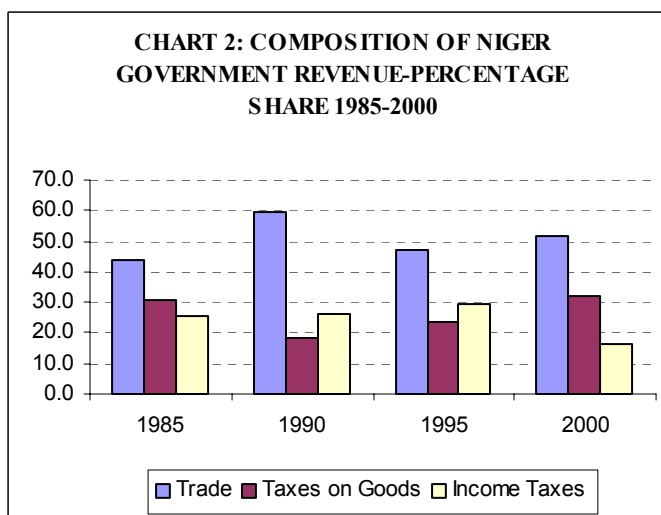


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B. DETAILED REVENUE BACKGROUND

1. COMPOSTION OF REVENUE

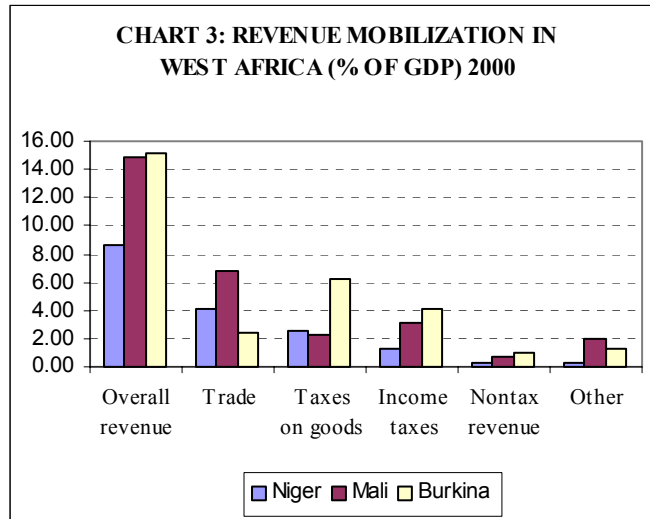
The composition of Niger's revenues has not varied considerably over time. First, international trade taxes from 1985 to 2000 have continued to represent more than 40% of total government fiscal revenue but increased to more than 60% in 1990 before declining to 50% in 2000. Second, taxes on goods have consistently provided one-fourth or more of government revenue except for a decline in 1990. Third, direct taxes have averaged close to 25% of revenue for much of the last two decades, but the share has recently declined to 15%. Finally, the ratio between the various sources of revenue has varied between the periods, but the main



finding is that other taxes have compensated for gaps left since Niger began to liberalize.

2. COMPARISON WITH OTHER NATIONS

Niger's tax ratio is very low by international standards. In 2000, Niger's revenue of 10% of GDP was eight points below the developing country average. Both Mali and Burkina Faso, two regional comparators, had ratios close to 15%. Both countries had significantly higher income tax yields and a good performance in one of the other tax categories. Mali registered a success in mobilizing trade tax revenue, while Burkina Faso managed to collect more than 6% of revenue from taxes on goods and services. Moreover, many developing countries in Africa were able to compensate for the decline in trade taxes with other taxes- VAT, excise, and income- while Niger has been unable to widen its fiscal base. Finally, in contrast to Niger, most developing country revenues have shown an appreciable increase over a 22 year period.



3. AGRICULTURAL CONTEXT

The agricultural sector provides a living for close to 90% of the population and together with the informal sector contributes close to 70% of GDP. Nevertheless, its contribution to fiscal revenue remains marginal, and it remains extremely vulnerable to external shocks. Niger suffered a “defiscalization” of agriculture in the 1970s and early 1980s for a variety of reasons. First, Sahelian droughts, prolonged periods of famine and low rainfall led to a commercialized agriculture being replaced by a system of subsistence agriculture, where cultivation was based not on maximizing production but on ensuring a minimal necessary to provide basic needs. Thus, Niger's dependence on taxes on livestock owners and on revenue collected from cotton and peanut cultivation decreased. Furthermore, there was the removal of the two levies on agriculture, the head tax and the livestock tax. Third, Niger's agro-pastoral exports to Nigeria, the principal destination, suffered from an appreciation of Nigeria's naira. Fourth, the public agricultural enterprises in Niger- OPVN (cereals), SONARA (peanuts), and RINI (rice) – suffered from weak capacity and limited financial means to contribute to the state budget and to help commercialize agriculture. Finally, agricultural credit virtually disappeared in the 1980s with the elimination of the large credit agency, CNCA.

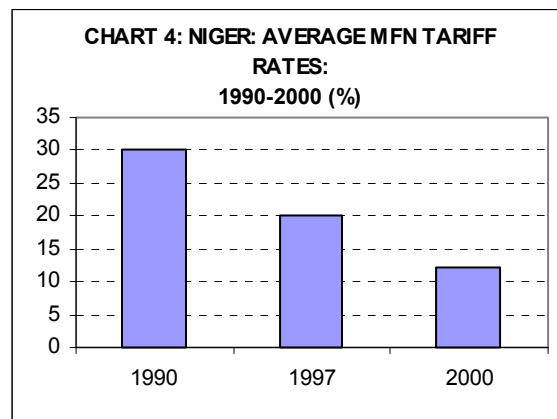
4. INCOME TAX

The income tax regime in Niger, which currently accounts for 2% of GDP and about 15% of government revenue, is characterized by several features. First, it has been mainly limited to the formal sector, with about 300 companies paying the majority of the taxes in 2000. In this context, the IMF is trying to reduce the special exemption arrangements (investment code, mining code, etc) that govern most of these individual enterprises through a more rigorous plan of

auditing. Second, the current tax system largely bypasses the larger informal sector. While the 1990s witnessed a growth of the urban and peri-urban informal sector, due to poor institutional design of a revenue collection system and poor administrative capacity, the informal sector has been able to avoid the tax net of the state. In this regard, the creation of the SME Directorate in Niamey, which will supervise the approximately 1,000 small and medium enterprises situated in Niamey that are subject to taxation on the basis of annual income and are not covered by the DGE, is a promising development.

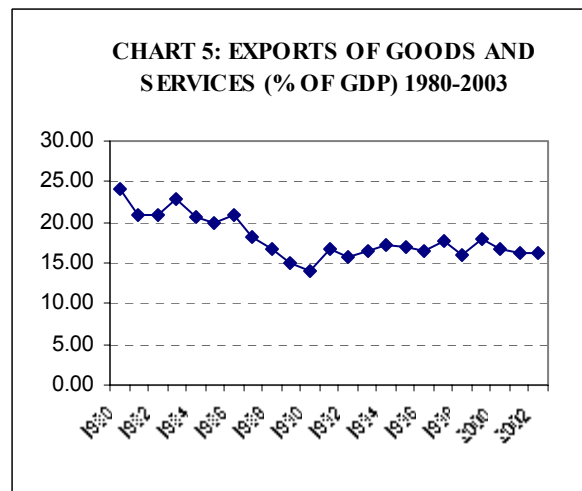
5. URANIUM

Uranium has been Niger’s principal export and one of the key sources of revenue for much of the 1970s and the 1980s. Currently, ranking behind Australia and Canada, Niger produces close to a tenth of world output and exports close to 3,000 tons per year. In the heyday of the uranium boom in the 1970s before the commodity price slump of the 1980s, Niger enjoyed substantial export earnings and produced close to 4,000 tons per year. Its uranium sector had a dominant influence on the three categories of tax revenue: the income tax (profits, taxes, and wages) paid by the two big uranium companies – Cominak and Sonichar; international trade taxes (especially export tax); and other taxes (including uranium royalties). The contribution of uranium to government revenue, which contributed close to 40% in 1978-79, fell to 10.6% in 1988-89. By 2000, the combined export revenues were less than 65 billion CFA francs. In the future, due to oversupply in the market and drawdown of commercial inventories held by nuclear utilities, the medium-term forecasts project low international prices, thus dampening prospects in Niger of another price boom.



