The African Growth and Opportunity Act (AGOA): Does It Really Present Opportunities?

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Introduction

Trade performance in Sub-Saharan Africa has been characterized by weak export growth, declining trade shares in the global market, and low foreign investment levels. The United States has made an attempt to assist in reversing these trends by passing the African Growth and Opportunity Act (AGOA), which was signed into law in May of 2000 as part of the Trade and Development Act of 2000. AGOA provides preferential access to U.S. markets for eligible products from designated countries of Sub-Saharan Africa (SSA) as well as improved access to U.S. credit and technical expertise. The program also establishes a high-level dialogue on trade and investment between the U.S. and SSA countries via a *U.S.-Sub-Saharan Africa Trade and Economic Forum*. The legislation was enacted after years of debate and negotiation in the United States (and elsewhere) about "aid vs. trade" and what could be done to assist the low-income countries in Sub-Sahara Africa. Generally, it is accepted that trade could play an important role for the Sub-Saharan Africa countries. Economically, trade offers short- and long-term opportunities to improve economic efficiency and raise incomes. Politically, trade also can help reinforce domestic reforms and lead to greater stability and peace.

In general, AGOA is similar to other preferential market access programs and may create a policy-induced "comparative advantage" for SSA exports. Currently, there are 37 AGOA-eligible countries (Table 1). The success of the program in promoting export growth in the region depends on how compatible the commodities are under AGOA with the export profiles of countries in the region and how responsive countries are in taking advantage of the opportunities. This in turn depends on the AOGA program incentives and the flexibility in the economic structures in different countries to transmit the incentives to producers of exported commodities.

This paper attempts to address three main questions. One question is, how well did the provisions in AGOA match up with the structure of African exports prior to its enactment? Another question is, in the short time the program has been in place, which countries have been able to take advantage of the program and why (and conversely, why haven't some countries taken advantage)? Finally, what would theory have predicted so far?

Given that the AGOA program is new, there is relatively little, if any, literature on the program's effectiveness to date. Earlier studies on Sub-Saharan Africa's trade have focused on trade performance in general (e.g., Amjadi et al. 1997) or expected gains or

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losses from the Uruguay Round (e.g., Harrold 1995; UNCTAD 1998; Ingco and Townsend 2000). Recent studies have focused on hypothetical impacts of increased market access in the current Doha Round negotiations (e.g., Ianchovichina et al. 2001).

This paper is organized as follows. Section 2 highlights the provisions of the AGOA program. Section 3 reviews the structure of SSA exports to the world and United States, including preferential trade. Section 4 focuses on the countries that have been most successful in taking advantage of the AGOA program. Section 5 highlights gains in the apparel and textile industries. Section 6 presents a model that is useful for predicting what could have been expected from the program compared with what has actually been accomplished. Section 7 concludes the paper.

Highlights of the AGOA Provisions

AGOA provides, among other items, preferential access to the U.S. market for eligible products (more than 1800 tariff lines) from designated SSA countries as well as improved access to credit and technical expertise.[2] AGOA allows duty- and quota-free market access for virtually all products as long as they are produced in and/or imported from a beneficiary SSA country. The commodities included in the provision are agricultural commodities, in particular food items (more than 600 tariff lines), petroleum products (20 tariff lines), minerals and manufacturing (more than 700 tariff lines), and apparel and footwear. Agricultural commodities include fresh cut roses, citrus products (fresh or juice), and vegetables (tomato, celery, cucumber, and dried onions). Nonagricultural products can be grouped into apparel, footwear, handbags, gloves, luggage and trunks, and watches.

One of the more important provisions is for the export of textiles and apparel, which face relatively high U.S. import tariffs. The Act grants duty free access for the first four years (through September 2004) for countries with per incomes below $1,500 that export apparel assembled in their countries with imported regional fabrics.[3] The exceptions include fabrics and yarns that are not imported as a part of finished apparel products, and some sensitive agricultural products. The provisions for apparel and clothing are very important for the region because cotton is an important export for many of the countries; thus, the program could provide opportunities to increase value-added exports.

There are certain exceptions under AGOA for the export of apparel items. For example, SSA countries can use their fabrics in apparel production, but only a certain portion of such imports is able to enter the United States duty free (namely, 1.5 percent of all U.S. apparel imports). The quota is increased by equal increments each year, but cannot exceed 3.5 percent of apparel imports by 2007. Also a SSA country that is in the less developed group (per capita income of less than $1,500 a year) can use fabrics of any origin in the assembly of apparel exported to the United States until 2004 (the 1.5 percent

[2] Further details of the AGOA program are available AGOA web site, http://www.agoa.gov. The web site also provides copies of comprehensive annual progress reports to the U.S. Congress.

[3] 42 of the 48 SSA countries in the region have incomes below $1500 per capita (Table 1). The countries with incomes above $1,500 per capita in 2000 were Botswana, Gabon, Mauritius, Namibia, Seychelles, and South Africa.

quota still applies). Finally, if certain fabrics are not available in commercial quantities in the United States, then apparel assembled from such fabrics of any origin qualifies for duty- and quota-free preferential treatment.

Structure of SSA Exports and U.S. Imports

To understand the usefulness of the AGOA provisions, it is important to understand the structure of exports of the region as well as U.S. imports prior to its enactment. In recent years, manufacturing has emerged as the largest export category for the SSA region at 36 percent (Table 2). This is followed by fuels, which has consistently stayed at 26-28 percent since 1980 (a few countries have been important, namely Nigeria, Cameroon, Gabon, and Angola). Food and agricultural exports have declined substantially in recent decades, from about 46 percent (combined) in 1970 to about 21 percent in 2000. Ores and metals have declined from about 16 percent of exports in 1970 to 8 percent in 2000.

The EU as a whole is the largest trading partner for Sub-Saharan Africa, with a share of about 42 percent of total exports in 2001 (IMF 2002). The United States is the largest single country export market for total SSA exports, holding a 23 percent share in 2000. The region's trade with other developing countries has grown from 17 percent only a decade ago to 25 percent in 2000.

Total U.S. imports from AGOA countries peaked at $18.3 billion in 2000, declining to $17.6 billion or 1.6 percent of total U.S. imports in 2001, and $14.1 billion or 1.2 percent share in 2002 (Table 3). U.S. import values from the AGOA-eligible countries jumped by 67 percent from 1999 to 2000, largely due to higher oil prices in 2000 (Figure 1). Oil prices fell about 15 percent between 2000 and 2001 while prices for other key commodity prices, such as coffee, also fell significantly. A comparison of SSA total exports to the world and SSA total exports to the United States shows that the export shares of oil and non-agricultural commodities exported to the United States were higher relative to overall exports to the world (Table 4).

The export profile of AGOA beneficiary countries is similar to the region as a whole with agricultural products contributing 19 percent and non-agricultural commodities 81 percent (oil 34 percent) of export earnings of the countries. It should be noted that these aggregate averages mask the export structures of individual countries because exports in many countries are highly concentrated in a few commodities (Table 5). Agricultural exports contribute more than 70 percent of total exports earnings in 9 countries, and 6 more countries depend on agricultural exports for 50-70 percent of their totals.

Influence of AGOA on SSA Exports to the U.S. Market

Table 3 shows exports of AGOA countries to U.S. by value for 2001 and 2002. The exported commodities from the countries fall under different market access programs: Most-Favored Nation (MFN), the Generalized System of Preferences (GSP), GSP for Least Developing Countries (GSP-LDC), and the AGOA program. The GSP program is important because it grants preferences to a wide range of qualifying developing countries around the world. The program was incorporated into the GATT in

1968. Under the U.S. GSP program, there is a specific provision for the Least Developing Countries (LDCs) that expand the benefits under the GSP by allowing duty free imports for about 1,650 U.S. tariff lines. Many SSA countries are participants of the GSP-LDC program. In fact, of the 37 AGOA countries, 22 have received preferential benefits under the GSP-LDC program (see box).[4]

Box - List of AGOA Beneficiary Countries by GSP eligibility	
GSP and AGOA Beneficiaries (15)	GSP-LDC and AGOA Beneficiaries (22)
Botswana, Cameroon, Cote d'Ivoire, Gabon, The Gambia, Ghana, Kenya, Mauritius, Nigeria, South Africa, Swaziland, Namibia, Sao Tome & Principe, Senegal, and Seychelles	Benin, Cape Verde, Central African Rep., Chad, Rep. of Congo, Djibouti, Eritrea, Ethiopia, Guinea, Guinea-Bissau, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sierra Leone, Tanzania, Uganda, and Zambia

For the recipients of the GSP-LDC program, the AGOA provisions have limited extra benefits because they provide market access for only about 243 new tariff lines; of the new commodities, about 49 are for apparel and footwear, and about 25 line items are agricultural-related products. Therefore, for these countries, the new trade opportunities from AGOA exist primarily for apparel exports. For the 14 countries that are not on the GSP-LDC list, they now receive duty free access for the 1,650 tariff lines received previously only by the LDCs, plus the 243 new tariff lines received by the LDCs -- so the potential benefits are obviously much greater. These countries have higher incomes and more diversified economies relative to the lower income countries, so they are more likely to take advantage of tariff elimination of all commodities covered under the AGOA program.

In 2000 (prior to the implementation of AGOA), only 4 percent of exports from the AGOA beneficiary countries were exported to U.S. under the GSP program (Table 3). The share of GSP and AGOA exports to total exports to the U.S. market increased to 47 percent in 2001 and again jumped to 64 percent in 2002. This is a tremendous shift, and it seems that the higher income countries are taking advantage of the program as they become more aware of its benefits. Much of the increased share in GSP and AGOA appears to have substituted for MFN trade (Figure 2).

The share of AGOA-eligible commodities in total exports to the U.S. market was 29 percent in 2001 and increased to 36 percent by 2002. In 2001, 16 of the 36 eligible countries used the program; this number increased to 22 by 2002 (Table 6). However,

[4] The Sub-Saharan African countries that are not eligible for AGOA include: Angola, Burkina Faso, Burundi, Comoros, Equatorial Guinea, Liberia, Somalia, Sudan, Togo, and Zimbabwe. Comoros, Somalia and Sudan have not shown any interest in participating in the program (AGOA 2002).

the share of AGOA exports to total exports to the United States was greater than 10 percent only in 13 countries and 9 of these countries were not on the GSP-LDC list. The top three beneficiary countries were Nigeria, Gabon and South Africa, the same countries that have the region's largest share of total exports to the U.S. market.

In terms of commodity performance, there has been significant variation by country and commodity groupings. Exports of food and agricultural raw materials accounted for 20 to 30 percent of the region's exports to the world during the 1990's (Table 2). Within this group, the export shares of most AGOA-eligible commodities have been very small. For example, the share of citrus products of total exports to the world from the SSA in 2001 was only 0.41 percent; when vegetables are added, it increases to 0.56 percent, or less than one percent of total export earnings of the countries. Despite the small share of AGOA commodities in the export earnings in many countries, some countries performed exceptionally well. The value of exports of agricultural commodities under AGOA doubled from 2001 to 2002, and forestry products (which had a very small share) tripled. This performance is impressive, especially considering the decline in aggregate exports of agricultural and forestry products of the SSA countries during the same time.

In sum, it seems the policy incentives or competitive edge that is created by the program has been effective in expanding exports of the countries, even in the short-term. The success, however, has varied by country depending on how well program commodities have been targeted to the export profile of the countries. Clearly, countries with more diversified economies have taken advantage of the market opportunities much better than countries whose exports are highly concentrated in a few products. The review of the country performance shows that among the top 3 beneficiaries, Nigeria and Gabon basically shifted their oil exports to the U.S market under AGOA while South Africa expanded its exports in all sectors.

The Success in Apparel Exports is Concentrated in a Few Countries

Under AGOA, exports of apparel showed the highest growth, increasing from zero in 2000 (no program) to $337 million in 2001 to $800 million in 2002. However, the source of this growth has been limited primarily to 7 countries (Kenya, Lesotho, Madagascar, Malawi, Mauritius, South Africa, and Swaziland). Of these seven countries, South Africa and Mauritius, and to a lesser extent Kenya, have had a long history of apparel exports. In South Africa and Mauritius, incomes are much higher than the rest of the SSA countries, which means that their labor-intensive industries (such as apparel) are faced with growing wages and higher costs. Therefore, since the mid-1990's, they have increased their investment in their neighboring countries: South Africa invested in Lesotho, Malawi, and Swaziland, and Mauritius invested in Madagascar. The available production capacity for these countries allowed them to take full advantage of the AGOA program.