C. FISCAL IMPACT OF TRADE LIBERALIZATION

One of the key factors responsible for revenue fluctuations in Niger has been fluctuations in trade taxes over the last two decades. Niger, like many other sub-Saharan countries, has undergone several rounds of significant trade liberalization since the early 1980s, first in the context of a structural adjustment program and then in the framework of West African regional integration, and has dismantled much of its protectionist trade regime. Prior to its reforms, Niger’s trade regime was characterized by high tariffs, multiple quantitative restrictions, import tariff exemptions, and administrative barriers to trade. After two decades, there has been a successful streamlining of tariffs and a reduction in both the ranges and the dispersions of tariff rates. Over the years, its average MFN tariff rate has decreased from more than 30 percent in the 1970s and 1980s

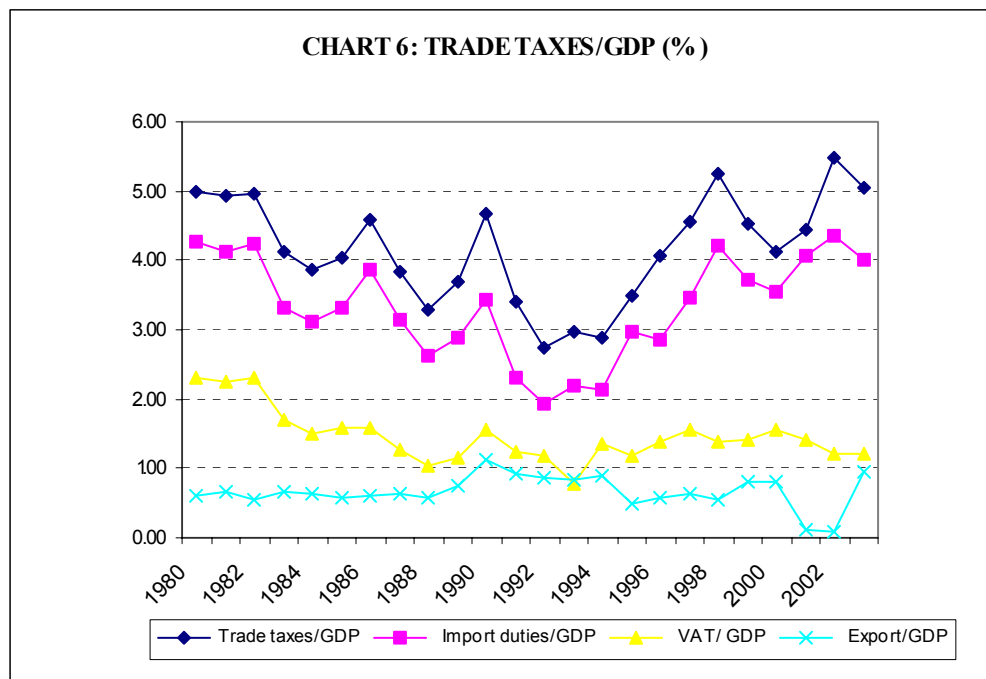


to less than 13 percent by 2003. (Chart 4) Furthermore, its quantitative import restrictions were abolished in 1990. However, in spite of its ambitious trade reforms, export and growth performance remained very weak due to a combination of poor resource endowment, geographic isolation, and a weak economic base. (Chart 5). Export/GDP growth declined significantly from 1980 to 1990 and then stagnated for most of the last 15 years.

As a signatory to the treaty establishing the West Africa regional grouping, *l'Union Économique et Monétaire Ouest-africaine* (UEMOA), which was ratified by seven countries-Niger, Benin, Burkina Faso, Ivory Coast, Mali, Senegal, and Togo -and became effective in January, 2000, Niger has further reduced and harmonized its tariff to the regional common external tariff (CET), based upon a four-tier tariff classification of 0, 5, 15, and 20 percent. Furthermore, the treaty was built upon a previous monetary and exchange rate arrangement, in which the CFA had a fixed parity to the franc (later replaced by the euro). Within the union, Niger is one of the countries which has strong compliance with the CET and which has radically reduced its trade restrictiveness over the last decade. Currently, according to the IMF restrictiveness index, which combines average MFN tariff levels with trade restriction measures (import licensing, reference pricing, etc) to rank countries from 1 to 10 with 10 being the most restrictive, Niger has a value of 2 (IMF, 2003). The absence of restrictions on the making of payments of transfers for current international transactions, coupled with a streamlined trade regime, has given the country a relatively liberal exchange and trade system.

In Niger, contrary to the experience of several countries with SAF/ESAF programs, the ratio of international trade taxes to GDP declined from close to 5% of GDP in 1980 to slightly below 3% by 1994 and returned to 5% only by the end of the decade. The fluctuation in the trade taxes can be explained principally by movements in customs duties (consisting mainly of the *droit fiscale* and the *droit de douane*). Export duties during the last two decades have remained roughly constant at close to 1%, as has the VAT collected on imports.

Trade liberalization and economic reform in Niger can be divided into several phases. During the first phase from 1982-1985 conducted under an adjustment program with the Fund, revenue from trade taxes deteriorated. The objective, which had been to improve the fiscal



revenue by increasing the rate of import and fiscal duties and the specific tax rates on alcohol, cigarettes, and tobacco along the Niger-Nigeria border, as well as a host of other measures designed to streamline the customs and taxation regime, was not achieved. The paradoxical effect of these reforms was to lower collected trade taxes and lead to a worsening fiscal balance. (Guillaumont et Guillaumont, 1991) There are several possible explanations for the poor revenue mobilization. First, trade liberalization created a change in the structure of imports by modifying the relationship between imports and rates. Also, agricultural imports in 1985 (brought in the country in response to the 1984 dry spell) were exempt from taxes. Second, clandestine commerce and fiscal evasion (arbitrary reclassification of products, bribery, false declarations) increased as a consequence of the rate increases. At the end of the period, in order to broaden its domestic tax base as part of its overall liberalization, Niger adopted the value-added tax, but the administrative costs and haphazard application ensured a low yield rate. (Annex 1)

In the second phase of reform from 1986 to 1994, there was a marked decline in trade tax revenue as a share of GDP due to a combination of tariff reduction and stagnant trade. An improvement in the government's fiscal position from 1988 to 1991 due to reduction in the average tariff rate¹ was followed by a steep decline in revenue as a result of further import liberalization as well as the economic recession in the two zones. A sudden collapse in international commodity prices in the mid 1980s resulted in a significant terms of trade shock for the Nigerien economy. However, in the late 1980s and early 1990s, the CFA economies in West and Central Africa, including Niger, maintained an overvalued exchange rate, which was undermining the competitiveness of the zone. Since flexibility in the exchange rate was not an available policy instrument due to the fixed exchange peg to the franc, the operational flexibility to adjust to shocks was reduced. Niger relied on an adjustment strategy involving contractionary fiscal and monetary policies to deflate domestic prices to achieve the required depreciation in the real effective exchange rate. However, the exchange rate remained overvalued and noncompetitive, and the adjustment policies failed to deflate relative prices. In this context, it is also important to note that improvements in administrative capacity and customs administration were not important parts of the reform package. Difficulties in policing long 3,500 mile frontiers along desert and savannah, particularly along the border with Nigeria, due to weak customs capacity, led to inadequate customs revenue.² The experience of Niger from the period demonstrates that without the right accompanying macroeconomic policies, coupled with customs reforms, trade liberalization may have limited effectiveness.