For other countries, there has not been much progress in increasing their AGOA exports. There are several reasons for this. To begin with, the process by which countries secure their eligibility tends to be a slow process -- as of May 1 2002, only 17 of the 37 countries were declared eligible to receive AGOA benefits (AGOA, 2002). To become eligible, one important step is that the beneficiary countries must meet certain

customs-related criteria to receive AGOA textile and apparel benefits. AGOA requires, for example, that countries implement an effective visa system and have laws and regulations to prevent unlawful transshipment of articles. Countries also must follow strict customs rules and verify the origin of products shipped to the United States. The governments of these countries also have to agree to provide information and permit visits to factories for verification. Meeting these requirements can be difficult for many of these countries.

Another important issue inhibiting greater program use is start-up investment costs. A recent comprehensive study examining preferential trade of apparel and textiles from the Caribbean region to the United States offers useful insights and parallels to the African situation (Skripnitchenko and Abbott 2002). The study analyzed the role of factors that contributed to the apparel trade growth under the Caribbean Basin Economic Recovery Act (CBERA), which offers preferential outward processing of apparel between the United States and the Caribbean. The results indicated that the impact of such policies on investment was not instantaneous -- it took about five years for the study countries to make the transition process. The reason is clear: low-income countries have limited capacity to expand production in the short run. For many SSA countries, they must basically start a new processing industry, particularly in the case of apparel. This requires key factors of production, such as investment (in particular foreign investment), market infrastructure, and skilled labor. The CBERA study also found that country-specific economic and political conditions are influential in foreign investment decisions. The risk factors that are associated with any new investment abroad slows the investment process, even in those countries that enjoy the incentives of trade preference programs and have relatively inexpensive labor.

Modeling Trade Performance

There are two basic issues of interest in the policy debate about preferential market access -- measuring the impact of AGOA and examining how exports from SSA countries will respond to increased market access during the course of the program. In general, the effects of the program depend on several factors including: the magnitude of tariff reductions; how many other countries are given the same market access preference; the volume of trade affected by the program; and the responsiveness of U.S. consumers and SSA exporters.

The following key facts can be summarized from the earlier sections: 1) there are a limited number of countries that have taken advantage of the AGOA program; 2) of the top 5 country exporters under the program, exports of 2 countries were highly concentrated in oil; and 3) most of the gains were concentrated in exports of apparel. Given this background, future gains will depend on two factors: first, whether the realization of the benefits will increase investment and exports, i.e., supply response; and second, whether further reductions in tariffs for excluded commodities will boost exports. If the list of commodities is expanded to include all those that SSA countries have traditionally exported, then exports could be expected to grow. The final impact, however, depends on the responsiveness of U.S. import demand. The elimination and/or reductions in tariffs under AGOA should increase U.S imports from the region. This will occur either because U.S. consumers will buy more lower priced goods from the SSA

countries (that is, trade creation) and/or there will be a decline in U.S imports from other exporting countries (that is, trade diversion). The export gains from the AGOA program represent the net trade flows from trade creation and trade diversion.

Methodological Issues

This study uses a partial equilibrium modeling framework to estimate the impact of AGOA on SSA export performance.[5] Previous studies that have attempted to estimate potential impacts of unilateral tariff concessions in a partial framework have included Kirmani, Molajoni, and Mayer (1984), Bond (1987), and Pelzman and Schoepfle (1988). Studies of this type typically show positive impacts of such policies, assuming other factors are held constant.

Following the partial equilibrium model of Pelzman and Schoepfle (1988), a system of demand and supply equations for the beneficiary countries of SSA ($j = 1,\ldots, 38$) and the United States (country i) for the k traded commodities ($k = 1, \ldots, K$) can be written as:

(1) $M_{ik} = f(P^d_{ik})$
(2) $P^d_{ik} = t_{ik}(P^w_{jk})$
(3) $X_{jk} = g(P^w_{jk})$
(4) $M_{ik} = X_{jk}$
(5) $R_{jk} = P^w_{jk} * X_{jk}$

where M is the volume of U.S. imports, X is the volume of SSA exports, P^d_{ik} is the U.S. domestic price for commodity k, P^w_{jk} is world market price at which SSA exports to the U.S., t is one plus the *ad valorem* duty rate *(T)* applied by the United States, and R is SSA's export revenue for goods sent to the U.S. market. Differentiating equations (1)-(5) and solving for proportional changes in imports, export prices, and export revenues, the following equations can be written as:

(6) $dM_{ik} = (n_{ik}/(1-n_{ik}/e_{ik})* dt_{ik}$
(7) $dpw_{jk} = -[n_{ik} (e_{jk} - e_{jk})] dt_{ik}$
(8) $R_{jk} = n_{ik} [(1+ e_{jk})/(e_{jk} - n_{ik})] dt_{ik}$

where n is the relative price elasticity of import demand, e is the export supply elasticity, and d denotes percent change. In this framework, exports, imports, and export revenues each are a function of percent changes in duties weighted by relative price changes and the elasticities of import demand and export supply. For the SSA countries, there will be revenue gains when the U.S. import demand elasticity is positive; the gains increase as the export supply and import elasticities are higher.

[5] There are advantages and disadvantages with both partial and general equilibrium modeling approaches. In this case, a general equilibrium approach using the GTAP approach, for example, would be limited by the database, which does not include many individual SSA countries or allow a fine disaggregation of the commodity data. The partial equilibrium model allows us to explore the impacts of AGOA at a fine level of country and commodity disaggregation.

The concept of partial equilibrium is not complicated, but has an important shortcoming because it cannot measure the change in the composition of imports, even though it can measure the direct impact of the policy change. Another problem is related to the fact that many countries have not taken advantage of the AGOA program so far, which means that more time is needed before being able to measure the full impact of the program. Clearly, the success of the program depends on realizing the benefits of the program through information and investment growth to shift production to the program commodities. Historically, U.S. imports from SSA countries have been limited to a few commodities, with oil being dominant. Up to the last couple of years prior to the implementation of AGOA, very little attention was given to expanding trade with the SSA region, so the historical data may not be a good indication of future trade patterns.

Methodology Used

The problem faced in this study is that the straightforward methodology discussed above is constrained by the lack of data. Therefore, a simple approach is used that first examines how the profile of the program fits the export pattern of the countries. An important question that arises is whether the goal of the AGOA program is to maximize the incentives for exported commodities in countries that have shown a comparative advantage or whether the goal is to promote trade in new commodities, perhaps encouraging diversification. To evaluate the export responsiveness of SSA countries to date, the reduced form of the partial equilibrium system of equations is used:

(9) $dX_{ik} = X^{o}_{ik} * dt * e_{ik}$

where X^{o}_{ik} is the base value of dutiable exports of eligible countries, dt is the change in export price (pre-AGOA price plus the eliminated tariff), and e_{ik} is the AGOA-related export elasticity of the SSA countries. The expected export growth is based on the assumption that the U.S. price is higher than the world price by the U.S. import tariff equivalent and that this price is transmitted to the markets of SSA countries. Since SSA exports are small relative to the size of the U.S. market, it is safe to assume that they are faced with perfectly elastic U.S. imports. The reduced form equation in (9) measures the increase in export earnings of the SSA countries, assuming all the benefits of tariff reductions are passed on to exporters. Based on this approach, the response to price increases is estimated using the actual data for different commodity groups.
An increasing response for e_{ik} indicates that countries are taking advantage of the program and diverting exports to the U.S. market or increasing their investment to expand their overall exports. A declining response for e_{ik} means that the program has been not been fully effective.

To estimate e_{ik} , information about X^{o}_{ik}, dX_{ik}, and dt had to be obtained. Base period exports in 2000 before AGOA are available (X^{o}_{ik}) as are changes in exports for 2001 and 2002 (dX_{ik} , assuming a lagged response). The preference margins (dt) for the AGOA commodities were measured as the margin of preference received for the exports of a commodity group, i.e., the weighted average of MFN duties collected for that commodity group divided by its corresponding import values. It should be noted that this

technique underestimates the true margin of protection because protection of a commodity leads to less trade, which translates into a lower weight for the commodity.

Estimating the Trade Impacts of AGOA

In this preliminary assessment of the impact of the AGOA program, the commodities were aggregated into 3 main groups: agriculture, apparel and footwear, and manufacturing and minerals (excluding oil and oil-related commodities). The primary focus here is on the exports of agricultural and apparel goods. The rationale for the focus on agriculture is that most countries in the region are agricultural exporters; for apparel, the rationale is that most countries in the region could potentially become apparel exporters because it is typically considered a labor-intensive industry that might be well suited to the SSA resource endowments. Also, the U.S. market protection for agriculture and apparel is much higher than for manufacturing, so there are much higher potential benefits for the AGOA countries when U.S. tariffs are eliminated in these two areas.

The export responses of the countries are derived based on the estimates of preference margins. The estimated preference margins are weighted average of tariffs (tariff revenues for AGOA products divided by the values of imports) for total agriculture and agricultural sub-groups, and apparel. For minerals and manufacturing, the tariff margin is a simple average. The tariff margin for total exports is the simple average of the three main groups (agriculture, apparel, and minerals and manufacturing). A point that needs clarification is that these calculated preference margins are for products that enter duty free under AGOA provisions and do not include tariffs for excluded commodities, such as peanuts or sugar. In addition, the calculated preference margin for all commodities (9.8 percent) does not include tariff exemptions for oil products, which are a key export from the region (concentrated in a few countries) to the U.S. market.

According to our estimates, the preference margins (*dt*) for AGOA products were about 15.7 percent for apparel, 8.9 percent for all agricultural products, and 4.8 percent for all manufacturing and mineral products (Table 5). Within the agricultural commodity sub-group, the preference margin was the highest for fruit, 10.5 percent, followed by vegetables, 8.5 percent.

The results show that the countries' responses to the AGOA program have increased in 2002 compared with 2001. The estimated elasticities almost doubled from 2001 to 2002 for all commodity groups. These responses are within the expected range used in earlier studies (e.g., the apparel export supply elasticities estimated by Mattoo and Subramanian ranged from about 1 to 5). In 2002, the export supply elasticity was highest for apparel and footwear at 5.2 percent, followed by agriculture at 4.6 percent and mining and manufacturing at 4.5. These high responses reflect both increases in the number of countries exporting under AGOA, which increased from 16 in 2001 to 22 in 2002, and an increase in the volume of exports. For example, exports by Swaziland increased ninefold in one year (note that this is a very small exporting country and was not a recipient of the GSP-LDC program). Also, AGOA exports to the United States by Lesotho, Cameroon, and Mauritius increased threefold in one year. Again, these countries are the recent beneficiaries of market access preference under the AGOA program.

The relatively higher responses for apparel and minerals and manufacturing relative to total agriculture perhaps reflect the differences in the flexibility of these

sectors to respond to new incentives. The high response of the food sub-sector stems from the high growth in exports of fruits and vegetables, but that could be the result of a shift in export destinations (trade diversion). Again, the response is highly concentrated in a few countries. In the case of fruit exports, South Africa accounts for more than 80 percent of exports under AGOA.

The export response to price incentives depends on increases in investment. The region's level of domestic investment is low relative to other developing regions of the world. So far, the increasing flow of FDI has helped several countries to increase their exports. However, most of the investment has been concentrated in the Southern Africa region, particularly in the apparel industry (Figure 3). How well this pattern could be replicated by other countries in the region is not clear. For countries that were benefiting from market access through the GSP-LDC program, the provisions under AGOA provide small additional tariff relief. For these countries, tariffs for their key agricultural exports remain high, which potentially could limit and/or exclude them from the program.

For several excluded commodities (such as peanuts and peanut products, cotton, cocoa products, and sugar), many *ad valorem* equivalent tariffs remain high. Many of these commodities are exported by SSA countries and have a proven comparative advantage. Exports of fisheries and forest products also are growing in the region, but so far exports to the U.S. under the AGOA remain almost negligible. For countries such as Ghana and Cote d'Ivoire, exports of fish and seafood are second only to coffee and cocoa. However, exports of these commodities face sanitary regulations, in addition to tariffs.

Conclusions and Discussion

This paper attempted to address three main questions about the relatively new AGOA preferential trade program. The first question concerned how well the market access provisions in AGOA matched up with the structure of African exports prior to its enactment. The provisions of the program do not exactly match the profile of the exports of the countries and relative to provisions under the GSP-LDC program, AGOA provided limited additional access for the lower income countries. This is probably one contributing reason that more than one-third of the eligible countries have not yet participated in the program. On the positive side, however, several countries have started exporting new commodities to the United States, which could be a promising future path. Exports of dry beans by Ethiopia, Ghana, and Sierra Leone are examples of countries exporting new commodities that benefit from the program. Admittedly, the size of such exports remains very small, but these are steps that could lead to significant export growth.