In the third phase, from 1994 to the present, Niger's reliance on trade taxes increased due to a marked increase in import tax receipts. The revenue implications of trade liberalization were offset by higher import levels resulting from the 1994 50% devaluation of the CFA franc, which had succeeded in boosting the economies of the zone and improving receipts from external and intra-regional trade. Partly due to the exchange rate effect, import duties and customs receipts

¹ It is interesting to note that the lowering of tariffs on certain products like biscuits and soaps resulted in an increase in declarations on these products.

² Trade between Nigeria and Niger has been grossly asymmetrical, with Nigerien exports accounting for less than .1% of Nigeria's total imports while trade with Nigeria accounts for 20% of Niger's official exports and 14% of its official imports. While Niger imports principally light manufactured goods, hydrocarbon and other energy-related products, and equipment from Nigeria, its principal exports are onions, livestock and vegetables. Imports from Nigeria constitute 13% of total receipts on external trade while re-exports also bring in significant amounts of money. Official statistics in Niger have frequently understated imports and exports from Nigeria. The fiscal effect of this illegal trade is significant, with estimates suggesting that the loss of import duties and export taxes amounted to close to CFA 30 billion in 2000. An increase in customs capacity could reduce this leakage.

picked up with the *droit de douane* increasing from 2.5 billion CFA in 1994 to 12.9 billion CFA in 1995. By 1998, this surge leveled off and there was a decline in revenue after 2000 as the UEMOA common external tariff was implemented.

D. REGIONAL DEVELOPMENTS AND REVENUE

The adverse fiscal effects of trade liberalization were manifest as Niger's customs and import duties from its UEMOA trading partners decreased as the zone became a unified economic space in January 2000. There was a further deterioration of revenues as goods coming from Cote d'Ivoire, Benin, Burkina, and Mali were no longer subject to tax or tariff at the border with Niger. Nigerien authorities have estimated that in 2000 the loss of customs revenue due to the introduction of the full CET in January 2000 amounted to CFAF 10.8 billion in 2000 (WTO, 2003). In this regard, a compensation mechanism was established in order to assist the poor landlocked countries for the loss of custom revenue incurred as they liberalized their trade regimes and eliminated tariff barriers. The fund, called the *rèlèvement communautaire de solidarité* (PCS) is based on a surcharge of 1 percent levied by member states on imports outside the union and supplemented by external financial support from the EU.

BOX 1: UEMOA AND ECOWAS

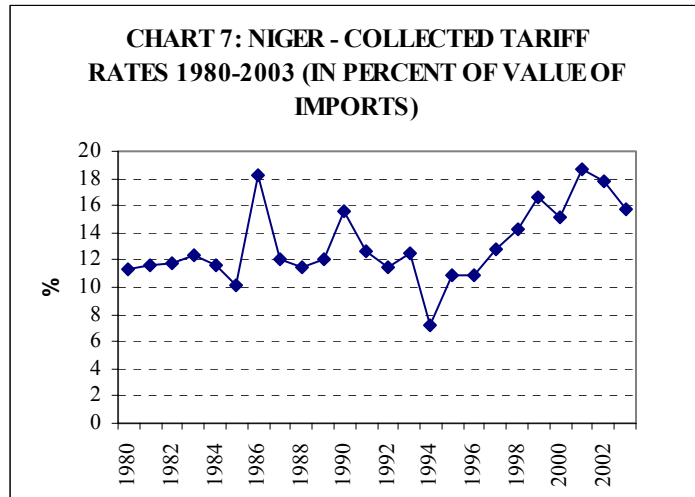
The government of Niger is a signatory to the UEMOA treaty, which was ratified in January, 1994 by seven countries- Niger, Benin, Burkina Faso, Ivory Coast, Mali, Senegal, and Togo, creating a common economic and monetary union in West Africa, as well as an institutional framework providing for the coordination of economic policies between member countries. The union was formally created in January, 2000. Complementary to the establishment of UEMOA in West Africa, there has been an increased momentum to integrate the West African CFA countries with several non-CFA countries under the larger framework of ECOWAS (Economic Community of West African States), which include the Anglophone Nigeria and Ghana. However, while the texts have been prepared, cooperation between the UEMOA Commission and the ECOWAS Secretariat improved in relation to the harmonization of trade liberalization schemes, significant obstacles remain to the actual implementation of the agreements.

However, the recent crisis in the Ivory Coast, which started in September 2002 has had a negative effect on the compensation fund. While Niger received more than CFA 20 billion from the compensation fund from 1998 to 2002, the crisis resulted in shortfalls in the transfers to Niger, with the regional organizations owing Niger a potential CFA 6 billion in 2003 and 2004. This has had an impact on overall revenue performance, contributing to a deterioration in revenue performance between 2002 and 2003, falling from 10.6 percent of GDP to 9.9 percent. Currently, the IMF team is working with the government to review prospects in relation to returning UEMOA transfers to levels prevailing before the crisis, which would bring in CFA 3-4 billion in additional revenue (0.2 percent of GDP) in 2004. (IMF, 2004) While compensation for revenue shortfall was set at 100 percent for 1996-2002, the rate declined to 80 percent in 2003, 60 percent in 2004 and is scheduled to decrease to 30 percent in 2005, with no reimbursement from 2006 onward. Thus, the compensation will end automatically by 2006, during which time the country will have to find alternative revenue sources. Since the Ivory Coast is one of the principal contributors to the fund, political and economic developments there will continue to generate aftershocks for the rest of the zone. The experience of Niger suggests that revenue losses from regional integration have been significant since Niger did have trading links with its neighbors, thus confirming the concerns of the UEMOA architects.

E. COLLECTED TARIFF RATE

A second variable to analyze is the collected tariff rate, which presents a deeper estimate than the more conventional revenue-to-GDP indicators. This rate, defined as the ratio of the

import duties collected to the value of overall imports, also allows one to get a more precise handle on the revenue effects of trade liberalization. While most regions have witnessed a significant decline in the ratio of trade tax revenue to GDP, collected tariff rates have exhibited considerable variation with some countries having parallel movements and others having divergent trends. Careful work at the IMF corroborates the proposition that movements in the collected tariff rate correlate more positively with



liberalization than trends in the ratio of trade taxes to GDP and that an econometric model with a data sample of 27 developing countries finds that for the period 1980-85, the average ratio of tariff revenue to GDP declined, while the average collected tariff rate increased, while the trends were reversed for the period 1985-1992, when trade liberalization was more pronounced. (Ebrill, Stotsky, and Gropp, 1999) Furthermore, empirical evidence from cross-sectional work suggests that there is frequently a nonlinear relationship between the statutory tariff rates and the rates actually collected. (Pritchett and Sethi, 1994) The higher the tariff rates, the greater the incentive for importers to find ways to seek exemptions. In Niger, the movements in the collected tariff rates roughly match the movements in the ratio of tariff revenue to GDP, with a slight post-1982 decrease as Niger began its trade reform, followed by considerable fluctuation from 1985 to 1990, a pre-devaluation decline between 1990 to 1994, and a post-devaluation steady increase. In sum, collected tariff rates in Niger have roughly mirrored tariff revenue/GDP trends.

IV. PARTIAL EQUILIBRIUM MODELLING OF TARIFF CHANGES

A. METHODOLOGY

The empirical part of the paper uses a static, partial equilibrium SMART model, jointly developed by researchers at the UNCTAD and the World Bank and widely used by negotiators at both bilateral and multilateral negotiations, to examine the effect of tariff changes on trade creation, trade diversion, and revenues on the economies of each of the seven UEMOA countries. In a broader sense, the work attempts to test several theses on the fiscal effects of alternative tariff regimes and gauge the fiscal effects of trade liberalization. The paper will use a preferred partial equilibrium analysis, which does not take into account broader general features of the international economy, but which undertakes a quick analysis of wide range of commercial policy issues and which is calculated at the tariff chapter-level. In this way, very useful insights can be obtained on complex trade policy changes. While there is the lack of detailed data linking imports and revenue collections within many UEMOA countries and the plethora of exemptions, quantitative restrictions, national standards, and discriminatory treatment of national and regional products, the methodological approach used allows an initial assessment of the impact of reforms.

B. THE THEORETICAL MODEL

The underlying analytics of the theory are clearly defined in Laird and Yeats (1986) and ECA (2001). The derivation begins with a basic trade model composed of simplified import demand and export supply functions and an equilibrating identity:

A simplified import demand function for country j from country k of commodity i:

$$(1) M_{ijk} = f(Y_j, P_{ij}, P_{ik})$$

The export supply function of commodity i of country k can be simplified as:

$$(2) X_{ijk} = f(P_{ikj})$$

The equilibrium in the trade between the countries is the standard partial equilibrium equation:

$$(3) M_{ijk} = X_{ikj}$$

In a free trade environment, the domestic price of the commodity i in country j from country k would change with the change in an ad valorem tariff as follows:

$$(4) P_{ijk} = P_{ikj} (1 + t_{ikj})$$

In order to get the price equation, differentiating we obtain:

$$(5) \quad dP_{ijk} = P_{ikj} dt_{ikj} + (1 + t_{ikj}) dP_{ikj}$$

Equations (4) and (5) are substituted into the elasticity of import demand function:

$$(6) \quad \frac{\Delta M_{ijk}}{(M_{ijk})} = \alpha_i^m \left(\frac{\Delta P_{ijk}}{(P_{ijk})} \right)$$

Using this, one obtains:

$$(7) \quad \frac{dM_{ijk}}{M_{ijk}} = \alpha_i^m \left(\frac{dt_{ijk}}{(1+t_{ijk})} + \frac{dP_{ijk}}{(P_{ijk})} \right)$$

Using this, one can arrive at the trade creation equation:

$$(8) \quad TC_{ijk} = M_{ijk} \alpha_i^m \frac{dt_{ijk}}{(1+t_{ijk})(1-(\alpha_i^m / \gamma_i^m))}$$

where TC_{ijk} is the sum of trade created in millions of dollars over i commodities affected by tariff change and α_i^m is the elasticity of import demand for commodity i in the importing country from the relevant trading partner. M_{ijk} is the current level of import demand of the given commodity i , while t_{ijk}^0 and t_{ijk}^1 represent tariff rates for commodity i at the initial and end periods respectively. According to the UNCTAD model, trade creation depends on the current level of imports, the import demand elasticity, and the relative tariff change and occurs when there is a shift from higher cost producer to lower cost producer as a result of elimination of tariffs on imports from the partner. Conceptually, the trade creation effect is caused by the extra output produced by the UEMOA member countries generated due to an increase in imports from the EU.

If γ approaches infinity, then equation 8 can be simplified as follows:

$$(9) \quad TC_{ijk} = \alpha_i^m M_{ijk} \frac{(1+t_{ijk}^1) - (1+t_{ijk}^0)}{(1+t_{ijk}^0)}$$

The elasticity of substitution is expressed as the percentage change in relative shares of imports from two different sources due to a 1 percent change in the relative prices of the same product from the two sources. Conceptually, the elasticity of substitution is a measurement of the ease with which various imports can be substituted for one another. Technically, it is measured as the slope of the import isoquant.

$$(10) \quad \sigma_M = \frac{\Delta(\sum (M_{ijk}/M_{ijK})/\sum (M_{ijk}/M_{ijK}))}{\Delta(P_{ijk}/P_{ijK})(P_{ijk}/P_{ijK})}$$

In this equation, k denotes imports from EU and K denotes imports from the rest of the world.

Trade diversion occurs when an efficient producer from outside the free trade area is displaced by less efficient producers in the preferential area. Essentially, trade diversion depends on the current level of imports from EU and the ROW (M^{EU} and M^{ROW}), the percentage change of tariffs (t_{EU}^0 and t_{EU}^1) facing EU imports with those from ROW remaining unchanged, and the elasticity of substitution σ_M of the imports between the EU and ROW into the concerned country. In the SMART framework, the trade diverted to the EU in the EPA can be expressed as:

$$(11) \quad TD^{EPA} = \frac{M^{EU} M^{ROW} ((1+t_{EU}^1/1+t_{EU}^0)-1) \sigma_m}{M^{EU} + M^{ROW} + M^{EU} ((1+t_{EU}^1/1+t_{EU}^0)-1)\sigma_m}$$

The strength of trade diversion depends on whether one assumes that goods are perfectly substitutable or whether goods are imperfectly substituted and whether calculations are made at official rates or on actual collected rates.

REVENUE EFFECT

WITS/ SMART has a very precise and elegant methodology for calculating revenue effects. The tariff revenue is the product of the tariff rate and the tariff base (value of imports). Thus, before the change in the ad valorem incidence of trade barriers, the revenue is given as:

$$(12) \quad R_0 = \sum_i \sum_k t_{ijk}^0 P_{ijk} M_{ijk}$$

After the change in tariff rate, the new revenue collection will be given by:

$$(13) \quad R_1 = \sum_i \sum_k t_{ijk}^1 P_{ijk} M_{ijk}$$

The revenue loss as a result of the implementation of an EPA is difference between R_1 and R_0 which is:

$$(14) \quad RL = \sum_i \sum_k \Delta t_{ijk}^0 P_{ijk} M_{ijk}$$

C. SCENARIOS

Three different tariff shocks were run to test the fiscal implications of alternative tariff regimes in Niger. A simple partial equilibrium framework and method were set up along the lines delineated in the theoretical model. In two scenarios, a revised tariff rate or formula was introduced across the board for all Nigerien products. The shocks were modifications of the current trade regime in UEMOA: 0 percent for raw materials, 5 percent for intermediate goods, 15 percent for consumer goods, and 20 percent for capital goods. The empirical simulations examined the trade creation, trade diversion and revenue gains and losses under these differing scenarios. In the third scenario, the fiscal consequences of a uniform tariff were assessed for UEMOA countries, where trade taxes provide important sources of revenue.