The second question is related to the effectiveness of the program. The results of this study show that exporters in the SSA region are responding to the new incentives and that this responsiveness has increased over time. Clearly, such programs create shifts in the strategies of exporters, particularly in countries that were not benefiting from the GSP-LDC program, and lead to shifts in program selection and the export destinations that are not taken into account in the study. Nevertheless, the increase in exports by several small countries is impressive. Distance and transportation costs are important factors for the region in limiting exports to the U.S. market. However, now it seems the

benefits of the program have at least compensated for the transportation costs and have provided enough incentives to increase exports to the U.S. market.

The countries that were in a position to take advantage of the apparel provisions have expanded their exports dramatically. Total exports from Lesotho, Madagascar, and Swaziland doubled in the post-AGOA period relative to 1999-2000. Kenya's apparel exports to the United States increased by 50 percent during the same period. The apparel provisions have offered incentives for the SSA countries to move away from primary commodity exports and toward more value-added exports, which has been effective as several countries have proven that they are able to meet the challenge.

The third question concerns what theory would have predicted so far. A partial equilibrium model was developed to derive the implicit export supply parameters as revealed by the export data under the AGOA program. The results indicate that, on average, responses were positive and unexpectedly high. However, this high response does not necessarily mean that there has been high total export growth for all countries. The short life of the program, combined with the fact that full benefits were realized by a small group of relatively higher income countries, makes generalizations of the impact limited.

This study offers a good lesson for future policy concessions, not only from the United States, but also other developed countries. The prices for several primary commodities exported by Sub-Saharan African countries are at the lowest level in 20 years while prices for processed products are much higher. Value-added commodities represent a possible high growth area as demand for processed agricultural products is increasing in developed countries. Currently, processed products account for less than 10 percent of SSA's agricultural exports. Developed countries dominate the exports of processed coffee and cocoa to the U.S. market. The U.S. import value of processed coffee is about 3 times as high as the raw product. The margin for processed cocoa is more than 2 times that of cocoa beans. Sub-Saharan African countries could potentially increase their exports of these commodities because they are producers of the raw materials and face high tariffs for processed goods, particularly for those products that are based on a mix of protected commodities, such as products that include peanuts and sugar. If the exports of apparel are a yardstick, tariff concessions for these value-added products could lead to a substantial expansion of exports.

Other AGOA provisions, such as trade capacity building, are in the process of being implemented and could increase the awareness of countries that have not yet taken advantage of the program. The program is still relatively new and obviously the certification process to become eligible for the program is a slow process. Investment promotion to attract FDI also is one of the key objectives of the program. A recent study of foreign investment in SSA indicates that there is a growing trend of relying on foreign investment from non-oil exporters in the region (USAID, 2003). The study indicates that the return to investment in SSA is higher than the Latin America and Middle East regions: 21 percent compared with 9.5 percent and 14.8 percent in the other two regions. Increasing exports improves the financial standing of a country, which is essential to attracting investment. Preferential trade programs can help jumpstart this process.

In sum, the impacts of these programs will not be the same for all countries. Being a participant in these programs does not guarantee significant benefits. Other factors also are important in determining the gains because of their role in attracting

foreign investment. These factors include economic structure, market size, resource quality (in particular human resources), geographical proximity and cultural connections, and above all, the policies of the countries.

Future speculation for the 2003-08 period (the end of the AGOA program) depends to a great extent on the actions of SSA countries to take advantage of the program. Expanding the commodity provisions would enhance the performance of the SSA countries, particularly for the group of countries that already have been successful in using the AGOA program. Currently, of all U.S. agricultural imports under AGOA, only 2 percent are AGOA-exclusive imports, i.e., they are not included in any other U.S. preference program. Providing market access for processed commodities would expand export opportunities in countries that have highly concentrated exports of a few agricultural commodities. Many of these countries currently are poor performers in the AGOA program so far.

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Table 1 - Selected Economic Indicators in SSA Countries in 2000

Country	Per cap. income	Total pop.	Ag. pop.	Structure of Economy			
				Ag.	Ind.	Manu.	Services
	Dollars	Mil.	---------- Percent ----------				
AGOA countries							
Benin	370	6.3	57.7	38.0	14.4	9.1	47.6
Botswana	3,300	1.6	49.7	3.6	44.4	5.0	52.0
Cameroon	580	14.9	51.1	43.8	20.2	10.9	35.9
Cape Verde	1,330	0.4	37.8	11.8	17.6	9.1	70.6
Central African Rep.	280	3.7	58.8	54.6	19.8	9.3	25.6
Chad	200	7.7	76.2	39.2	13.8	11.2	47.0
Congo, Dem. Rep.	n.a.	50.9	69.7	..	..	..	..
Congo, Rep.	570	3.0	37.5	5.3	70.9	3.4	23.8
Cote d'Ivoire	600	16.0	53.6	29.2	22.4	18.7	48.4
Eritrea	170	4.1	81.3	..	..	..	..
Ethiopia	100	64.3	82.4	52.3	11.1	7.0	36.5
Gabon	3,190	1.2	18.6	6.4	53.2	4.2	40.4
Gambia, The	340	1.3	67.5	37.9	12.7	5.4	49.3
Ghana	340	19.3	61.6	35.3	25.4	9.0	39.3
Guinea	450	7.4	67.2	24.0	37.1	4.2	38.9
Guinea-Bissau	180	1.2	76.3	58.8	12.3	9.9	28.9
Kenya	350	30.1	66.9	19.9	18.7	13.1	61.3
Lesotho	580	2.0	72.0	16.9	43.8	16.0	39.3
Madagascar	250	15.5	70.5	34.9	13.1	..	52.0
Malawi	170	10.3	84.6	41.6	19.1	13.8	39.4
Mali	240	10.8	70.0	45.8	17.1	4.0	37.1
Mauritania	370	2.7	42.3	22.4	30.6	9.0	47.0
Mauritius	3,750	1.2	58.7	6.0	32.1	24.5	61.9
Mozambique	210	17.7	59.8	24.4	25.1	12.6	50.5
Namibia	2,030	1.8	69.1	..	..	..	..
Niger	180	10.8	79.4	38.8	17.6	6.8	43.6
Nigeria	260	126.9	56.0	29.5	46.0	4.1	24.5
Rwanda	230	8.5	93.8	43.7	21.2	11.5	35.1
Sao Tome & Principe	290	0.1	53.3	20.5	17.0	4.5	62.5
Senegal	490	9.5	52.6	18.2	26.9	17.8	55.0
Seychelles	7,050	0.1	41.5	3.0	21.6	12.5	75.4
Sierra Leone	130	5.0	63.4	47.3	29.7	4.7	23.0
South Africa	3,020	42.8	45.0	3.2	30.9	18.8	65.9
Swaziland	1,390	1.0	73.6	16.8	44.3	33.1	38.9
Tanzania	270	33.7	72.2	45.1	15.8	7.5	39.1
Uganda	300	22.2	85.8	42.5	19.1	9.1	38.4
Zambia	300	10.1	55.5	27.3	24.1	12.7	48.6
Non-AGOA countries							
Angola	290	13.1	65.8	5.7	76.1	2.9	18.2
Burkina Faso	210	11.3	81.5	34.5	17.2	12.2	48.3
Burundi	110	6.8	91.0	50.7	18.5	..	30.8
Comoros	380	0.6	66.8	40.9	11.9	4.2	47.2
Equatorial Guinea	800	0.5	51.8	7.0	88.0	..	4.9
Liberia	n.a.	3.1	55.1	..	..	..	..
Somalia	n.a.	8.8	72.5	..	..	..	..
Sudan	310	31.1	63.9	37.2	18.1	8.8	44.7
Togo	290	4.5	66.7	37.7	22.2	9.7	40.2
Zimbabwe	460	12.6	64.7	18.5	25.0	15.8	56.5