BOX 1: LOW UNIFORM TARIFFS

In recent years, the issue of uniform tariff has become an important one for both academic economists and development practitioners who feel that low, uniform tariffs are one of the optimal solutions to promoting greater competitiveness, especially in small, open economies. In the wake of Chile's successful implementation of a 10 percent uniform tariff, there has been greater interest in streamlining cumbersome trade regimes in the developing world. Both the IMF and World Bank-sponsored work has been in the direction of tariff uniformity and against the wide range of tariff dispersion. Tariff dispersion has been perceived as a barrier to competitiveness and productivity for many countries, and a contributor to smuggling and fiscal evasion in the developing world.

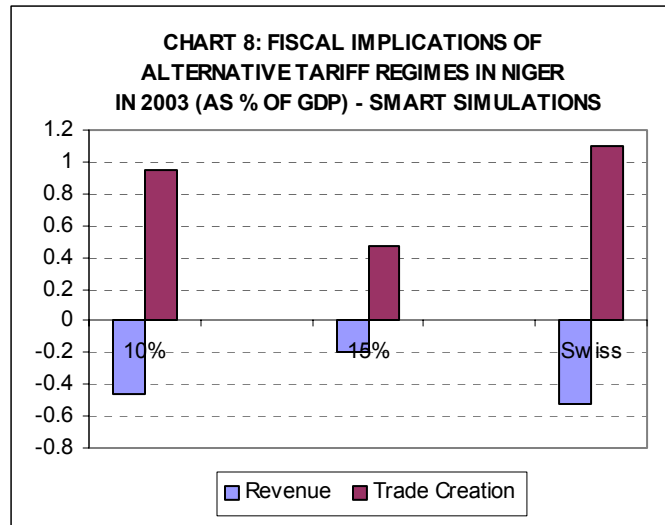
A variety of explanations, both theoretical and policy-related, have been advanced to emphasize the benefits of a low uniform tariff. Panagariya and Rodrik (1993) have argued that tariff uniformity can increase efficiency by lowering the value of implicit rents captured by rent-seekers. A tiered tariff regime can result in misclassification of goods by importers in order to avoid higher tariffs. The greater the dispersion between tariff rates, the greater the tendency for product misclassification. In this context, administrative simplicity and transparency in revenue collection have been cited as important advantages of low uniform tariffs. (Subramanian, 1994). Setting trade tariff rates at a uniform level limits the ability of public officials to extract bribes from importers and may deliver higher government revenues and welfare than alternative tariff regimes; the empirical evidence finds that these considerations are relevant to policymaking, since a robust association between the standard deviation of trade tariffs - a measure of the diversification of tariff menus - and corruption emerges across countries. (Gatti, 2003)

However, the vital role of tariffs as revenue sources in developing countries suggests that alternative tariff regimes need to take into consideration the fiscal losses from tariff reform. Rajaram (1994) and Mitra (1992) find that in countries with World Bank reform programs, a greater emphasis on revenue issues needs to be considered. This is especially the case in Africa, where trade taxes account for a significantly larger share of revenue than in other regions of the world and where Bank and Fund adjustment operations require adherence to strict fiscal criteria. In sum, revenue considerations are vitally important in trade policy design in Africa.

D. RESULTS

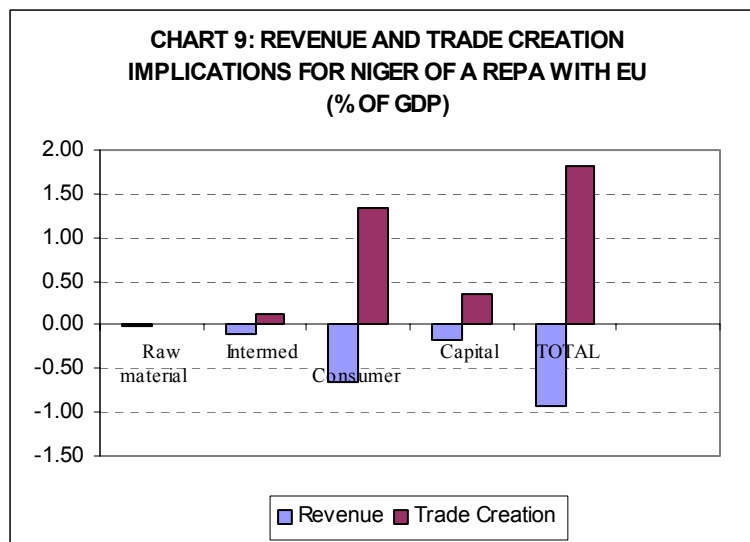
1. SIMULATION A

In the first simulation, three different tariff shocks were run to test the fiscal implications of alternative tariff regimes in Niger. In each scenario, a revised tariff rate or formula was introduced across the board for all Nigerien products. The results are as follows. Under a low uniform tariff of 10 percent, Niger loses close to .5% of GDP in tariff revenue, but it gains close to 1% of GDP through trade creation, while under a 15 percent uniform tariff, the revenue losses are slightly over .2% of GDP, while the gains are close to .5%. Finally, under the Swiss formula, a special kind of harmonized method that greatly narrows gaps between high and low tariffs,³ the revenue losses are slightly over .5% of GDP, while the gains are close to 1.1% of GDP.



2. SIMULATION B

This simulation estimates the effects of setting up a possible Regional Economic Partnership Agreement (REPA) between the EU and UEMOA by 2015 to replace the existing system of non-reciprocal trade preferences through a bilateral deal.⁴ Under this scenario, the ACP countries (like Niger) will retain their current preferential access to European markets, but would have to progressively open their own markets to European imports on a preferential basis. While currently ACP countries like Niger have close to zero barriers in EU markets for manufactures and non-sensitive agricultural products, EU still faces higher tariffs

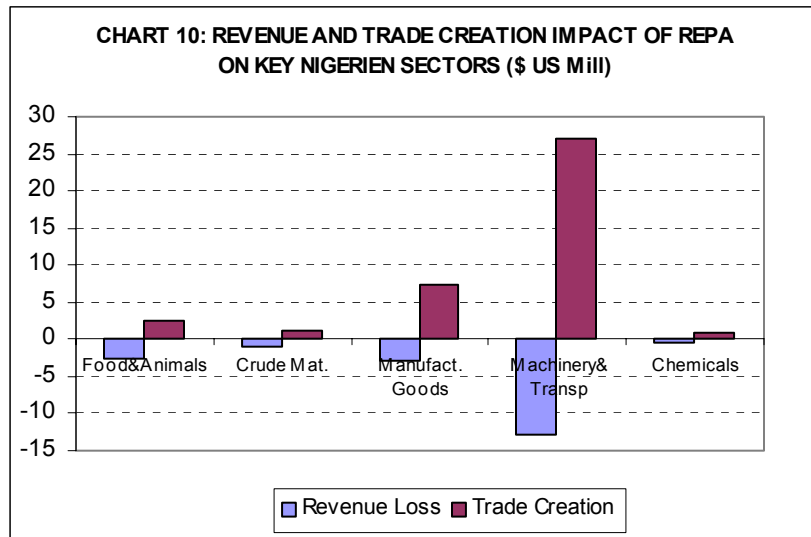


³ Developed in the 1970s during the Tokyo Round, the Swiss formula uses a single formula to produce a narrow range of final tariff rates from a wide set of initial tariffs as well as a maximum final rate.

⁴ The main goal of the European Union is to establish free trade areas with the various ACP regions to replace the Lomé agreements, which are running counter to the spirit of the WTO. A multi-staged approach is planned, with negotiations from 2000-2005 and implementation after that. The major advantage to the developing countries from an EPA with Europe will be secure market access to the European market and allow exports to continue to enjoy preferential access.

especially for manufactured products in ACP markets. Thus, a REPA would give one-way market access for EU exporters in ACP markets. While in theory, the REPA could help foster trade and investment in Africa and have a general deflationary effect, their potential negative fiscal consequences (due to the loss of import duties as European imports will start replacing imports from the rest of the world) and possible displacement of local industry, as well as potential creation of local unemployment, have created some apprehension in ACP countries. The competition faced by producers in ACP markets from higher quality but lower priced European goods could be offset by the gains to local consumer welfare from cheaper and better-quality imports.

The results of the analysis suggest that Niger will lose fiscal revenue close to 1 percent of GDP (more than CFA 15 billion) and potentially gain 1.5 percent of GDP through trade creation, as new cost-effective EU supplies replace other imports and intra-UEMOA trade. Importantly, the elimination of tariffs will have a welfare gain both for domestic consumers in Niger who purchase finished goods from Europe and for producers who purchase imported intermediate goods for production. In this scenario, the fiscal losses to Niger from a REPA would be considerable, and given its poorly developed fiscal system, losses would need to be compensated by EU transfers and external



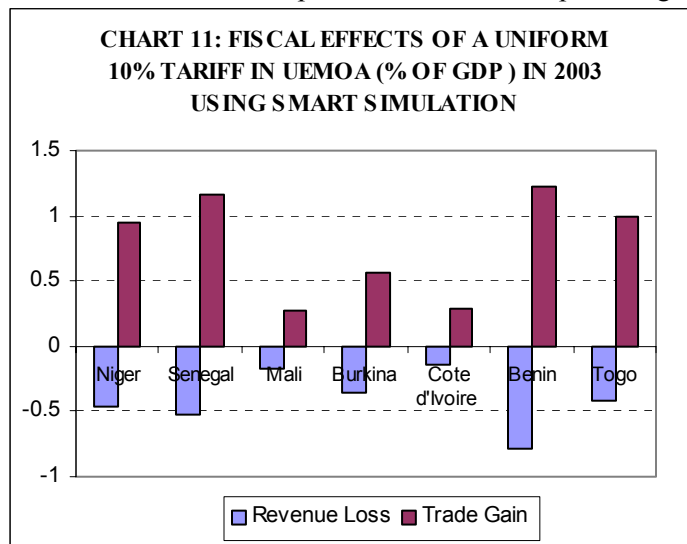
assistance. However, besides the loss of revenue, the adjustment cost of reallocating resources from producers displaced by the new imports will be significant. Partial equilibrium analysis shows that the key sector that will be affected by a REPA will be the machinery and transportation sector (accounting for the large bulk of exports from Europe to both West and Central Africa), which will suffer fiscal losses of over \$10 million, but offset by estimated trade creation of more than \$25 million. Nevertheless, there will be marginal impact with respect to food and animals, crude materials, and chemicals.

However, the extent of trade creation is dependent on a series of assumptions built into the SMART model. The overall welfare gains for Niger will depend on the overall efficiency and production costs of the European Union; the more efficient the EU, the higher the trade creation will be and the less trade diversion. The SMART model assumes that trade creation will occur whenever inefficient local production is displaced by imports. Specifically, trade creation will depend on the degree of substitutability between EU imports and domestic production and on collected tariff rates rather than official tariffs. (McQueen, 1999) It is difficult to quantify the effects of new EU imports on local goods because in the absence of precise microlevel data, it is unclear if they will replace highly competitive imports from Asia, imports from other UEMOA countries, or local production. However, Niger currently imports close to one-third from the European Union and one-fourth from Asia and the Middle East. In the machinery and transport sector, which constitutes the bulk of Niger's imports from the EU, the EU is the lowest cost supplier with Japan as the only competitor, and due to high costs of production and greater

shipping costs, Japan has not been successful in affecting European market share. China and the US are not major competitors in this sector since the bulk of Chinese exports are cereals and electrical machinery, while the US exports cereals, tobacco products, and textiles. Thus, the possibilities of significant trade diversion in this sector are unlikely, although in other sectors, there may be some small trade diversion, which can only be confirmed from industry analysis. Finally, as in any partial equilibrium exercise, the results need to be taken with some caution since it is difficult to measure the possible growth-enhancing dynamic effects of the REPA's on the Nigerien economy as it is of understanding the precise magnitude of the adjustment costs of reallocating internal resources.

3. SIMULATION C

In the third simulation, a tariff shock was introduced into each of the seven UEMOA countries' tariff regimes in order to gauge the differential impact of tariff change on each of the countries. A 10 percent uniform tariff had the most effect on Senegal and Benin, two of the largest economies in the zone, with trade creation of 1.2 percent of GDP compensating for revenue losses of close to 0.5 percent of GDP in Senegal and 0.7 percent in Benin. A second result of the simulation was that Niger and Togo, two of the poorer economies of the zone, had the second highest trade creation impact relative to GDP. Third, countries like Burkina and Mali did not have major fiscal losses or revenue gains. Fourth, Cote d'Ivoire has a much lower revenue and trade creation impact than expected due to the fact that a large percentage of its intermediate goods imports are already taxed at close to 5 percent, and consequently, an increase in tariff on intermediate goods to 10 percent results in a revenue gain and an opposite effect on trade creation. As expected, the results have been influenced by certain structural features of the zone which is characterized by diverse economic sizes, structures, and policy climates. The results confirm certain predictions that the larger partners in a zone are more affected by tariff changes than smaller partners. This asymmetry is more pronounced in a zone where income disparities and economic sizes are greater. In this context, it is important to note that the impact also depends on the fiscal bases of each member country and the dependence on tariff revenue, and a host of economic variables, including the relative shares of agriculture and manufacturing sectors in the overall economy.



V. GENERAL CONCLUSIONS AND POLICY IMPLICATIONS

Niger, one of the world's poorest countries, having a GDP per capita of close to \$170, has suffered major fluctuations in revenue since the 1970s. The revenue/GDP ratio has fallen from 14 percent in 1980 to 10.6 percent in 2002. Using data collected during from several missions, one finds that the principal reasons for low revenue mobilization are: the adverse fiscal impact of trade liberalization, the defiscalization of agriculture in the 1970s, the collapse of the uranium boom in the 1980s, stagnant trade, and the poor record of the VAT in mobilizing revenue.

The experience of Niger shows that the large reduction in tariffs during the 1980s and 1990s in the context of structural adjustment programs and West African regional integration initiatives had adverse effects on trade tax revenue during the period 1980-2003. However, higher import levels after 1994 succeeded in partially mitigating the revenue losses. Second, trade liberalization in Niger has not resulted in significant export growth during the last two decades. Third, without accompanying macroeconomic policies and a realistic exchange rate, tariff reform will not be adequate. The maintenance of an overvalued exchange rate from 1986 to 1994 and the weakness of the internal adjustment strategy during this time failed to offset some of the gains that resulted from tariff liberalization. Fourth, improvements in customs administration are important in order to mitigate the revenue impact of trade reform. Fifth, the implementation of the VAT in Niger has not been a panacea due to administrative costs and implementation difficulties. Sixth, the experience of Niger suggests that there are asymmetric gains and losses in any regional integration arrangement, and that dependence on external compensation may result in slippages in revenue targets, as seen by the impact of the Ivory Coast crisis on compensation payments to Niger. In sum, there was not a proper sequencing of policies in Niger during the design of the reform process.