* AGOA-eligible countries are based upon 2002.

Source: World Bank (2003); AGOA (2003).

Table 2 - Sub-Saharan Africa Export Composition (Percent)

Year	Agri. raw materials	Food	Manu-facturing	Ores and metals	Fuels
1970	12.9	34.5	18.8	15.6	15.6
1980	6.1	22.0	12.4	8.6	26.6
1991	3.3	13.4	20.2	7.5	27.9
2000	4.4	16.6	36.1	7.7	28.4

Source: World Bank (2003); 1990 data not available.

Table 3 - U.S. Imports from SSA Countries by Program

	Trade values				Trade shares			
	Total U.S. Imports from SSA	of which MFN	of which GSP	of which AGOA	MFN	GSP	AGOA	GSP and AGOA
	----------$ Million ----------				---------- Percent ----------			
1989	9,231	9,141	90	0	99.0	1.0	0.0	1.0
1990	10,153	10,042	110	0	98.9	1.1	0.0	1.1
1991	9,459	9,373	86	0	99.1	0.9	0.0	0.9
1992	9,368	9,302	66	0	99.3	0.7	0.0	0.7
1993	9,891	9,820	71	0	99.3	0.7	0.0	0.7
1994	9,624	9,338	286	0	97.0	3.0	0.0	3.0
1995	10,155	9,721	435	0	95.7	4.3	0.0	4.3
1996	11,911	11,396	515	0	95.7	4.3	0.0	4.3
1997	12,603	12,002	601	0	95.2	4.8	0.0	4.8
1998	10,733	10,086	647	0	94.0	6.0	0.0	6.0
1999	10,948	10,395	553	0	95.0	5.0	0.0	5.0
2000	18,322	17,617	704	0	96.2	3.8	0.0	3.8
2001	17,574	9,394	600	7,579	53.5	3.4	43.1	46.5
2002	14,056	5,065	630	8,361	36.0	4.5	59.5	64.0

Source: USITC (2003).

Table 4 - Comparison of Recent SSA Exports Relative to US Imports ($Million), By Sector

Commodity	1997-99 SSA Exports to World	Shares	US Imports from SSA 2001	Shares	of which AGOA 2001	US Imports from SSA 2002	Shares	of which AGOA 2002
Total	52,420	1.00	17,574	1.00	7,579	14,056	1.00	8,361
Ag	9,810	0.19	769	0.04	59	846	0.01	107
Food	3,425	0.07	266	0.02	35	258	0.00	58
Other	6,386	0.12	503	0.03	24	587	0.00	49
Coffee, and tea	2,026	0.04	157	0.01	0	181	0.00	0
Cotton	1,338	0.03	3	0.00	0	2	0.00	0
Wool and fibers	496	0.01	6	0.00	0	3	0.00	0
Sugar	419	0.01	39	0.00	0	48	0.00	0
Cocoa	2,307	0.04	276	0.02	0	323	0.00	0
Non-ag	42,609	0.81	16,805	0.96	7,521	13,210	0.99	8,254
Oil	17,921	0.34	11,022	0.63	6,827	7,808	0.90	6,825
Textiles / apparel	295	0.01	501	0.03	356	595	0.05	799

Source: UN (2003); USITC (2003).

Table 5 - SSA Export Levels, Growth Rates, and Structure

Country	Total export levels, 1999 World	U.S.	Shares	1990-99 growth rates: World	US	Concentration index 1/
	---------- $ Million ----		Percent	------- Percent --------		---- Ratio ----
AGOA countries						
Benin	385	18	4.6	2.4	-2.1	0.77
Botswana	1,391	17	1.2	-4.5	2.0	0.14
Cameroon	2,241	77	3.4	1.9	-8.0	0.38
Cape Verde	114	0	0.1	11.1	-8.8	0.69
Central African Repul	117	3	2.5	-5.6	8.5	n.a.
Chad	242	7	2.9	-0.1	20.7	n.a.
Congo, Rep.	1,704	411	24.1	5.2	-0.1	n.a.
Cote d'Ivoire	4,909	343	7.0	2.3	6.0	0.34
Eritrea	66	0	0.7	1.0	n.a	n.a.
Ethiopia	916	30	3.3	6.1	n.a	0.63
Gabon	1,964	1,513	77.0	-4.1	8.2	0.77
Gambia, The	199	0	0.1	0.6	-25.9	0.45
Ghana	2,479	209	8.4	9.4	2.4	0.37
Guinea	735	115	15.7	-1.1	-2.1	0.63
Guinea-Bissau	56	0	0.1	10.4	n.a	n.a.
Kenya	2,686	106	4.0	2.2	6.5	0.34
Lesotho	216	111	51.2	9.1	16.6	0.14
Madagascar	921	80	8.7	6.2	7.3	0.24
Malawi	489	59	12.0	0.0	5.0	n.a.
Mali	640	9	1.4	3.3	17.0	0.84
Mauritania	370	1	0.2	-1.8	-38.4	n.a.
Mauritius	2,743	258	9.4	4.8	5.5	n.a.
Mozambique	455	10	2.3	10.4	-11.6	n.a.
Namibia	1,702	30	1.8	n.a.	-1.2	0.14
Niger	322	5	1.5	-2.8	-25.0	0.68
Nigeria	12,832	4,172	32.5	5.5	-4.0	0.98
Rwanda	110	4	3.4	0.3	-23.6	0.64
Sao Tome and Princi	16	3	16.4	6.1	39.0	n.a.
Senegal	1,443	17	1.2	-0.8	15.4	0.25
Seychelles	456	5	1.1	7.4	22.1	n.a.
Sierra Leone	95	10	10.9	-6.7	-16.6	n.a.
South Africa	33,699	3,193	9.5	2.9	7.0	0.14
Swaziland	1,004	38	3.8	4.1	1.5	0.14
Tanzania	1,210	34	2.9	9.0	8.9	0.25
Uganda	726	20	2.8	7.0	2.7	0.55
Zambia	701	38	5.4	-2.8	3.1	0.49
Non-AGOA countries						
Angola	5,337	2,349	44.0	1.3	2.1	n.a.
Burkina Faso	287	3	1.0	-4.0	5.1	0.61
Burundi	63	7	11.2	-3.6	-1.8	0.88
Comoros	51	2	4.0	3.7	-9.3	n.a.
Equatorial Guinea	818	41	5.0	34.0	n.a	n.a.
Sudan	814	0	0.0	n.a.	-62.5	0.33
Togo	455	3	0.7	-2.3	-1.8	0.48
Zimbabwe	2,537	135	5.3	1.1	2.8	n.a.

Sources: World Bank (2003); USITC (2003).

1/ The trade concentration index was calculated using a modified version of the Herfindahl-Hirschmann index (see UNCTAD, 2003).

Table 6 - Total AGOA Exports to the United States in 2001 and 2002, Ranked by 2002 AGOA Values

	AGOA Exports $Mil		Total Exports $ Mil.		Percent Shares	
Country	**2001**	**2002**	**2001**	**2002**	**2001**	**2002**
Nigeria	3,570,136	2,886,580	9,180,003	6,219,096	39	46
Gabon	611,414	770,280	1,734,956	1,665,521	35	46
South Africa	447,359	477,630	4,587,897	4,182,612	10	11
Lesotho	134,607	338,818	224,044	342,917	60	99
Kenya	58,599	132,944	136,908	202,072	43	66
Mauritius	41,745	114,620	295,403	301,285	14	38
Cameroon	39,415	104,201	111,528	183,505	35	57
Madagascar	97,190	81,653	284,839	225,534	34	36
Swaziland	8,776	79,780	69,089	123,086	13	65
Congo (ROC)	105,688	63,944	527,449	210,537	20	30
Malawi	25,422	56,996	84,206	76,345	30	75
Cote d'Ivoire	0	28,595	358,327	399,435	0	7
Ghana	34,243	24,262	205,031	128,542	17	19
Botswana	0	3,958	20,921	30,198	0	13
Namibia	0	1,610	38,752	58,841	0	3
Ethiopia	227	1,399	32,226	28,354	1	5
Tanzania	30	812	29,275	26,614	0	3
Mozambique	0	190	7,779	9,240	0	2
Zambia	16	83	16,103	8,161	0	1
Uganda	0	17	20,553	17,196	0	0
Mali	0	2	6,412	2,746	0	0
Niger	0	1	4,749	947	0	0
Senegal	0	0	104,684	4,110	0	0
Benin	0	0	1,425	788	0	0
Cape Verde	0	0	1,589	1,969	0	0
Cen African Rep	0	0	2,391	2,022	0	0
Chad	0	0	6,181	6,327	0	0
Djibouti	0	0	996	1,967	0	0
Eritrea	0	0	96	415	0	0
Guinea	0	0	106,075	84,670	0	0
Guinea-Bissau	0	0	20	39	0	0
Mauritania	0	0	297	968	0	0
Rwanda	271	0	7,607	3,308	4	0
Sao Tome & Prin	0	0	323	432	0	0
Seychelles	0	0	24,231	27,381	0	0
Sierra Leone	0	0	4,816	4,095	0	0

Source: USITC, 2003.

Table 7 - Trade Flows Under AGOA and the Implicit Export Supply Elasticities

	Trade flows				Derived elasticity (e_ik)	
	2000 (X_o)	2001 (dX_1)	2002 (dX_2)	Tariff (dt)	2001	2002
	--------- Thousand dollars --------			Percent	------ Elasticity ------	
Agriculture:						
Exports to U.S.	835,543	789,654	867,106			
AGOA exports		58,990	108,913	8.9	0.79	1.55
Food sub-component						
Exports to U.S.	300,587	265,629	258,491			
AGOA exports		34,938	58,135	7.2	1.61	3.04
Vegetable sub-component						
Exports to U.S.	1,643	2,082	4,154			
AGOA exports		326	1,582	8.5	2.33	8.94
Fruit sub-component						
Exports to U.S.	90,129	70,969	84,909			
AGOA exports		34,127	55,669	10.5	3.61	7.47
Apparel & footware						
Exports to U.S.	769,766	983,882	1,129,278			
AGOA exports		356,148	799,994	15.7	2.95	5.18
Minerals & manufacturing						
Exports to U.S.	5,209,106	4,649,249	4,082,937			
AGOA exports		336,532	629,253	4.8	1.35	2.82
Total						
Exports to U.S.	18,321,343	17,573,488	14,055,698			
AGOA exports		7,579,158	8,361,422	9.8	4.22	4.86