Using a SMART model partial equilibrium analysis developed by UNCTAD researchers for researchers and negotiators at multilateral trade rounds, three different tariff shocks were simulated in order to test the fiscal and trade implications of additional trade liberalization in Niger. First, the preferred tariff regime in terms of overall fiscal and job creation impact was the harmonized Swiss formula. Second, a possible Regional Economic Partnership Agreement (REPA) between the EU and UEMOA by 2015 that would abolish duties on EU imports to the UEMOA countries would have negative fiscal effects on Niger of more than 1 percent of GDP, positive effects on trade creation of about 1.5 percent of GDP, and ambiguous effects on local industry. While there will be some welfare gains for consumers and importers from lower import tariffs and the possibility of trade creation, the fiscal losses would be significant as would the adjustment cost of reallocating resources from producers displaced by the new imports. Third, there are asymmetric gains and losses from regional integration and a 10 percent uniform tariff would have the greatest impact on Benin and Senegal and some impact on Niger and Togo. In sum, further trade liberalization in Niger will have significant fiscal costs, partially offset by trade creation through increased imports.

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ANNEX 1: VAT IN NIGER

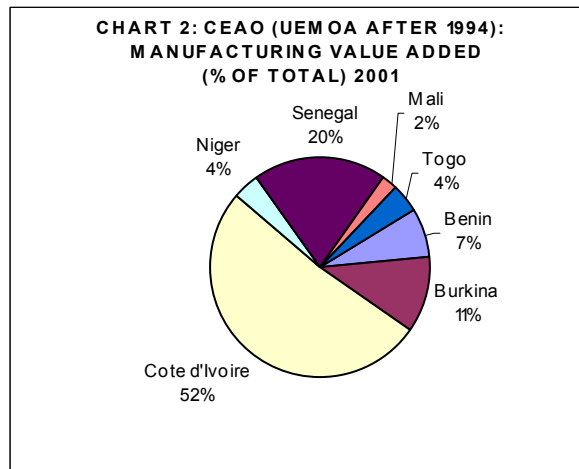
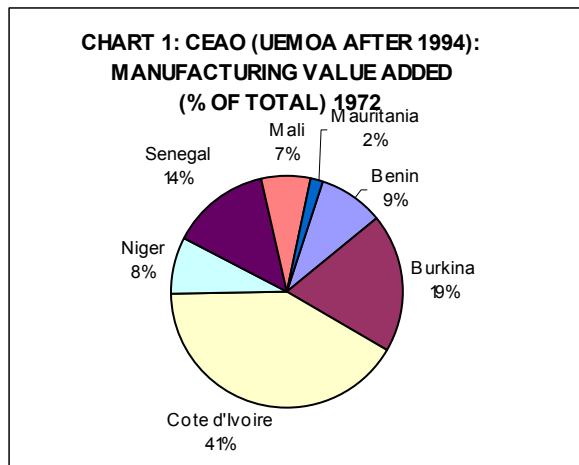
In order to broaden its domestic tax base as part of its overall liberalization, in January, 1986 the Government of Niger adopted the value-added tax. (VAT). The main idea was to levy this tax on most goods and services, as well as most business transactions in order to compensate for trade liberalization and customs reform. The authorities cited a number of reasons as a rationale for the adoption of the tax. First, the VAT was supposed to end the fiscal and tax inequalities inherent in the prevailing system characterized by tax cascades and cumulative taxes without deductions. A second objective was to improve industrial investment through the mechanism of deductions conferred by the VAT. A third goal was to encourage exports, and a final one was to pass taxes from the economic operators to the consumers.

Within a year, protests from the business community pressured the government to reduce the standard rate from 25% in 1986 to 17% in 1987. Contrary to the stated efforts, the VAT did not succeed in mobilizing adequate revenue and suffered a number of shortcomings. Firstly, after the implementation of the VAT in 1986, Niger witnessed a decline in revenue rather than an increase, resulting in a budgetary crisis. The yield levels were quite low and continued to decline to close to 2% of GDP for much of the 1990's. Secondly, there is widespread evasion, with some estimates suggesting that less than one-third of companies are paying the VAT. Thirdly, it is incomplete and excludes a large part of the service sector and agriculture sector from its application. Recently, there has been some discussion of extending the VAT on all processed food and of eliminating VAT exemptions on water and electricity consumption. Since it is a overwhelmingly formal sector tax, it creates incentives for resources to shift into the informal sector, and its haphazard application and high administrative costs in a country with weak institutional capacity makes it difficult to administer.

Finally, the evidence suggests that the credit mechanism is restrictive and that there are delays in providing proper credits for VAT on inputs. In Niger, in theory, the enterprise collects taxes calculated on its gross sales and then transfers to the Treasury those collections minus a credit for the taxes charged on its own purchases, as confirmed by invoices. (Barlow and Snyder, 1994) However, in practice, the operation of such a system requires proper record-keeping and an administrative machinery to handle the transactions. In this context, it is important to note that the turnover taxes which were replaced by the VAT provided twice the amount of revenues in several years. In sum, Niger needs to rectify the limitations in the VAT design and administration.

ANNEX 2: ASYMMETRIC GAINS AND LOSSES FROM INTEGRATION

One of the major explanations for the differential gains and losses from regional integration is the differential size of the member states. Analytical work and cross-regional empirical evidence suggests that there is an asymmetric distribution of gains and losses from a regional integration agreement where there is a pronounced imbalance between the stronger economies and the weaker ones. (World Bank, 2003) Generally, a RIA between two poor countries has a tendency to cause income divergence, but a RIA between two rich ones will result in income convergence. Larger and more developed countries in a RIA gain relative to poorer and smaller members because due to the trade surplus of the former with the latter, after the formation of the union, the manufactures of the richer country are sold to the poorer countries free of tariffs, resulting in a transfer of tariff revenues from the poorer to the more developed countries and a worsening in terms of trade for the poorer country. (Schiff, 2000). This is especially the case in South-South partnerships. Furthermore, agglomeration effects and the migration of industries within regions further exacerbate the divide. Chart 1 and Chart 2 show that Niger's share of UEMOA manufacturing value-added decreased from 8 percent in 1972 to 4 percent in 2001, while Cote d'Ivoire's share increased from 41 percent to 52 percent during the same time frame. (World Bank, 2001) A delocation of small-scale industry within the union, coupled with the large migration of workers from the landlocked to the coastal countries, has affected the share of manufactures within the union.