Fig. 1- U.S. Imports from AGOA Countries by Commodity Group

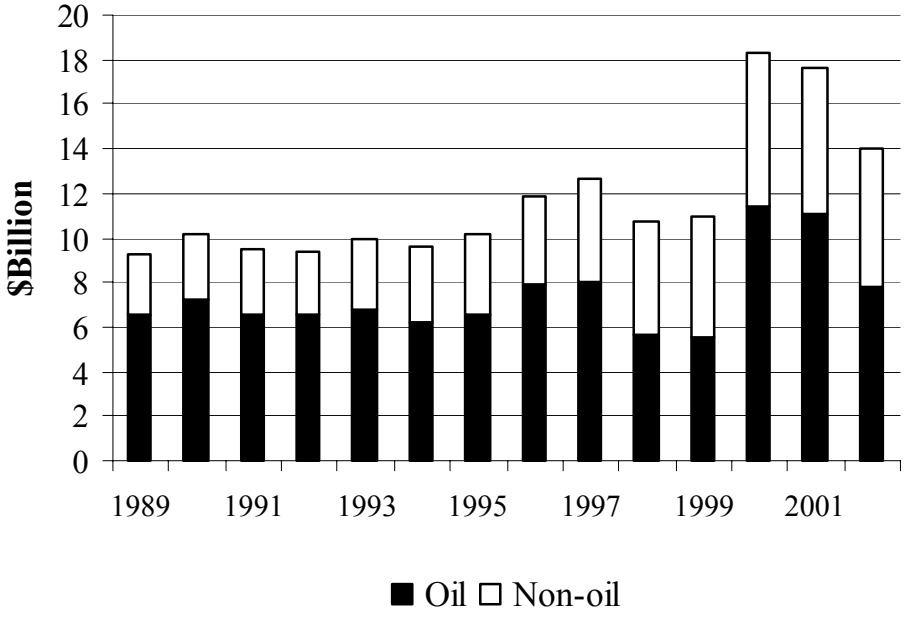


Fig. 2 - U.S. Imports from AGOA Countries by Program of Entry

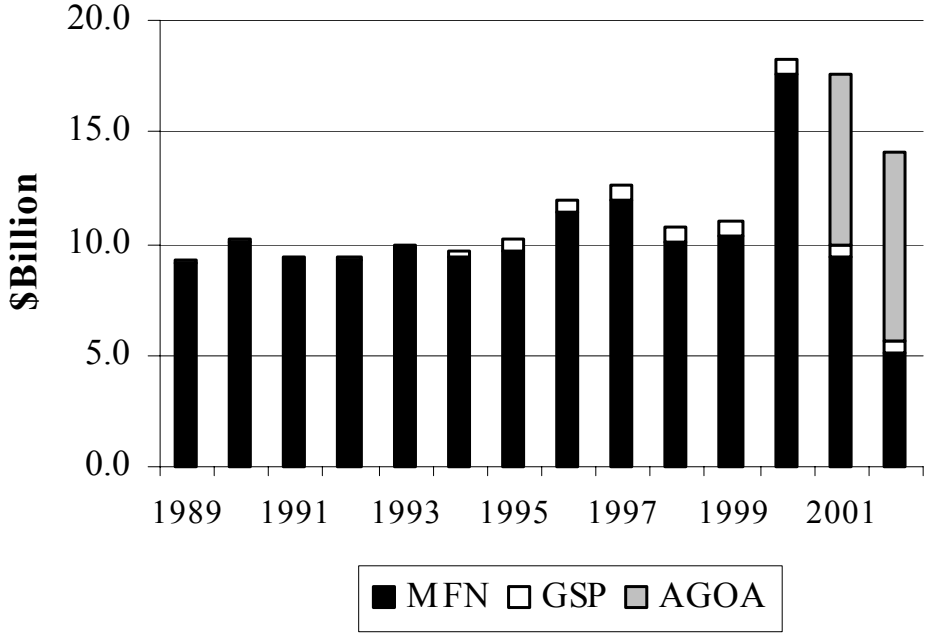
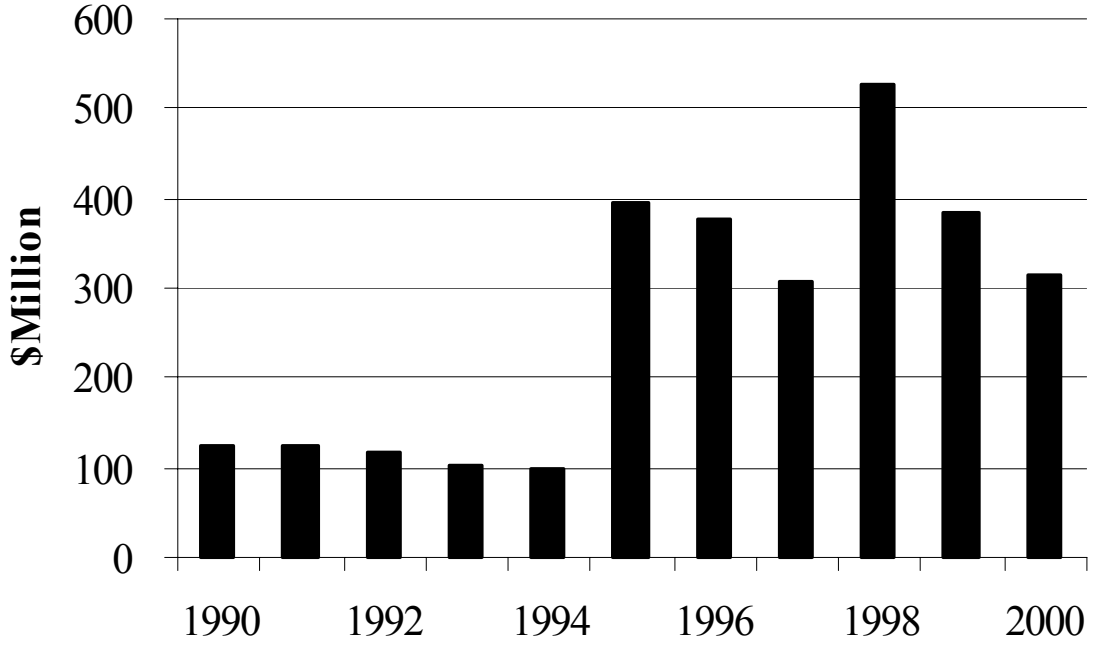


Fig. 3 - FDI in Top 5 AGOA Non-oil Exporters



* Kenya, Lesotho, Madagascar, Malawi, Swaziland