ANNEX 3

NIGER: KEY ECONOMIC INDICATORS 1997-2003

	1997	1998	1999	2000	2001	2002	2003
Macroeconomy							
Nominal GDP (bill. CFA)	1077	1225	1243	1281	1426	1513	1588
Real GDP growth (%)	2.8	10.4	-0.6	0.1	7.1	3.0	5.3
Inflation (end period) (%)	4.1	3.4	-1.9	4.7	3.2	0.6	-1.5
Gross investment/GDP (%)	10.9	11.3	10.2	10.8	12.1	14.2	14.2
Gross national savings/GDP (%)	6.5	7.5	7.3	5.4	7.4	7.6	8.0
Public Finance							
Revenue (excluding grants)/GDP (%)	8.4	8.9	8.8	8.6	9.3	10.6	9.9
Total expenditure/GDP (%)	16.0	17.0	18.2	16.2	17.2	18.4	17.4
Primary budget balance/GDP (%)	-6.0	-6.6	-8.2	-5.9	-6.1	-6.3	-6.4
Overall balance (excluding grants)/GDP (%)	-7.5	-8.1	-9.7	-7.6	-7.9	-7.7	-7.5
Trade							
Export growth, fob (%)	2.8	24.2	-9.9	14.2	-0.7	-2.5	4.4
Import growth, cif (%)	11.7	33.6	-16.5	11.6	3.4	6.4	6.6
Current account balance/GDP (%)	-10.4	-10	-7.6	-7.5	-6.6	-7.8	-7.8
Debt							
Debt-service ratio/exports (%)	24.4	23.8	23.2	24.7	27.5	30.4	23.6
Debt-service ratio/ revenue (%)	47.5	47.7	43.7	51.1	50.0	43.7	39.2
Exchange rate (CFA per US dollar)	584	590	615	710	733	695	580

Sources: Government of Niger, IMF, and Bank staff estimates

ANNEX 4

Niger Revenue Base: 1980-2003 (CFA Billions)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Total GDP	534.1	600.7	661.9	687.5	640	647.4	645.2	650.6	695.9	674	677.2	672.7	659	647.4	787.1	834.6	909.7	953.5	1086.7	1242.6	1280.4	1426	1512.8	1586.4
Total Revenue	77.4	76.8	73.8	68.8	70.1	70	74	75.6	68.2	70.1	69.3	56	51.7	46.7	53.2	67.9	79	90.8	111.8	109.6	110.1	132.3	160.9	156.7
	14.5	12.8	11.1	10.0	11.0	10.8	11.5	11.6	9.8	10.4	10.2	8.3	7.8	7.2	6.8	8.1	8.7	9.5	10.3	8.8	8.6	9.3	10.6	9.9
Fiscal Revenue	65.4	65.3	65.9	62.6	61.1	59.6	62.1	57.9	54	55.2	53.5	46.5	40.9	42	47.4	62.1	68.5	78.1	97	100.6	102.7	125	143.8	152.1
Trade Taxes	26.6	29.6	32.9	28.3	24.7	26.1	29.6	25	22.8	24.9	31.7	22.9	18	19.3	22.6	29.2	36.9	43.5	56.9	56.4	53	63.4	82.8	79.9
Import	22.8	24.7	28.1	22.9	20	21.5	24.9	20.4	18.3	19.5	23.2	15.5	12.7	14.2	16.9	24.7	25.9	33	45.9	46.2	45.5	58.1	65.8	63.4
Customs duties	3.1	3.3	4	1.6	1.1	1.1	1.5	1.3	1.7	1.9	2.6	2.1	2.1	1.3	2.5	12.9	16.2	19.1	19.4	14.5	14.5	20.2	19.7	20.3
Fiscal duties	4.8	5.1	5.6	6.5	5.7	6.2	5.6	4.5	4.5	4.6	4.9	6.5	5.2	4.7	3.3	7	0	0	0	0	0	1.5	0	14
VAT	12.3	13.5	15.3	11.7	9.6	10.3	10.3	8.3	7.2	7.7	10.6	8.3	7.7	5	10.7	9.9	12.6	14.9	15.2	17.5	20	20	18.4	19.3
Others	6.4	7.7	8	8.5	8.3	8.5	12.2	10.9	9.4	10.7	5.1	-1.4	-2.3	3.2	0.4	-5.1	-2.9	-1	11.3	14.2	11.0	16.4	27.7	9.8
Export	3.2	3.9	3.7	4.6	4	3.8	3.9	4.1	4	5	7.7	6.2	5.7	5.5	7	4	5.2	6	6.1	10	10.3	1.5	1.3	15.2
Uranium	1	1.2	0.8	1	1	0.9	0.9	0.9	0.8	0.8	1	1.1	0.7	0.6	0.5	0.8	0	0	0	0	0	0	0	0
Other exp taxes	2.2	2.7	2.9	3.6	3	2.9	3	3.2	3.2	4.2	6.7	5.1	5	4.9	6.5	3.2	5.2	6	6.1	10	10.3	1.5	0	1.3
Taxes on Goods						18	15.7	14	12.1	12.4	9.8	8.4	6.5	6.8	9.2	12.1	11.6	15.6	16.7	22.4	20.5	30.4	32.7	33.1
Income Taxes						15.4	16	15	17.8	17.2	13.9	13.6	13.3	12.9	12.9	18.1	16.2	15.5	18.9	19.3	18	22.6	23.1	28.3
Other Taxes	1.1	0.3	2.1	1.1		0.1	0.8	3.9	1.3	0.7	0	1.6	3.1	3	2.7	2.7	3.8	3.5	4.5	2.5	11.2	8.6	5.2	10.8
Nontax Revenue	11.8	9.5	7.9	6.2	8.9	10.4	11.9	17.7	14.2	14.9	15.8	9.5	10.8	4.7	5.8	5.8	10.5	12.7	14.8	9	7.4	7.3	17.1	4.6

Source: Data collected from Ministry of Finance, Directorate of Customs, Directorate of Statistics, Directorate of Taxation, the Treasury in Niamey

ANNEX 5

TABLE 1: NIGER'S IMPORTS: 1995-2002 (% OF TOTAL IMPORTS)

	1995	1996	1997	1998	1999	2000	2001	2002
Primary products	49	50.8	61.1	59.6	59.3	59.6	64.8	60.9
Agriculture	35.6	38.9	49.4	46.6	45.5	42.9	49.4	44.1
Food products	35.4	38.9	49.4	46.6	45.5	42.7	49.3	44.1
Rice	7.6	10.1	15.5	13.7	12	11.7	16.5	16.3
Palm oil	7.3	7.6	8.6	8.7	11.1	7.5	6.9	7.9
Beet or cane sugar, raw	10.1	9	9.3	8.6	7.3	6.7	5.3	3.6
Cigarettes	1.9	2.9	4.4	4.9	5.6	4.8	5.6	4.8
Wheat or flour	0.7	1.9	3.9	3.9	3.7	4.1	4.7	4.4
Milk and dairy cream	5.8	5	5	4.3	3.8	4.1	4.5	3.8
Mining	13	11.9	11.8	13.1	13.8	16.7	15.4	16.8
Fuel	11.2	10.3	10	11.8	12.7	15.4	14.4	16
Manufactures	51	49.2	38.9	40.4	40.7	40.4	35.2	39.1
Chemicals	18.7	17.2	15.4	15.7	13.4	16.2	12.1	12.4
Automobile products	10	10.6	2.9	6.2	6.8	6.6	6.6	6

Source: WTO (2003), IMF and Bank databases

TABLE 2: NIGER'S EXPORTS: 1995-2002 (% OF TOTAL EXPORTS)

	1995	1996	1997	1998	1999	2000	2001	2002
Primary products	99	98.7	99	98.4	99.1	98.5	98.6	98.6
Agriculture	17.9	33.5	26.6	30.1	37.3	47.4	40.4	37
Live animals (sheep and goats)	2.2	6.5	7.2	6	7.8	13.6	15	12.8
Live animals (bovine)	3.8	10.1	7	6.9	8.4	12.2	10.7	8.5
Other vegetables	9.2	11.9	7.4	11.5	11.8	8.5	3.9	4.4
Mining	81.1	65.2	72.4	68.3	61.8	51.1	58.3	61.6
Uranium	81	65.1	72.3	68.2	61.3	50.5	57.7	61.1
Manufactures	0.9	0.5	1	1.6	0.9	1.5	1.4	1.4

Source: WTO (2003), IMF and Bank databases